ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

This attachment contains the groundwater monitoring well results from the laboratory analytical reports prepared by Alpha Analytical Inc. of Sparks, Nevada and Columbia Analytical Services (CAS) of Simi Valley, California.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *16-Feb-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10020301 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10020301-01A	MW-21-5	Aqueous
10020301-02A	MW-21-4	Aqueous
10020301-03A	MW-21-3	Aqueous
10020301-04A	MW-21-2	Aqueous
10020301-05A	MW-21-1	Aqueous
10020301-06A	DUPE-1-1Q10	Aqueous
10020301-07A	EB-1-2/2/10	Aqueous
10020301-08A	TB-1-2/2/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10020301-01A	EPA Method 314.0	Perchlorate
10020301-02A	EPA Method 314.0	Perchlorate
10020301-03A	EPA Method 314.0	Perchlorate
10020301-04A	EPA Method 314.0	Perchlorate
10020301-05A	EPA Method 314.0	Perchlorate
10020301-06A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/03/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-21-5**				
Lab ID : BMI10020301-01A Perchlorate	3.04	1.00 µg/L	02/04/10 11:56	02/04/10 14:46
Date Sampled 02/02/10 08:05				
Client ID: **MW-21-4**				
Lab ID : BMI10020301-02A Perchlorate	1.82	1.00 µg/L	02/04/10 11:56	02/04/10 15:05
Date Sampled 02/02/10 08:28				
Client ID: **MW-21-3**				
Lab ID : BMI10020301-03A Perchlorate	2.83	1.00 µg/L	02/04/10 11:56	02/04/10 15:23
Date Sampled 02/02/10 08:56				
Client ID: **MW-21-2**				
Lab ID : BMI10020301-04A Perchlorate	2.23	1.00 µg/L	02/04/10 11:56	02/04/10 15:41
Date Sampled 02/02/10 09:24				
Client ID: **MW-21-1**				
Lab ID : BMI10020301-05A Perchlorate	2.53	1.00 µg/L	02/04/10 11:56	02/04/10 16:00
Date Sampled 02/02/10 09:59				
Client ID: **DUPE-1-1Q10**				
Lab ID : BMI10020301-06A Perchlorate	2.33	1.00 µg/L	02/04/10 11:56	02/04/10 16:18
Date Sampled 02/02/10 00:00				
Client ID: **EB-1-2/2/10**				
Lab ID : BMI10020301-07A Perchlorate	ND	1.00 µg/L	02/04/10 11:56	02/04/10 18:16
Date Sampled 02/02/10 09:42				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/16/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/03/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-21-5**				
Lab ID : BMI10020301-01A Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 11:48
Date Sampled 02/02/10 08:05				
Client ID: **MW-21-4**				
Lab ID : BMI10020301-02A Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 11:24
Date Sampled 02/02/10 08:28				
Client ID: **MW-21-3**				
Lab ID : BMI10020301-03A Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 11:54
Date Sampled 02/02/10 08:56				
Client ID: **MW-21-2**				
Lab ID : BMI10020301-04A Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 11:59
Date Sampled 02/02/10 09:24				
Client ID: **MW-21-1**				
Lab ID : BMI10020301-05A Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 12:05
Date Sampled 02/02/10 09:59				
Client ID: **DUPE-1-1Q10**				
Lab ID : BMI10020301-06A Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 12:11
Date Sampled 02/02/10 00:00				
Client ID: **EB-1-2/2/10**				
Lab ID : BMI10020301-07A Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 12:16
Date Sampled 02/02/10 09:42				

ND = Not Detected

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Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

	Parameter	Estimated Concentration		Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID : **MW-21-5**						
Lab ID : BMI10020301-01A	* * * None Found * * *	ND		2.0 µg/L	02/04/10 14:07	02/04/10 14:07
Date Received : 02/03/10						
Date Sampled : 02/02/10 08:05						
Client ID : **MW-21-4**						
Lab ID : BMI10020301-02A	* * * None Found * * *	ND		2.0 µg/L	02/04/10 14:30	02/04/10 14:30
Date Received : 02/03/10						
Date Sampled : 02/02/10 08:28						
Client ID : **MW-21-3**						
Lab ID : BMI10020301-03A	* * * None Found * * *	ND		2.0 µg/L	02/04/10 14:52	02/04/10 14:52
Date Received : 02/03/10						
Date Sampled : 02/02/10 08:56						
Client ID : **MW-21-2**						
Lab ID : BMI10020301-04A	* * * None Found * * *	ND		2.0 µg/L	02/04/10 15:14	02/04/10 15:14
Date Received : 02/03/10						
Date Sampled : 02/02/10 09:24						
Client ID : **MW-21-1**						
Lab ID : BMI10020301-05A	* * * None Found * * *	ND		2.0 µg/L	02/04/10 15:36	02/04/10 15:36
Date Received : 02/03/10						
Date Sampled : 02/02/10 09:59						
Client ID : **DUPE-1-1Q10**						
Lab ID : BMI10020301-06A	* * * None Found * * *	ND		2.0 µg/L	02/04/10 15:58	02/04/10 15:58
Date Received : 02/03/10						
Date Sampled : 02/02/10 00:00						
Client ID : **EB-1-2/2/10**						
Lab ID : BMI10020301-07A	Tertiary Butyl Alcohol (TBA)	51	Q	10 µg/L	02/04/10 13:45	02/04/10 13:45
Date Received : 02/03/10						
Date Sampled : 02/02/10 09:42						
Client ID : **TB-1-2/2/10**						
Lab ID : BMI10020301-08A	* * * None Found * * *	ND		2.0 µg/L	02/04/10 13:23	02/04/10 13:23
Date Received : 02/03/10						
Date Sampled : 02/02/10 00:00						

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Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020301-01A
Client I.D. Number: MW-21-5

Sampled: 02/02/10 08:05
Received: 02/03/10
Extracted: 02/04/10 14:07
Analyzed: 02/04/10 14:07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	3.5	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	108	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	107	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	89	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	1.8	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020301-02A
Client I.D. Number: MW-21-4

Sampled: 02/02/10 08:28
Received: 02/03/10
Extracted: 02/04/10 14:30
Analyzed: 02/04/10 14:30

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND		1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	6.5		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	109	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	105	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	J	1.0	µg/L					
35	Tetrachloroethene	1.7		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected
J = Estimated: The analyte was positively identified; the quantitation is an estimation.

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020301-03A
Client I.D. Number: MW-21-3

Sampled: 02/02/10 08:56
Received: 02/03/10
Extracted: 02/04/10 14:52
Analyzed: 02/04/10 14:52

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	1.0	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	2.2	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.4	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	109	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	107	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	7.7	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

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Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/16/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020301-04A
Client I.D. Number: MW-21-2

Sampled: 02/02/10 09:24
Received: 02/03/10
Extracted: 02/04/10 15:14
Analyzed: 02/04/10 15:14

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	0.57	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.60	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.61	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	111	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	107	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	91	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	4.9	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/16/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020301-05A
Client I.D. Number: MW-21-1

Sampled: 02/02/10 09:59
Received: 02/03/10
Extracted: 02/04/10 15:36
Analyzed: 02/04/10 15:36

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	2.8	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	111	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	110	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	94	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/16/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020301-06A
Client I.D. Number: DUPE-1-1Q10

Sampled: 02/02/10 00:00
Received: 02/03/10
Extracted: 02/04/10 15:58
Analyzed: 02/04/10 15:58

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	1.4	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	110	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	107	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	90	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/16/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020301-07A
Client I.D. Number: EB-1-2/2/10

Sampled: 02/02/10 09:42
Received: 02/03/10
Extracted: 02/04/10 13:45
Analyzed: 02/04/10 13:45

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	111	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	108	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/16/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020301-08A
Client I.D. Number: TB-1-2/2/10

Sampled: 02/02/10 00:00
Received: 02/03/10
Extracted: 02/04/10 13:23
Analyzed: 02/04/10 13:23

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	109	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	109	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/16/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10020301 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10020301-01A	MW-21-5	Aqueous	2
10020301-02A	MW-21-4	Aqueous	2
10020301-03A	MW-21-3	Aqueous	2
10020301-04A	MW-21-2	Aqueous	2
10020301-05A	MW-21-1	Aqueous	2
10020301-06A	DUPE-1-1Q10	Aqueous	2
10020301-07A	EB-1-2/2/10	Aqueous	2
10020301-08A	TB-1-2/2/10	Aqueous	2

2/16/10

Report Date

Alpha Analytical, Inc.

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Date: *16-Feb-10*

QC Summary Report

Work Order: 10020301

Method Blank

Type: **MBLK** Test Code: **EPA Method 314.0**
File ID: **14** Batch ID: **23505** Analysis Date: **02/04/2010 12:56**
Sample ID: **MB-23505** Units : **µg/L** Run ID: **IC_3_100204A** Prep Date: **02/04/2010 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type: **LFB** Test Code: **EPA Method 314.0**
File ID: **15** Batch ID: **23505** Analysis Date: **02/04/2010 13:14**
Sample ID: **LFB-23505** Units : **µg/L** Run ID: **IC_3_100204A** Prep Date: **02/04/2010 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	23.7	2	25		95	85	115			

Sample Matrix Spike

Type: **LFM** Test Code: **EPA Method 314.0**
File ID: **19** Batch ID: **23505** Analysis Date: **02/11/2010 15:36**
Sample ID: **10020402-02ALFM** Units : **µg/L** Run ID: **IC_3_100204A** Prep Date: **02/04/2010 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	29.2	2	25	3.863	101	80	120			

Sample Matrix Spike Duplicate

Type: **LFMD** Test Code: **EPA Method 314.0**
File ID: **20** Batch ID: **23505** Analysis Date: **02/11/2010 15:54**
Sample ID: **10020402-02ALFMD** Units : **µg/L** Run ID: **IC_3_100204A** Prep Date: **02/04/2010 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	29.5	2	25	3.863	103	80	120	29.18	1.1(15)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *15-Feb-10*

QC Summary Report

Work Order: 10020301

Method Blank

Type **MBLK** Test Code: **EPA Method 200.8**

File ID: **020410.B\509MB.D** Batch ID: **23509K** Analysis Date: **02/05/2010 10:50**

Sample ID: **MB-22509** Units : **mg/L** Run ID: **ICP/MS_100205B** Prep Date: **02/04/2010 13:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 200.8**

File ID: **020410.B\590L1.D** Batch ID: **23509K** Analysis Date: **02/05/2010 10:55**

Sample ID: **LCS-22509** Units : **mg/L** Run ID: **ICP/MS_100205B** Prep Date: **02/04/2010 13:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0501	0.005	0.05		100	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 200.8**

File ID: **020410.B\509MS.D** Batch ID: **23509K** Analysis Date: **02/05/2010 11:29**

Sample ID: **10020301-02AMS** Units : **mg/L** Run ID: **ICP/MS_100205B** Prep Date: **02/04/2010 13:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0533	0.005	0.05	0	107	80	120			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 200.8**

File ID: **020410.B\509MSD.D** Batch ID: **23509K** Analysis Date: **02/05/2010 11:35**

Sample ID: **10020301-02AMSD** Units : **mg/L** Run ID: **ICP/MS_100205B** Prep Date: **02/04/2010 13:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0536	0.005	0.05	0	107	80	120	0.05334	0.4(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

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Date: 12-Feb-10

QC Summary Report

Work Order: 10020301

Method Blank Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10020407.D** Batch ID: **MS15W0204M** Analysis Date: **02/04/2010 10:25**

Sample ID: **MBLK MS15W0204M** Units : **µg/L** Run ID: **MSD_15_100204B** Prep Date: **02/04/2010 10:25**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	11.1		10		111	70	130			
Surr: Toluene-d8	10.7		10		107	70	130			

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Date: *12-Feb-10*

QC Summary Report

Work Order: 10020301

Surr: 4-Bromofluorobenzene	8.84		10		88	70	130			

Laboratory Control Spike Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **10020405.D** Batch ID: **MS15W0204M** Analysis Date: **02/04/2010 09:27**

Sample ID: **LCS MS15W0204M** Units : **µg/L** Run ID: **MSD_15_100204B** Prep Date: **02/04/2010 09:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	10.2	1	10		102	70	130			
Chloromethane	8.78	2	10		88	70	130			
Vinyl chloride	12.1	1	10		121	70	130			
Chloroethane	11.4	1	10		114	70	130			
Bromomethane	7.61	2	10		76	70	130			
Trichlorofluoromethane	10.9	1	10		109	70	130			
1,1-Dichloroethene	10.9	1	10		109	70	130			
Dichloromethane	10.6	2	10		106	70	130			
trans-1,2-Dichloroethene	11.2	1	10		112	70	130			
Methyl tert-butyl ether (MTBE)	12.3	0.5	10		123	70	130			
1,1-Dichloroethane	10.4	1	10		104	70	130			
cis-1,2-Dichloroethene	11.8	1	10		118	70	130			
Bromochloromethane	12.5	1	10		125	70	130			
Chloroform	10.1	1	10		101	70	130			
2,2-Dichloropropane	11.5	1	10		115	70	130			
1,2-Dichloroethane	11.8	1	10		118	70	130			
1,1,1-Trichloroethane	11.5	1	10		115	70	130			
1,1-Dichloropropene	11.2	1	10		112	70	130			
Carbon tetrachloride	11.9	1	10		119	70	130			
Benzene	10.5	0.5	10		105	70	130			
Dibromomethane	12.5	1	10		125	70	130			
1,2-Dichloropropane	11.1	1	10		111	70	130			
Trichloroethene	11.5	1	10		115	70	130			
Bromodichloromethane	12.4	1	10		124	70	130			
cis-1,3-Dichloropropene	10.8	1	10		108	70	130			
trans-1,3-Dichloropropene	11.1	1	10		111	70	130			
1,1,2-Trichloroethane	11.8	1	10		118	70	130			
Toluene	10.3	0.5	10		103	70	130			
1,3-Dichloropropane	12	1	10		120	70	130			
Dibromochloromethane	12.1	1	10		121	70	130			
1,2-Dibromoethane (EDB)	25.5	2	20		127	70	130			
Tetrachloroethene	11.6	1	10		116	70	130			
1,1,1,2-Tetrachloroethane	11.9	1	10		119	70	130			
Chlorobenzene	10.7	1	10		107	70	130			
Ethylbenzene	10.4	0.5	10		104	70	130			
m,p-Xylene	11.1	0.5	10		111	70	130			
Bromoform	12.2	1	10		122	70	130			
Styrene	12	1	10		120	70	130			
o-Xylene	11.1	0.5	10		111	70	130			
1,1,2,2-Tetrachloroethane	11.5	1	10		115	70	130			
1,2,3-Trichloropropane	22.9	2	20		114	70	130			
Isopropylbenzene	9.98	1	10		99.8	70	130			
Bromobenzene	10.4	1	10		104	70	130			
n-Propylbenzene	9.83	1	10		98	70	130			
4-Chlorotoluene	10.4	1	10		104	70	130			
2-Chlorotoluene	9.88	1	10		99	70	130			
1,3,5-Trimethylbenzene	9.7	1	10		97	70	130			
tert-Butylbenzene	9.78	1	10		98	70	130			
1,2,4-Trimethylbenzene	9.89	1	10		99	70	130			
sec-Butylbenzene	10.1	1	10		101	70	130			
1,3-Dichlorobenzene	10.3	1	10		103	70	130			
1,4-Dichlorobenzene	9.84	1	10		98	70	130			
4-Isopropyltoluene	9.91	1	10		99	70	130			
1,2-Dichlorobenzene	9.78	1	10		98	70	130			
n-Butylbenzene	9.79	1	10		98	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	56	3	50		112	70	130			
1,2,4-Trichlorobenzene	11.4	2	10		114	70	130			
Naphthalene	12.2	2	10		122	70	130			
Hexachlorobutadiene	19.8	2	20		99	70	130			
1,2,3-Trichlorobenzene	11.8	2	10		118	70	130			
Surr: 1,2-Dichloroethane-d4	10.9		10		109	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	9.42		10		94	70	130			

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Date: *12-Feb-10*

QC Summary Report

Work Order: 10020301

Sample Matrix Spike Type **MS** Test Code: **EPA Method SW8260B**

File ID: **10020410.D** Batch ID: **MS15W0204M** Analysis Date: **02/04/2010 11:31**

Sample ID: **10020301-02AMS** Units : **µg/L** Run ID: **MSD_15_100204B** Prep Date: **02/04/2010 11:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	38.3	2.5	50	0	77	13	167			
Chloromethane	38.6	10	50	0	77	28	145			
Vinyl chloride	54.4	2.5	50	0	109	43	134			
Chloroethane	47.4	2.5	50	0	95	39	154			
Bromomethane	22.8	10	50	0	46	19	176			
Trichlorofluoromethane	49.9	2.5	50	0	99.8	34	160			
1,1-Dichloroethene	50	2.5	50	0	100	60	130			
Dichloromethane	49.8	10	50	0	99.6	68	130			
trans-1,2-Dichloroethene	50	2.5	50	0	99.9	63	130			
Methyl tert-butyl ether (MTBE)	57.2	1.3	50	0	114	56	141			
1,1-Dichloroethane	47.6	2.5	50	0	95	61	130			
cis-1,2-Dichloroethene	54.1	2.5	50	0	108	70	130			
Bromochloromethane	58	2.5	50	0	116	70	130			
Chloroform	53.1	2.5	50	6.53	93	67	130			
2,2-Dichloropropane	51.8	2.5	50	0	104	30	152			
1,2-Dichloroethane	54	2.5	50	0	108	60	135			
1,1,1-Trichloroethane	52	2.5	50	0	104	59	137			
1,1-Dichloropropene	50.8	2.5	50	0	102	63	130			
Carbon tetrachloride	52.7	2.5	50	0	105	50	147			
Benzene	47.3	1.3	50	0	95	67	130			
Dibromomethane	58	2.5	50	0	116	69	133			
1,2-Dichloropropane	51.2	2.5	50	0	102	69	130			
Trichloroethene	51.4	2.5	50	0	103	69	130			
Bromodichloromethane	56.8	2.5	50	0	114	66	134			
cis-1,3-Dichloropropene	48.9	2.5	50	0	98	63	130			
trans-1,3-Dichloropropene	52.6	2.5	50	0	105	66	131			
1,1,2-Trichloroethane	54.3	2.5	50	0	109	68	130			
Toluene	46.7	1.3	50	0	93	66	130			
1,3-Dichloropropane	55.6	2.5	50	0	111	70	130			
Dibromochloromethane	56.9	2.5	50	0	114	70	130			
1,2-Dibromoethane (EDB)	118	5	100	0	118	70	130			
Tetrachloroethene	54.2	2.5	50	1.65	105	61	134			
1,1,1,2-Tetrachloroethane	54	2.5	50	0	108	70	130			
Chlorobenzene	48.9	2.5	50	0	98	70	130			
Ethylbenzene	47.2	1.3	50	0	94	68	130			
m,p-Xylene	50.5	1.3	50	0	101	64	130			
Bromoform	56.4	2.5	50	0	113	64	138			
Styrene	54.4	2.5	50	0	109	69	130			
o-Xylene	50.6	1.3	50	0	101	70	130			
1,1,2,2-Tetrachloroethane	50.4	2.5	50	0	101	65	131			
1,2,3-Trichloropropane	102	10	100	0	102	70	130			
Isopropylbenzene	44.2	2.5	50	0	88	64	138			
Bromobenzene	46.6	2.5	50	0	93	70	130			
n-Propylbenzene	43.2	2.5	50	0	86	66	132			
4-Chlorotoluene	45.4	2.5	50	0	91	70	130			
2-Chlorotoluene	44.2	2.5	50	0	88	70	130			
1,3,5-Trimethylbenzene	43	2.5	50	0	86	66	136			
tert-Butylbenzene	43.3	2.5	50	0	87	65	137			
1,2,4-Trimethylbenzene	43.5	2.5	50	0	87	65	137			
sec-Butylbenzene	44.7	2.5	50	0	89	66	134			
1,3-Dichlorobenzene	45.5	2.5	50	0	91	70	130			
1,4-Dichlorobenzene	43.4	2.5	50	0	87	70	130			
4-Isopropyltoluene	43.4	2.5	50	0	87	66	137			
1,2-Dichlorobenzene	43.8	2.5	50	0	88	70	130			
n-Butylbenzene	42.3	2.5	50	0	85	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	249	15	250	0	99	67	130			
1,2,4-Trichlorobenzene	48.6	10	50	0	97	61	137			
Naphthalene	51.6	10	50	0	103	40	167			
Hexachlorobutadiene	86.6	10	100	0	87	61	130			
1,2,3-Trichlorobenzene	51.5	10	50	0	103	51	144			
Surr: 1,2-Dichloroethane-d4	52.9		50		106	70	130			
Surr: Toluene-d8	51.4		50		103	70	130			
Surr: 4-Bromofluorobenzene	46		50		92	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 12-Feb-10

QC Summary Report

Work Order: 10020301

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **10020411.D** Batch ID: **MS15W0204M** Analysis Date: **02/04/2010 11:54**

Sample ID: **10020301-02AMSD** Units : **µg/L** Run ID: **MSD_15_100204B** Prep Date: **02/04/2010 11:54**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	39.7	2.5	50	0	79	13	167	38.32	3.6(20)	
Chloromethane	37.2	10	50	0	74	28	145	38.61	3.7(20)	
Vinyl chloride	57.5	2.5	50	0	115	43	134	54.38	5.6(20)	
Chloroethane	50.8	2.5	50	0	102	39	154	47.4	6.9(20)	
Bromomethane	32.8	10	50	0	66	19	176	22.81	36.0(20)	R5
Trichlorofluoromethane	51.3	2.5	50	0	103	34	160	49.88	2.9(20)	
1,1-Dichloroethene	51.7	2.5	50	0	103	60	130	50	3.4(20)	
Dichloromethane	50.6	10	50	0	101	68	130	49.81	1.5(20)	
trans-1,2-Dichloroethene	52.4	2.5	50	0	105	63	130	49.95	4.8(20)	
Methyl tert-butyl ether (MTBE)	59.3	1.3	50	0	119	56	141	57.19	3.6(20)	
1,1-Dichloroethane	49.4	2.5	50	0	99	61	130	47.57	3.7(20)	
cis-1,2-Dichloroethene	56.6	2.5	50	0	113	70	130	54.09	4.6(20)	
Bromochloromethane	60.6	2.5	50	0	121	70	130	58.04	4.3(20)	
Chloroform	54.9	2.5	50	6.53	97	67	130	53.08	3.3(20)	
2,2-Dichloropropane	53.1	2.5	50	0	106	30	152	51.82	2.4(20)	
1,2-Dichloroethane	56.2	2.5	50	0	112	60	135	53.99	3.9(20)	
1,1,1-Trichloroethane	53.2	2.5	50	0	106	59	137	52	2.2(20)	
1,1-Dichloropropene	53.3	2.5	50	0	107	63	130	50.77	4.9(20)	
Carbon tetrachloride	55.5	2.5	50	0	111	50	147	52.74	5.1(20)	
Benzene	49.5	1.3	50	0	99	67	130	47.32	4.5(20)	
Dibromomethane	60.4	2.5	50	0	121	69	133	58.02	4.0(20)	
1,2-Dichloropropane	53.6	2.5	50	0	107	69	130	51.19	4.6(20)	
Trichloroethene	53.4	2.5	50	0	107	69	130	51.43	3.7(20)	
Bromodichloromethane	59	2.5	50	0	118	66	134	56.8	3.8(20)	
cis-1,3-Dichloropropene	51.2	2.5	50	0	102	63	130	48.94	4.6(20)	
trans-1,3-Dichloropropene	53.8	2.5	50	0	108	66	131	52.6	2.3(20)	
1,1,2-Trichloroethane	56	2.5	50	0	112	68	130	54.26	3.2(20)	
Toluene	48.8	1.3	50	0	98	66	130	46.73	4.3(20)	
1,3-Dichloropropane	58.4	2.5	50	0	117	70	130	55.61	4.9(20)	
Dibromochloromethane	59.9	2.5	50	0	120	70	130	56.94	5.1(20)	
1,2-Dibromoethane (EDB)	125	5	100	0	125	70	130	118.3	5.6(20)	
Tetrachloroethene	56.7	2.5	50	1.65	110	61	134	54.22	4.4(20)	
1,1,1,2-Tetrachloroethane	57.6	2.5	50	0	115	70	130	54.03	6.3(20)	
Chlorobenzene	51.1	2.5	50	0	102	70	130	48.94	4.4(20)	
Ethylbenzene	49.1	1.3	50	0	98	68	130	47.2	4.0(20)	
m,p-Xylene	53	1.3	50	0	106	64	130	50.51	4.7(20)	
Bromoform	61	2.5	50	0	122	64	138	56.41	7.9(20)	
Styrene	57.8	2.5	50	0	116	69	130	54.41	6.0(20)	
o-Xylene	53	1.3	50	0	106	70	130	50.55	4.8(20)	
1,1,2,2-Tetrachloroethane	53.6	2.5	50	0	107	65	131	50.42	6.2(20)	
1,2,3-Trichloropropane	108	10	100	0	108	70	130	102.1	5.4(20)	
Isopropylbenzene	46.8	2.5	50	0	94	64	138	44.21	5.7(20)	
Bromobenzene	48.5	2.5	50	0	97	70	130	46.59	4.0(20)	
n-Propylbenzene	45.7	2.5	50	0	91	66	132	43.23	5.5(20)	
4-Chlorotoluene	47.7	2.5	50	0	95	70	130	45.38	5.0(20)	
2-Chlorotoluene	46.5	2.5	50	0	93	70	130	44.18	5.2(20)	
1,3,5-Trimethylbenzene	45	2.5	50	0	90	66	136	43	4.5(20)	
tert-Butylbenzene	46	2.5	50	0	92	65	137	43.31	6.0(20)	
1,2,4-Trimethylbenzene	45.5	2.5	50	0	91	65	137	43.47	4.6(20)	
sec-Butylbenzene	47.2	2.5	50	0	94	66	134	44.67	5.6(20)	
1,3-Dichlorobenzene	48	2.5	50	0	96	70	130	45.54	5.2(20)	
1,4-Dichlorobenzene	45.5	2.5	50	0	91	70	130	43.38	4.7(20)	
4-Isopropyltoluene	46	2.5	50	0	92	66	137	43.43	5.7(20)	
1,2-Dichlorobenzene	45.7	2.5	50	0	91	70	130	43.83	4.2(20)	
n-Butylbenzene	45	2.5	50	0	90	60	142	42.26	6.3(20)	
1,2-Dibromo-3-chloropropane (DBCP)	265	15	250	0	106	67	130	248.7	6.2(20)	
1,2,4-Trichlorobenzene	53.4	10	50	0	107	61	137	48.61	9.4(20)	
Naphthalene	57.4	10	50	0	115	40	167	51.63	10.6(20)	
Hexachlorobutadiene	92.2	10	100	0	92	61	130	86.64	6.2(20)	
1,2,3-Trichlorobenzene	55.7	10	50	0	111	51	144	51.46	7.9(20)	
Surr: 1,2-Dichloroethane-d4	53.8		50		108	70	130			
Surr: Toluene-d8	51		50		102	70	130			
Surr: 4-Bromofluorobenzene	46.7		50		93	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *12-Feb-10*

QC Summary Report

Work Order: 10020301

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMIS10020301

Report Due By : 5:00 PM On : 17-Feb-2010

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 24131 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	03-Feb-2010	**03-Feb-2010**

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI10020301-01A	MW-21-5	AQ	02/02/10 08:05	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020301-02A	MW-21-4	AQ	02/02/10 08:28	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					Level IV QC
BMI10020301-03A	MW-21-3	AQ	02/02/10 08:56	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020301-04A	MW-21-2	AQ	02/02/10 09:24	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020301-05A	MW-21-1	AQ	02/02/10 09:59	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020301-06A	DUPE-1-1Q10	AQ	02/02/10 00:00	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020301-07A	EB-1-2/2/10	AQ	02/02/10 09:42	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020301-08A	TB-1-2/2/10	AQ	02/02/10 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 8/25/09

Comments: Security seals intact. Frozen ice. Temp Blank #8404 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2-3-10 1045

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA ___ NV ___ WA ___ ID ___ OR ___ OTHER ___ Page # ___ of ___

24131

Client Name	P.O. #	Job #
BATTELLE / DAVID CONNER	218013	G005862
Address	**EMail Address**	
3990 OLD TOWN AVE., C-205		
City, State, Zip	**Phone #**	**Fax #**
SAN DIEGO, CA 92110	(619) 726-7311	

Analyses Required: VOC (524.2); Total Cr (200.8); ClO4 - (314.0)

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	Total Cr (200.8)	ClO4 - (314.0)	REMARKS
805	2/2/10	AQ	BMI1002030I-01	MW-21-5	NORM		V/P 5	X	X	X	
828			-02	MW-21-4				X	X	X	LEVEL IV QC
856			-03	MW-21-3				X	X	X	
924			-04	MW-21-2				X	X	X	
959			-05	MW-21-1				X	X	X	
—			-06	DUPE-1-1010				X	X	X	DUPLICATE
942			-07	EB-1-2/2/10				X	X	X	EQUIP. BLANK
—			-08	TB-1-2/2/10			V/1	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by	MARCO MENDOZA	INSIGHT	2/2/10	1152
Received by	Anthony Stark	Alpha Analytical	2/4/10	1152
Relinquished by				
Received by Elizabeth Adcox	Elizabeth Adcox	Alpha	2.3.10	1045
Relinquished by				
Received by				

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *17-Feb-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10020402 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10020402-01A	MW-14-5	Aqueous
10020402-02A	MW-14-4	Aqueous
10020402-03A	MW-14-3	Aqueous
10020402-04A	MW-14-2	Aqueous
10020402-05A	MW-14-1	Aqueous
10020402-06A	EB-2-2/3/10	Aqueous
10020402-07A	TB-2-2/3/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10020402-02A	EPA Method 314.0	Perchlorate
10020402-03A	EPA Method 314.0	Perchlorate
10020402-04A	EPA Method 314.0	Perchlorate
10020402-05A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/04/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-14-5**				
Lab ID : BMI10020402-01A Perchlorate	ND	1.00 µg/L	02/04/10 11:56	02/11/10 14:59
Date Sampled 02/03/10 08:00				
Client ID: **MW-14-4**				
Lab ID : BMI10020402-02A Perchlorate	3.86	1.00 µg/L	02/04/10 11:56	02/11/10 15:18
Date Sampled 02/03/10 08:31				
Client ID: **MW-14-3**				
Lab ID : BMI10020402-03A Perchlorate	6.58	1.00 µg/L	02/04/10 11:56	02/11/10 16:13
Date Sampled 02/03/10 08:59				
Client ID: **MW-14-2**				
Lab ID : BMI10020402-04A Perchlorate	3.88	1.00 µg/L	02/04/10 11:56	02/11/10 16:31
Date Sampled 02/03/10 09:27				
Client ID: **MW-14-1**				
Lab ID : BMI10020402-05A Perchlorate	2.97	1.00 µg/L	02/04/10 11:56	02/11/10 16:50
Date Sampled 02/03/10 09:59				
Client ID: **EB-2-2/3/10**				
Lab ID : BMI10020402-06A Perchlorate	ND	1.00 µg/L	02/04/10 11:56	02/11/10 17:08
Date Sampled 02/03/10 09:46				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/17/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/04/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter		Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-14-3**					
Lab ID : BMI10020402-03A	Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 12:22
Date Sampled 02/03/10 08:59					
Client ID: **MW-14-2**					
Lab ID : BMI10020402-04A	Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 12:28
Date Sampled 02/03/10 09:27					
Client ID: **MW-14-1**					
Lab ID : BMI10020402-05A	Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 12:33
Date Sampled 02/03/10 09:59					
Client ID: **EB-2-2/3/10**					
Lab ID : BMI10020402-06A	Chromium (Cr)	ND	0.0050 mg/L	02/04/10 13:36	02/05/10 12:39
Date Sampled 02/03/10 09:46					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/17/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**MW-14-5**					
Lab ID :	BMI10020402-01A	Sulfur dioxide	2.1	2.0 µg/L	02/05/10 13:14	02/05/10 13:14
Date Received :	02/04/10					
Date Sampled :	02/03/10 08:00					
Client ID :	**MW-14-4**					
Lab ID :	BMI10020402-02A	* * * None Found * * *	ND	2.0 µg/L	02/05/10 13:36	02/05/10 13:36
Date Received :	02/04/10					
Date Sampled :	02/03/10 08:31					
Client ID :	**MW-14-3**					
Lab ID :	BMI10020402-03A	* * * None Found * * *	ND	2.0 µg/L	02/08/10 18:29	02/08/10 18:29
Date Received :	02/04/10					
Date Sampled :	02/03/10 08:59					
Client ID :	**MW-14-2**					
Lab ID :	BMI10020402-04A	* * * None Found * * *	ND	2.0 µg/L	02/08/10 18:52	02/08/10 18:52
Date Received :	02/04/10					
Date Sampled :	02/03/10 09:27					
Client ID :	**MW-14-1**					
Lab ID :	BMI10020402-05A	* * * None Found * * *	ND	2.0 µg/L	02/05/10 14:43	02/05/10 14:43
Date Received :	02/04/10					
Date Sampled :	02/03/10 09:59					
Client ID :	**EB-2-2/3/10**					
Lab ID :	BMI10020402-06A	Tertiary Butyl Alcohol (TBA)	55	10 µg/L	02/05/10 12:52	02/05/10 12:52
Date Received :	02/04/10	2-Methyl-1-propene	2.1	2.0 µg/L	02/05/10 12:52	02/05/10 12:52
Date Sampled :	02/03/10 09:46					
Client ID :	**TB-2-2/3/10**					
Lab ID :	BMI10020402-07A	* * * None Found * * *	ND	2.0 µg/L	02/05/10 12:30	02/05/10 12:30
Date Received :	02/04/10					
Date Sampled :	02/03/10 00:00					

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/17/10

Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020402-01A
Client I.D. Number: MW-14-5

Sampled: 02/03/10 08:00
Received: 02/04/10
Extracted: 02/05/10 13:14
Analyzed: 02/05/10 13:14

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	117	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	103	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	89	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/17/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020402-02A
Client I.D. Number: MW-14-4

Sampled: 02/03/10 08:31
Received: 02/04/10
Extracted: 02/05/10 13:36
Analyzed: 02/05/10 13:36

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	J	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	116	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	106	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	88	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	J	1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

J=Estimated: The analyte was positively identified; the quanitation is an estimation.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/17/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020402-03A
Client I.D. Number: MW-14-3

Sampled: 02/03/10 08:59
Received: 02/04/10
Extracted: 02/08/10 18:29
Analyzed: 02/08/10 18:29

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.51		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.9		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	92	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	105	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	0.74		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/17/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020402-04A
Client I.D. Number: MW-14-2

Sampled: 02/03/10 09:27
Received: 02/04/10
Extracted: 02/08/10 18:52
Analyzed: 02/08/10 18:52

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	0.54		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.57		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	11		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	91	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	105	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	0.69		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/17/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020402-05A
Client I.D. Number: MW-14-1

Sampled: 02/03/10 09:59
Received: 02/04/10
Extracted: 02/05/10 14:43
Analyzed: 02/05/10 14:43

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	4.9		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	120	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	107	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	89	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020402-06A
Client I.D. Number: EB-2-2/3/10

Sampled: 02/03/10 09:46
Received: 02/04/10
Extracted: 02/05/10 12:52
Analyzed: 02/05/10 12:52

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	116	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	107	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	89	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020402-07A
Client I.D. Number: TB-2-2/3/10

Sampled: 02/03/10 00:00
Received: 02/04/10
Extracted: 02/05/10 12:30
Analyzed: 02/05/10 12:30

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	117	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	106	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	88	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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2/17/10
Report Date

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10020402 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10020402-01A	MW-14-5	Aqueous	2
10020402-02A	MW-14-4	Aqueous	2
10020402-03A	MW-14-3	Aqueous	2
10020402-04A	MW-14-2	Aqueous	2
10020402-05A	MW-14-1	Aqueous	2
10020402-06A	EB-2-2/3/10	Aqueous	2
10020402-07A	TB-2-2/3/10	Aqueous	2

2/17/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *17-Feb-10*

QC Summary Report

Work Order: 10020402

Method Blank

Type: **MBLK** Test Code: **EPA Method 314.0**

File ID: **14** Batch ID: **23505** Analysis Date: **02/04/2010 12:56**

Sample ID: **MB-23505** Units : **µg/L** Run ID: **IC_3_100204A** Prep Date: **02/04/2010 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type: **LFB** Test Code: **EPA Method 314.0**

File ID: **15** Batch ID: **23505** Analysis Date: **02/04/2010 13:14**

Sample ID: **LFB-23505** Units : **µg/L** Run ID: **IC_3_100204A** Prep Date: **02/04/2010 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	23.7	2	25		95	85	115			

Sample Matrix Spike

Type: **LFM** Test Code: **EPA Method 314.0**

File ID: **19** Batch ID: **23505** Analysis Date: **02/11/2010 15:36**

Sample ID: **10020402-02ALFM** Units : **µg/L** Run ID: **IC_3_100204A** Prep Date: **02/04/2010 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	29.2	2	25	3.863	101	80	120			

Sample Matrix Spike Duplicate

Type: **LFMD** Test Code: **EPA Method 314.0**

File ID: **20** Batch ID: **23505** Analysis Date: **02/11/2010 15:54**

Sample ID: **10020402-02ALFMD** Units : **µg/L** Run ID: **IC_3_100204A** Prep Date: **02/04/2010 11:56**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	29.5	2	25	3.863	103	80	120	29.18	1.1(15)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *15-Feb-10*

QC Summary Report

Work Order: 10020402

Method Blank

Type **MBLK** Test Code: **EPA Method 200.8**

File ID: **020410.B\509MB.D** Batch ID: **23509K** Analysis Date: **02/05/2010 10:50**

Sample ID: **MB-22509** Units : **mg/L** Run ID: **ICP/MS_100205B** Prep Date: **02/04/2010 13:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 200.8**

File ID: **020410.B\590L1.D** Batch ID: **23509K** Analysis Date: **02/05/2010 10:55**

Sample ID: **LCS-22509** Units : **mg/L** Run ID: **ICP/MS_100205B** Prep Date: **02/04/2010 13:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0501	0.005	0.05		100	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 200.8**

File ID: **020410.B\509MS.D** Batch ID: **23509K** Analysis Date: **02/05/2010 11:29**

Sample ID: **10020301-02AMS** Units : **mg/L** Run ID: **ICP/MS_100205B** Prep Date: **02/04/2010 13:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0533	0.005	0.05	0	107	80	120			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 200.8**

File ID: **020410.B\509MSD.D** Batch ID: **23509K** Analysis Date: **02/05/2010 11:35**

Sample ID: **10020301-02AMSD** Units : **mg/L** Run ID: **ICP/MS_100205B** Prep Date: **02/04/2010 13:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0536	0.005	0.05	0	107	80	120	0.05334	0.4(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *15-Feb-10*

QC Summary Report

Work Order: 10020402

Method Blank Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10020507.D** Batch ID: **MS15W0205M** Analysis Date: **02/05/2010 10:38**

Sample ID: **MBLK MS15W0205M** Units : **µg/L** Run ID: **MSD_15_100205B** Prep Date: **02/05/2010 10:38**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	11.3		10		113	70	130			
Surr: Toluene-d8	10.8		10		108	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *15-Feb-10*

QC Summary Report

Work Order: 10020402

Surr: 4-Bromofluorobenzene	9.04			10		90	70	130		

Laboratory Control Spike Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **10020505.D** Batch ID: **MS15W0205M** Analysis Date: **02/05/2010 09:40**

Sample ID: **LCS MS15W0205M** Units : **µg/L** Run ID: **MSD_15_100205B** Prep Date: **02/05/2010 09:40**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	10	1	10		100	70	130			
Chloromethane	8.41	2	10		84	70	130			
Vinyl chloride	11.3	1	10		113	70	130			
Chloroethane	10.9	1	10		109	70	130			
Bromomethane	7.78	2	10		78	70	130			
Trichlorofluoromethane	10.7	1	10		107	70	130			
1,1-Dichloroethene	10.6	1	10		106	70	130			
Dichloromethane	10.3	2	10		103	70	130			
trans-1,2-Dichloroethene	10.9	1	10		109	70	130			
Methyl tert-butyl ether (MTBE)	12.1	0.5	10		121	70	130			
1,1-Dichloroethane	10.1	1	10		101	70	130			
cis-1,2-Dichloroethene	11.1	1	10		111	70	130			
Bromochloromethane	12.5	1	10		125	70	130			
Chloroform	10.1	1	10		101	70	130			
2,2-Dichloropropane	11.4	1	10		114	70	130			
1,2-Dichloroethane	11.7	1	10		117	70	130			
1,1,1-Trichloroethane	11.5	1	10		115	70	130			
1,1-Dichloropropene	10.9	1	10		109	70	130			
Carbon tetrachloride	12	1	10		120	70	130			
Benzene	10.1	0.5	10		101	70	130			
Dibromomethane	12.4	1	10		124	70	130			
1,2-Dichloropropane	10.8	1	10		108	70	130			
Trichloroethene	11.3	1	10		113	70	130			
Bromodichloromethane	12.1	1	10		121	70	130			
cis-1,3-Dichloropropene	10.8	1	10		108	70	130			
trans-1,3-Dichloropropene	11.2	1	10		112	70	130			
1,1,2-Trichloroethane	11.6	1	10		116	70	130			
Toluene	10.1	0.5	10		101	70	130			
1,3-Dichloropropane	12.1	1	10		121	70	130			
Dibromochloromethane	12.3	1	10		123	70	130			
1,2-Dibromoethane (EDB)	25.9	2	20		130	70	130			
Tetrachloroethene	11.4	1	10		114	70	130			
1,1,1,2-Tetrachloroethane	12.1	1	10		121	70	130			
Chlorobenzene	10.7	1	10		107	70	130			
Ethylbenzene	10.3	0.5	10		103	70	130			
m,p-Xylene	11	0.5	10		110	70	130			
Bromoform	12.6	1	10		126	70	130			
Styrene	11.9	1	10		119	70	130			
o-Xylene	11.1	0.5	10		111	70	130			
1,1,2,2-Tetrachloroethane	11.4	1	10		114	70	130			
1,2,3-Trichloropropane	23.7	2	20		119	70	130			
Isopropylbenzene	9.7	1	10		97	70	130			
Bromobenzene	10.2	1	10		102	70	130			
n-Propylbenzene	9.54	1	10		95	70	130			
4-Chlorotoluene	10.1	1	10		101	70	130			
2-Chlorotoluene	9.56	1	10		96	70	130			
1,3,5-Trimethylbenzene	9.41	1	10		94	70	130			
tert-Butylbenzene	9.52	1	10		95	70	130			
1,2,4-Trimethylbenzene	9.53	1	10		95	70	130			
sec-Butylbenzene	9.83	1	10		98	70	130			
1,3-Dichlorobenzene	10	1	10		100	70	130			
1,4-Dichlorobenzene	9.64	1	10		96	70	130			
4-Isopropyltoluene	9.51	1	10		95	70	130			
1,2-Dichlorobenzene	9.53	1	10		95	70	130			
n-Butylbenzene	9.36	1	10		94	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	55.2	3	50		110	70	130			
1,2,4-Trichlorobenzene	10.9	2	10		109	70	130			
Naphthalene	11.7	2	10		117	70	130			
Hexachlorobutadiene	19	2	20		95	70	130			
1,2,3-Trichlorobenzene	11.5	2	10		115	70	130			
Surr: 1,2-Dichloroethane-d4	10.9		10		109	70	130			
Surr: Toluene-d8	10.2		10		102	70	130			
Surr: 4-Bromofluorobenzene	9.32		10		93	70	130			

Alpha Analytical, Inc.

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Date: *15-Feb-10*

QC Summary Report

Work Order: 10020402

Sample Matrix Spike Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **10020508.D** Batch ID: **MS15W0205M** Analysis Date: **02/05/2010 11:01**

Sample ID: **10020402-02AMS** Units : **µg/L** Run ID: **MSD_15_100205B** Prep Date: **02/05/2010 11:01**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	33.9	2.5	50	0	68	13	167			
Chloromethane	34.4	10	50	0	69	28	145			
Vinyl chloride	46.2	2.5	50	0	92	43	134			
Chloroethane	43.4	2.5	50	0	87	39	154			
Bromomethane	29.1	10	50	0	58	19	176			
Trichlorofluoromethane	44.9	2.5	50	0	90	34	160			
1,1-Dichloroethene	45.3	2.5	50	0	91	60	130			
Dichloromethane	46.8	10	50	0	94	68	130			
trans-1,2-Dichloroethene	46.6	2.5	50	0	93	63	130			
Methyl tert-butyl ether (MTBE)	56.1	1.3	50	0	112	56	141			
1,1-Dichloroethane	44.3	2.5	50	0	89	61	130			
cis-1,2-Dichloroethene	50.9	2.5	50	0	102	70	130			
Bromochloromethane	58	2.5	50	0	116	70	130			
Chloroform	44.9	2.5	50	0	90	67	130			
2,2-Dichloropropane	48.7	2.5	50	0	97	30	152			
1,2-Dichloroethane	54.9	2.5	50	0	110	60	135			
1,1,1-Trichloroethane	48.9	2.5	50	0	98	59	137			
1,1-Dichloropropene	47.3	2.5	50	0	95	63	130			
Carbon tetrachloride	50.2	2.5	50	0	100	50	147			
Benzene	44	1.3	50	0	88	67	130			
Dibromomethane	57.3	2.5	50	0	115	69	133			
1,2-Dichloropropane	47.6	2.5	50	0	95	69	130			
Trichloroethene	47.9	2.5	50	0	96	69	130			
Bromodichloromethane	54.5	2.5	50	0	109	66	134			
cis-1,3-Dichloropropene	47.4	2.5	50	0	95	63	130			
trans-1,3-Dichloropropene	51.7	2.5	50	0	103	66	131			
1,1,2-Trichloroethane	53.3	2.5	50	0	107	68	130			
Toluene	43.4	1.3	50	0	87	66	130			
1,3-Dichloropropane	55.1	2.5	50	0	110	70	130			
Dibromochloromethane	56.9	2.5	50	0	114	70	130			
1,2-Dibromoethane (EDB)	117	5	100	0	117	70	130			
Tetrachloroethene	49.3	2.5	50	0	99	61	134			
1,1,1,2-Tetrachloroethane	52.9	2.5	50	0	106	70	130			
Chlorobenzene	46.5	2.5	50	0	93	70	130			
Ethylbenzene	44.1	1.3	50	0	88	68	130			
m,p-Xylene	47.1	1.3	50	0	94	64	130			
Bromoform	56.9	2.5	50	0	114	64	138			
Styrene	51.7	2.5	50	0	103	69	130			
o-Xylene	47.6	1.3	50	0	95	70	130			
1,1,2,2-Tetrachloroethane	51.7	2.5	50	0	103	65	131			
1,2,3-Trichloropropane	104	10	100	0	104	70	130			
Isopropylbenzene	41.3	2.5	50	0	83	64	138			
Bromobenzene	45.8	2.5	50	0	92	70	130			
n-Propylbenzene	40.6	2.5	50	0	81	66	132			
4-Chlorotoluene	43.6	2.5	50	0	87	70	130			
2-Chlorotoluene	41.7	2.5	50	0	83	70	130			
1,3,5-Trimethylbenzene	40.6	2.5	50	0	81	66	136			
tert-Butylbenzene	40.7	2.5	50	0	81	65	137			
1,2,4-Trimethylbenzene	41.5	2.5	50	0	83	65	137			
sec-Butylbenzene	41.7	2.5	50	0	83	66	134			
1,3-Dichlorobenzene	43.8	2.5	50	0	88	70	130			
1,4-Dichlorobenzene	42.2	2.5	50	0	84	70	130			
4-Isopropyltoluene	41	2.5	50	0	82	66	137			
1,2-Dichlorobenzene	42.7	2.5	50	0	85	70	130			
n-Butylbenzene	40.2	2.5	50	0	80	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	254	15	250	0	102	67	130			
1,2,4-Trichlorobenzene	48.6	10	50	0	97	61	137			
Naphthalene	51.5	10	50	0	103	40	167			
Hexachlorobutadiene	80	10	100	0	80	61	130			
1,2,3-Trichlorobenzene	50.3	10	50	0	101	51	144			
Surr: 1,2-Dichloroethane-d4	56.6		50		113	70	130			
Surr: Toluene-d8	50.3		50		101	70	130			
Surr: 4-Bromofluorobenzene	46.1		50		92	70	130			

Alpha Analytical, Inc.

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Date: *15-Feb-10*

QC Summary Report

Work Order: 10020402

Sample Matrix Spike Duplicate Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **10020509.D** Batch ID: **MS15W0205M** Analysis Date: **02/05/2010 11:23**

Sample ID: **10020402-02AMSD** Units : **µg/L** Run ID: **MSD_15_100205B** Prep Date: **02/05/2010 11:23**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	39.8	2.5	50	0	80	13	167	33.85	16.1(20)	
Chloromethane	37.3	10	50	0	75	28	145	34.39	8.2(20)	
Vinyl chloride	54.7	2.5	50	0	109	43	134	46.24	16.7(20)	
Chloroethane	51.9	2.5	50	0	104	39	154	43.41	17.8(20)	
Bromomethane	38.2	10	50	0	76	19	176	29.11	27.0(20)	R5
Trichlorofluoromethane	54.1	2.5	50	0	108	34	160	44.93	18.5(20)	
1,1-Dichloroethene	52	2.5	50	0	104	60	130	45.29	13.9(20)	
Dichloromethane	50.6	10	50	0	101	68	130	46.77	7.9(20)	
trans-1,2-Dichloroethene	52.7	2.5	50	0	105	63	130	46.62	12.1(20)	
Methyl tert-butyl ether (MTBE)	57.9	1.3	50	0	116	56	141	56.08	3.2(20)	
1,1-Dichloroethane	49.4	2.5	50	0	99	61	130	44.26	11.1(20)	
cis-1,2-Dichloroethene	55.8	2.5	50	0	112	70	130	50.86	9.3(20)	
Bromochloromethane	59.8	2.5	50	0	120	70	130	58	3.0(20)	
Chloroform	48.8	2.5	50	0	98	67	130	44.85	8.4(20)	
2,2-Dichloropropane	55.7	2.5	50	0	111	30	152	48.71	13.3(20)	
1,2-Dichloroethane	57	2.5	50	0	114	60	135	54.89	3.7(20)	
1,1,1-Trichloroethane	55.3	2.5	50	0	111	59	137	48.86	12.3(20)	
1,1-Dichloropropene	53.7	2.5	50	0	107	63	130	47.27	12.8(20)	
Carbon tetrachloride	58.4	2.5	50	0	117	50	147	50.22	15.1(20)	
Benzene	49.4	1.3	50	0	99	67	130	44.04	11.6(20)	
Dibromomethane	58.5	2.5	50	0	117	69	133	57.29	2.1(20)	
1,2-Dichloropropane	51.8	2.5	50	0	104	69	130	47.59	8.5(20)	
Trichloroethene	54.5	2.5	50	0	109	69	130	47.85	13.0(20)	
Bromodichloromethane	60.2	2.5	50	0	120	66	134	54.53	9.8(20)	
cis-1,3-Dichloropropene	50.9	2.5	50	0	102	63	130	47.41	7.2(20)	
trans-1,3-Dichloropropene	54.2	2.5	50	0	108	66	131	51.7	4.8(20)	
1,1,2-Trichloroethane	55.3	2.5	50	0	111	68	130	53.33	3.6(20)	
Toluene	49.5	1.3	50	0	99	66	130	43.44	13.0(20)	
1,3-Dichloropropane	58.2	2.5	50	0	116	70	130	55.08	5.6(20)	
Dibromochloromethane	59.9	2.5	50	0	120	70	130	56.91	5.2(20)	
1,2-Dibromoethane (EDB)	123	5	100	0	123	70	130	117.4	5.0(20)	
Tetrachloroethene	56.6	2.5	50	0	113	61	134	49.26	13.9(20)	
1,1,1,2-Tetrachloroethane	58.7	2.5	50	0	117	70	130	52.87	10.5(20)	
Chlorobenzene	51.5	2.5	50	0	103	70	130	46.5	10.2(20)	
Ethylbenzene	49.9	1.3	50	0	99.8	68	130	44.06	12.5(20)	
m,p-Xylene	53.5	1.3	50	0	107	64	130	47.11	12.8(20)	
Bromoform	61.9	2.5	50	0	124	64	138	56.94	8.3(20)	
Styrene	58	2.5	50	0	116	69	130	51.65	11.5(20)	
o-Xylene	53.3	1.3	50	0	107	70	130	47.62	11.3(20)	
1,1,2,2-Tetrachloroethane	54	2.5	50	0	108	65	131	51.65	4.5(20)	
1,2,3-Trichloropropane	107	10	100	0	107	70	130	103.9	3.3(20)	
Isopropylbenzene	48.5	2.5	50	0	97	64	138	41.32	15.9(20)	
Bromobenzene	50	2.5	50	0	100	70	130	45.75	8.9(20)	
n-Propylbenzene	47.8	2.5	50	0	96	66	132	40.56	16.3(20)	
4-Chlorotoluene	49.8	2.5	50	0	99.6	70	130	43.59	13.3(20)	
2-Chlorotoluene	47.2	2.5	50	0	94	70	130	41.68	12.3(20)	
1,3,5-Trimethylbenzene	46.7	2.5	50	0	93	66	136	40.6	13.9(20)	
tert-Butylbenzene	47	2.5	50	0	94	65	137	40.69	14.4(20)	
1,2,4-Trimethylbenzene	47.1	2.5	50	0	94	65	137	41.49	12.6(20)	
sec-Butylbenzene	48.7	2.5	50	0	97	66	134	41.66	15.5(20)	
1,3-Dichlorobenzene	49.2	2.5	50	0	98	70	130	43.76	11.8(20)	
1,4-Dichlorobenzene	47.3	2.5	50	0	95	70	130	42.22	11.3(20)	
4-Isopropyltoluene	47.6	2.5	50	0	95	66	137	40.97	14.9(20)	
1,2-Dichlorobenzene	47.4	2.5	50	0	95	70	130	42.74	10.4(20)	
n-Butylbenzene	46.8	2.5	50	0	94	60	142	40.17	15.3(20)	
1,2-Dibromo-3-chloropropane (DBCP)	263	15	250	0	105	67	130	253.9	3.4(20)	
1,2,4-Trichlorobenzene	54.7	10	50	0	109	61	137	48.56	11.8(20)	
Naphthalene	57.2	10	50	0	114	40	167	51.52	10.4(20)	
Hexachlorobutadiene	96	10	100	0	96	61	130	79.97	18.3(20)	
1,2,3-Trichlorobenzene	56.1	10	50	0	112	51	144	50.32	10.9(20)	
Surr: 1,2-Dichloroethane-d4	55		50		110	70	130			
Surr: Toluene-d8	51.2		50		102	70	130			
Surr: 4-Bromofluorobenzene	47.2		50		94	70	130			

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Date: *15-Feb-10*

QC Summary Report

Work Order: 10020402

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMIS10020402

Report Due By : 5:00 PM On : 18-Feb-2010

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

PO : 218013

Client's COC # : 28878 Job : G005862/JPL Groundwater Monitoring

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	04-Feb-2010	**04-Feb-2010**

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	METALS_DW	VOC_TIC_W	VOC_W	Sample Remarks
BMI10020402-01A	MW-14-5	AQ	02/03/10 08:00	4	0	10	Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria	
BMI10020402-02A	MW-14-4	AQ	02/03/10 08:31	8	0	10	Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria	MS/MSD
BMI10020402-03A	MW-14-3	AQ	02/03/10 08:59	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria	
BMI10020402-04A	MW-14-2	AQ	02/03/10 09:27	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria	
BMI10020402-05A	MW-14-1	AQ	02/03/10 09:59	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria	
BMI10020402-06A	EB-2-2/3/10	AQ	02/03/10 09:46	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria	
BMI10020402-07A	TB-2-2/3/10	AQ	02/03/10 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria	Reno Trip Blank 8/25/09

Comments: Security seals intact. Frozen ice. Temp Blank #7546 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2-4-10 1135

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

Name: GERALD TOMPKINS / BATTELLE
Address: 505 KING AVE.
City, State, Zip: COLUMBUS, OH 43201
Phone Number ______ Fax ______

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? 28878
AZ ___ **CA** ___ **NV** ___ **WA** ___
ID ___ **OR** ___ **OTHER** ______ **Page #** 1 **of** 1

Client Name: BATTELLE / DAVID CONNER
Address: 3990 OLD TOWN AVE., C-205
City, State, Zip: SAN DIEGO, CA 92110
P.O. #: 218013
EMail Address:
Phone #: (619) 726-7311
Job #: G005862
Fax #:
Sampled by:
Report Attention:

Required QC Level? I II (III) IV
EDD / EDF? YES ___ ***NO*** ___
Global ID # ___

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (*Office Use Only*)	Sample Description	TAT	*Field Filtered*	Total and type of containers ** See below	VOC (524.2)	Total Cr (200.8)	ClO4- (314.0)					REMARKS
800	2/3/10	AQ	BMI10020402-01	MW-14-5	NORM		V/P 4	X		X					
831			-02	MW-14-4			V/P 8	X		X					MS/MSD
859			-03	MW-14-3			V/P 5	X	X	X					
927			-04	MW-14-2				X	X	X					
959			-05	MW-14-1				X	X	X					
946			-06	EB-2-2/3/10				X	X	X					EQUIP. BLANK
—			-07	TB-2-2/3/10			V/1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[illegible]	MARCO MENDOZA	INSIGHT EEC	2/3/10	1216
Received by	[illegible]	Anthony Stalk	Alpha Analytical	2/3/10	1216
Relinquished by	[illegible]				
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	2-4-10	1135
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *18-Feb-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring

Work Order: BMI10020506 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10020506-01A	MW-18-5	Aqueous
10020506-02A	MW-18-4	Aqueous
10020506-03A	MW-18-3	Aqueous
10020506-04A	MW-18-2	Aqueous
10020506-05A	DUPE-2-1Q10	Aqueous
10020506-06A	EB-3-2/4/10	Aqueous
10020506-07A	TB-3-2/4/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
NONE		

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/05/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-18-5**				
Lab ID : BMI10020506-01A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/11/10 19:17
Date Sampled 02/04/10 08:23				
Client ID: **MW-18-4**				
Lab ID : BMI10020506-02A Perchlorate	58.8	1.00 µg/L	02/11/10 13:07	02/11/10 19:35
Date Sampled 02/04/10 09:05				
Client ID: **MW-18-3**				
Lab ID : BMI10020506-03A Perchlorate	45.1	1.00 µg/L	02/11/10 13:07	02/11/10 19:54
Date Sampled 02/04/10 09:35				
Client ID: **MW-18-2**				
Lab ID : BMI10020506-04A Perchlorate	21.4	1.00 µg/L	02/11/10 13:07	02/11/10 20:12
Date Sampled 02/04/10 10:02				
Client ID: **DUPE-2-1Q10**				
Lab ID : BMI10020506-05A Perchlorate	60.1	1.00 µg/L	02/11/10 13:07	02/11/10 20:31
Date Sampled 02/04/10 00:00				
Client ID: **EB-3-2/4/10**				
Lab ID : BMI10020506-06A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/11/10 20:49
Date Sampled 02/04/10 09:50				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

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2/18/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/05/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-18-4**				
Lab ID : BMI10020506-02A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 04:35
Date Sampled 02/04/10 09:05				
Client ID: **MW-18-3**				
Lab ID : BMI10020506-03A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 04:52
Date Sampled 02/04/10 09:35				
Client ID: **MW-18-2**				
Lab ID : BMI10020506-04A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 04:57
Date Sampled 02/04/10 10:02				
Client ID: **DUPE-2-1Q10**				
Lab ID : BMI10020506-05A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 05:03
Date Sampled 02/04/10 00:00				
Client ID: **EB-3-2/4/10**				
Lab ID : BMI10020506-06A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 05:09
Date Sampled 02/04/10 09:50				

ND = Not Detected

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

	Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID : **MW-18-5**					
Lab ID : BMI10020506-01A	Sulfur dioxide	5.1	2.0 µg/L	02/09/10 14:19	02/09/10 14:19
Date Received : 02/05/10					
Date Sampled : 02/04/10 08:23					
Client ID : **MW-18-4**					
Lab ID : BMI10020506-02A	Sulfur dioxide	2.5	2.0 µg/L	02/09/10 14:41	02/09/10 14:41
Date Received : 02/05/10					
Date Sampled : 02/04/10 09:05					
Client ID : **MW-18-3**					
Lab ID : BMI10020506-03A	* * * None Found * * *	ND	2.0 µg/L	02/09/10 15:03	02/09/10 15:03
Date Received : 02/05/10					
Date Sampled : 02/04/10 09:35					
Client ID : **MW-18-2**					
Lab ID : BMI10020506-04A	* * * None Found * * *	ND	2.0 µg/L	02/09/10 15:25	02/09/10 15:25
Date Received : 02/05/10					
Date Sampled : 02/04/10 10:02					
Client ID : **DUPE-2-1Q10**					
Lab ID : BMI10020506-05A	* * * None Found * * *	ND	2.0 µg/L	02/09/10 15:48	02/09/10 15:48
Date Received : 02/05/10					
Date Sampled : 02/04/10 00:00					
Client ID : **EB-3-2/4/10**					
Lab ID : BMI10020506-06A	* * * None Found * * *	ND	2.0 µg/L	02/09/10 13:13	02/09/10 13:13
Date Received : 02/05/10					
Date Sampled : 02/04/10 09:50					
Client ID : **TB-3-2/4/10**					
Lab ID : BMI10020506-07A	* * * None Found * * *	ND	2.0 µg/L	02/09/10 12:50	02/09/10 12:50
Date Received : 02/05/10					
Date Sampled : 02/04/10 00:00					

Alpha Analytical, Inc.

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Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/18/10

Report Date

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020506-01A
Client I.D. Number: MW-18-5

Sampled: 02/04/10 08:23
Received: 02/05/10
Extracted: 02/09/10 14:19
Analyzed: 02/09/10 14:19

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	91	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	105	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/18/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020506-02A
Client I.D. Number: MW-18-4

Sampled: 02/04/10 09:05
Received: 02/05/10
Extracted: 02/09/10 14:41
Analyzed: 02/09/10 14:41

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	2.1		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	10		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.2		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	90	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	106	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/18/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020506-03A
Client I.D. Number: MW-18-3

Sampled: 02/04/10 09:35
Received: 02/05/10
Extracted: 02/09/10 15:03
Analyzed: 02/09/10 15:03

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L
3	Vinyl chloride	ND		0.50	µg/L
4	Chloroethane	ND		0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L
9	Freon-113	ND		0.50	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L
16	Chloroform	1.8		0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L
21	Carbon tetrachloride	17		0.50	µg/L
22	Benzene	ND		0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L
25	Trichloroethene	1.2		0.50	µg/L
26	Bromodichloromethane	ND		0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L
30	1,1,2-Trichloroethane	ND		0.50	µg/L
31	Toluene	ND		0.50	µg/L
32	1,3-Dichloropropane	ND		0.50	µg/L
33	Dibromochloromethane	ND		0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L
35	Tetrachloroethene	ND		0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND		0.50	µg/L
37	Chlorobenzene	ND		0.50	µg/L
38	Ethylbenzene	ND		0.50	µg/L
39	m,p-Xylene	ND		0.50	µg/L
40	Bromoform	ND		0.50	µg/L
41	Styrene	ND		0.50	µg/L
42	o-Xylene	ND		0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND		0.50	µg/L
44	1,2,3-Trichloropropane	ND		1.0	µg/L
45	Isopropylbenzene	ND		0.50	µg/L
46	Bromobenzene	ND		0.50	µg/L
47	n-Propylbenzene	ND		0.50	µg/L
48	4-Chlorotoluene	ND		0.50	µg/L
49	2-Chlorotoluene	ND		0.50	µg/L
50	1,3,5-Trimethylbenzene	ND		0.50	µg/L
51	tert-Butylbenzene	ND		0.50	µg/L
52	1,2,4-Trimethylbenzene	ND		0.50	µg/L
53	sec-Butylbenzene	ND		0.50	µg/L
54	1,3-Dichlorobenzene	ND		0.50	µg/L
55	1,4-Dichlorobenzene	ND		0.50	µg/L
56	4-Isopropyltoluene	ND		0.50	µg/L
57	1,2-Dichlorobenzene	ND		0.50	µg/L
58	n-Butylbenzene	ND		0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND		2.5	µg/L
60	1,2,4-Trichlorobenzene	ND		1.0	µg/L
61	Naphthalene	ND		1.0	µg/L
62	Hexachlorobutadiene	ND		1.0	µg/L
63	1,2,3-Trichlorobenzene	ND		1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	91		(70-130)	%REC
65	Surr: Toluene-d8	99		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	108		(70-130)	%REC

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

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2/18/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020506-04A
Client I.D. Number: MW-18-2

Sampled: 02/04/10 10:02
Received: 02/05/10
Extracted: 02/09/10 15:25
Analyzed: 02/09/10 15:25

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	91	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	105	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

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2/18/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020506-05A
Client I.D. Number: DUPE-2-1Q10

Sampled: 02/04/10 00:00
Received: 02/05/10
Extracted: 02/09/10 15:48
Analyzed: 02/09/10 15:48

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	2.0		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	8.9		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.1		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	92	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	107	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/18/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020506-06A
Client I.D. Number: EB-3-2/4/10

Sampled: 02/04/10 09:50
Received: 02/05/10
Extracted: 02/09/10 13:13
Analyzed: 02/09/10 13:13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	92	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	107	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/18/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020506-07A
Client I.D. Number: TB-3-2/4/10

Sampled: 02/04/10 00:00
Received: 02/05/10
Extracted: 02/09/10 12:50
Analyzed: 02/09/10 12:50

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L
2	Chloromethane	ND	Q	1.0	µg/L
3	Vinyl chloride	ND		0.50	µg/L
4	Chloroethane	ND		0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L
9	Freon-113	ND		0.50	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L
16	Chloroform	ND		0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L
22	Benzene	ND		0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L
25	Trichloroethene	ND		0.50	µg/L
26	Bromodichloromethane	ND		0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L
30	1,1,2-Trichloroethane	ND		0.50	µg/L
31	Toluene	ND		0.50	µg/L
32	1,3-Dichloropropane	ND		0.50	µg/L
33	Dibromochloromethane	ND		0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L
35	Tetrachloroethene	ND		0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND		0.50	µg/L
37	Chlorobenzene	ND		0.50	µg/L
38	Ethylbenzene	ND		0.50	µg/L
39	m,p-Xylene	ND		0.50	µg/L
40	Bromoform	ND		0.50	µg/L
41	Styrene	ND		0.50	µg/L
42	o-Xylene	ND		0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND		0.50	µg/L
44	1,2,3-Trichloropropane	ND		1.0	µg/L
45	Isopropylbenzene	ND		0.50	µg/L
46	Bromobenzene	ND		0.50	µg/L
47	n-Propylbenzene	ND		0.50	µg/L
48	4-Chlorotoluene	ND		0.50	µg/L
49	2-Chlorotoluene	ND		0.50	µg/L
50	1,3,5-Trimethylbenzene	ND		0.50	µg/L
51	tert-Butylbenzene	ND		0.50	µg/L
52	1,2,4-Trimethylbenzene	ND		0.50	µg/L
53	sec-Butylbenzene	ND		0.50	µg/L
54	1,3-Dichlorobenzene	ND		0.50	µg/L
55	1,4-Dichlorobenzene	ND		0.50	µg/L
56	4-Isopropyltoluene	ND		0.50	µg/L
57	1,2-Dichlorobenzene	ND		0.50	µg/L
58	n-Butylbenzene	ND		0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND		2.5	µg/L
60	1,2,4-Trichlorobenzene	ND		1.0	µg/L
61	Naphthalene	ND		1.0	µg/L
62	Hexachlorobutadiene	ND		1.0	µg/L
63	1,2,3-Trichlorobenzene	ND		1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	93		(70-130)	%REC
65	Surr: Toluene-d8	101		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	106		(70-130)	%REC

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/18/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10020506 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10020506-01A	MW-18-5	Aqueous	2
10020506-02A	MW-18-4	Aqueous	2
10020506-03A	MW-18-3	Aqueous	2
10020506-04A	MW-18-2	Aqueous	2
10020506-05A	DUPE-2-1Q10	Aqueous	2
10020506-06A	EB-3-2/4/10	Aqueous	2
10020506-07A	TB-3-2/4/10	Aqueous	2

2/18/10

Report Date

Alpha Analytical, Inc.

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Date: *17-Feb-10*

QC Summary Report

Work Order: 10020506

Method Blank

Type: **MBLK** Test Code: **EPA Method 314.0**

File ID: **14** Batch ID: **23577** Analysis Date: **02/11/2010 14:04**

Sample ID: **MB-23577** Units : **µg/L** Run ID: **IC_3_100211A** Prep Date: **02/11/2010 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type: **LFB** Test Code: **EPA Method 314.0**

File ID: **15** Batch ID: **23577** Analysis Date: **02/11/2010 14:22**

Sample ID: **LFB-23577** Units : **µg/L** Run ID: **IC_3_100211A** Prep Date: **02/11/2010 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	25	2	25		100	85	115			

Sample Matrix Spike

Type: **LFM** Test Code: **EPA Method 314.0**

File ID: **40** Batch ID: **23577** Analysis Date: **02/11/2010 22:03**

Sample ID: **10020971-03ALFM** Units : **µg/L** Run ID: **IC_3_100211A** Prep Date: **02/11/2010 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	30.4	2	25	0	122	80	120			M1

Sample Matrix Spike Duplicate

Type: **LFMD** Test Code: **EPA Method 314.0**

File ID: **41** Batch ID: **23577** Analysis Date: **02/11/2010 22:21**

Sample ID: **10020971-03ALFMD** Units : **µg/L** Run ID: **IC_3_100211A** Prep Date: **02/11/2010 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	27.7	2	25	0	111	80	120	30.43	9.3(15)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

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Date: *17-Feb-10*

QC Summary Report

Work Order: 10020506

Method Blank

Type: **MBLK** Test Code: **EPA Method 200.8**
File ID: **021110.B\160SMPL.D** Batch ID: **23572K** Analysis Date: **02/12/2010 04:12**
Sample ID: **MB-23572** Units : **mg/L** Run ID: **ICP/MS_100212C** Prep Date: **02/10/2010 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method 200.8**
File ID: **021110.B\161_LCS.D** Batch ID: **23572K** Analysis Date: **02/12/2010 04:18**
Sample ID: **LCS-23572** Units : **mg/L** Run ID: **ICP/MS_100212C** Prep Date: **02/10/2010 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0489	0.005	0.05		98	80	120			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method 200.8**
File ID: **021110.B\165SMPL.D** Batch ID: **23572K** Analysis Date: **02/12/2010 04:40**
Sample ID: **10020506-02AMS** Units : **mg/L** Run ID: **ICP/MS_100212C** Prep Date: **02/10/2010 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0464	0.005	0.05	0	93	80	120			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method 200.8**
File ID: **021110.B\166SMPL.D** Batch ID: **23572K** Analysis Date: **02/12/2010 04:46**
Sample ID: **10020506-02AMSD** Units : **mg/L** Run ID: **ICP/MS_100212C** Prep Date: **02/10/2010 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0437	0.005	0.05	0	87	80	120	0.04635	5.9(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

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Date: *17-Feb-10*

QC Summary Report

Work Order: 10020506

Method Blank Type: **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10020907.D** Batch ID: **MS15W0209M** Analysis Date: **02/09/2010 10:37**

Sample ID: **MBLK MS15W0209M** Units : **µg/L** Run ID: **MSD_15_100209B** Prep Date: **02/09/2010 10:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.25		10		93	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			

Alpha Analytical, Inc.

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Date: *17-Feb-10*

QC Summary Report

Work Order: 10020506

Surr: 4-Bromofluorobenzene	10.4		10	104	70	130			

Laboratory Control Spike Type: **LCS** Test Code: **EPA Method SW8260B**

File ID: **10020905.D** Batch ID: **MS15W0209M** Analysis Date: **02/09/2010 09:37**

Sample ID: **LCS MS15W0209M** Units : **µg/L** Run ID: **MSD_15_100209B** Prep Date: **02/09/2010 09:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	8.99	1	10		90	70	130			
Chloromethane	7.02	2	10		70	70	130			
Vinyl chloride	10.2	1	10		102	70	130			
Chloroethane	9.21	1	10		92	70	130			
Bromomethane	5.79	2	10		58	70(70)	130			L50
Trichlorofluoromethane	9.99	1	10		99.9	70	130			
1,1-Dichloroethene	10.7	1	10		107	70	130			
Dichloromethane	10.5	2	10		105	70	130			
trans-1,2-Dichloroethene	10.8	1	10		108	70	130			
Methyl tert-butyl ether (MTBE)	12	0.5	10		120	70	130			
1,1-Dichloroethane	10.3	1	10		103	70	130			
cis-1,2-Dichloroethene	11.7	1	10		117	70	130			
Bromochloromethane	12	1	10		120	70	130			
Chloroform	9.8	1	10		98	70	130			
2,2-Dichloropropane	10.9	1	10		109	70	130			
1,2-Dichloroethane	11.1	1	10		111	70	130			
1,1,1-Trichloroethane	10.6	1	10		106	70	130			
1,1-Dichloropropene	10.9	1	10		109	70	130			
Carbon tetrachloride	10.7	1	10		107	70	130			
Benzene	10.5	0.5	10		105	70	130			
Dibromomethane	12.1	1	10		121	70	130			
1,2-Dichloropropane	11.6	1	10		116	70	130			
Trichloroethene	11	1	10		110	70	130			
Bromodichloromethane	12.1	1	10		121	70	130			
cis-1,3-Dichloropropene	11.3	1	10		113	70	130			
trans-1,3-Dichloropropene	11.4	1	10		114	70	130			
1,1,2-Trichloroethane	12.1	1	10		121	70	130			
Toluene	10.4	0.5	10		104	70	130			
1,3-Dichloropropane	12.6	1	10		126	70	130			
Dibromochloromethane	12.1	1	10		121	70	130			
1,2-Dibromoethane (EDB)	26	2	20		130	70	130			
Tetrachloroethene	11	1	10		110	70	130			
1,1,1,2-Tetrachloroethane	11.4	1	10		114	70	130			
Chlorobenzene	10.6	1	10		106	70	130			
Ethylbenzene	10.2	0.5	10		102	70	130			
m,p-Xylene	11	0.5	10		110	70	130			
Bromoform	11.9	1	10		119	70	130			
Styrene	12	1	10		120	70	130			
o-Xylene	11.1	0.5	10		111	70	130			
1,1,2,2-Tetrachloroethane	11.3	1	10		113	70	130			
1,2,3-Trichloropropane	21.8	2	20		109	70	130			
Isopropylbenzene	10.3	1	10		103	70	130			
Bromobenzene	10.5	1	10		105	70	130			
n-Propylbenzene	10.1	1	10		101	70	130			
4-Chlorotoluene	10.6	1	10		106	70	130			
2-Chlorotoluene	10.2	1	10		102	70	130			
1,3,5-Trimethylbenzene	9.63	1	10		96	70	130			
tert-Butylbenzene	9.71	1	10		97	70	130			
1,2,4-Trimethylbenzene	9.85	1	10		99	70	130			
sec-Butylbenzene	10	1	10		100	70	130			
1,3-Dichlorobenzene	10.2	1	10		102	70	130			
1,4-Dichlorobenzene	9.66	1	10		97	70	130			
4-Isopropyltoluene	9.72	1	10		97	70	130			
1,2-Dichlorobenzene	9.67	1	10		97	70	130			
n-Butylbenzene	9.79	1	10		98	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	55.3	3	50		111	70	130			
1,2,4-Trichlorobenzene	10.6	2	10		106	70	130			
Naphthalene	12.1	2	10		121	70	130			
Hexachlorobutadiene	17.1	2	20		85	70	130			
1,2,3-Trichlorobenzene	10.9	2	10		109	70	130			
Surr: 1,2-Dichloroethane-d4	8.91		10		89	70	130			
Surr: Toluene-d8	9.48		10		95	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

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Date: *17-Feb-10*

QC Summary Report

Work Order: 10020506

Sample Matrix Spike Type: **MS** Test Code: **EPA Method SW8260B**

File ID: **10020908.D** Batch ID: **MS15W0209M** Analysis Date: **02/09/2010 11:00**

Sample ID: **10020801-01AMS** Units : **µg/L** Run ID: **MSD_15_100209B** Prep Date: **02/09/2010 11:00**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	39.1	2.5	50	0	78	13	167			
Chloromethane	33.2	10	50	0	66	28	145			
Vinyl chloride	49.8	2.5	50	0	99.6	43	134			
Chloroethane	41	2.5	50	0	82	39	154			
Bromomethane	22.2	10	50	0	44	19	176			
Trichlorofluoromethane	42.6	2.5	50	0	85	34	160			
1,1-Dichloroethene	48.1	2.5	50	0	96	60	130			
Dichloromethane	49.6	10	50	0	99	68	130			
trans-1,2-Dichloroethene	51.4	2.5	50	0	103	63	130			
Methyl tert-butyl ether (MTBE)	56.4	1.3	50	0	113	56	141			
1,1-Dichloroethane	48.6	2.5	50	0	97	61	130			
cis-1,2-Dichloroethene	54.6	2.5	50	0	109	70	130			
Bromochloromethane	56.8	2.5	50	0	114	70	130			
Chloroform	45.7	2.5	50	0.5	90	67	130			
2,2-Dichloropropane	50.1	2.5	50	0	100	30	152			
1,2-Dichloroethane	51.8	2.5	50	0	104	60	135			
1,1,1-Trichloroethane	49.3	2.5	50	0	99	59	137			
1,1-Dichloropropene	51.8	2.5	50	0	104	63	130			
Carbon tetrachloride	49.8	2.5	50	0	99.7	50	147			
Benzene	48.4	1.3	50	0	97	67	130			
Dibromomethane	56.3	2.5	50	0	113	69	133			
1,2-Dichloropropane	53.7	2.5	50	0	107	69	130			
Trichloroethene	50.2	2.5	50	0	100	69	130			
Bromodichloromethane	55	2.5	50	0	110	66	134			
cis-1,3-Dichloropropene	49.6	2.5	50	0	99	63	130			
trans-1,3-Dichloropropene	50.9	2.5	50	0	102	66	131			
1,1,2-Trichloroethane	54.5	2.5	50	0	109	68	130			
Toluene	47.3	1.3	50	0	95	66	130			
1,3-Dichloropropane	57.4	2.5	50	0	115	70	130			
Dibromochloromethane	54.1	2.5	50	0	108	70	130			
1,2-Dibromoethane (EDB)	116	5	100	0	116	70	130			
Tetrachloroethene	49.7	2.5	50	0	99	61	134			
1,1,1,2-Tetrachloroethane	52.3	2.5	50	0	105	70	130			
Chlorobenzene	48.5	2.5	50	0	97	70	130			
Ethylbenzene	47	1.3	50	0	94	68	130			
m,p-Xylene	50.5	1.3	50	0	101	64	130			
Bromoform	52.8	2.5	50	0	106	64	138			
Styrene	55.1	2.5	50	0	110	69	130			
o-Xylene	51	1.3	50	0	102	70	130			
1,1,2,2-Tetrachloroethane	51.5	2.5	50	0	103	65	131			
1,2,3-Trichloropropane	100	10	100	0	100	70	130			
Isopropylbenzene	47.5	2.5	50	0	95	64	138			
Bromobenzene	47.6	2.5	50	0	95	70	130			
n-Propylbenzene	46.3	2.5	50	0	93	66	132			
4-Chlorotoluene	47.9	2.5	50	0	96	70	130			
2-Chlorotoluene	46.6	2.5	50	0	93	70	130			
1,3,5-Trimethylbenzene	44.4	2.5	50	0	89	66	136			
tert-Butylbenzene	44.8	2.5	50	0	90	65	137			
1,2,4-Trimethylbenzene	44.6	2.5	50	0	89	65	137			
sec-Butylbenzene	46.6	2.5	50	0	93	66	134			
1,3-Dichlorobenzene	46.2	2.5	50	0	92	70	130			
1,4-Dichlorobenzene	44.2	2.5	50	0	88	70	130			
4-Isopropyltoluene	44.8	2.5	50	0	90	66	137			
1,2-Dichlorobenzene	43.5	2.5	50	0	87	70	130			
n-Butylbenzene	44.5	2.5	50	0	89	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	246	15	250	0	98	67	130			
1,2,4-Trichlorobenzene	45	10	50	0	90	61	137			
Naphthalene	50.4	10	50	0	101	40	167			
Hexachlorobutadiene	77.2	10	100	0	77	61	130			
1,2,3-Trichlorobenzene	45.9	10	50	0	92	51	144			
Surr: 1,2-Dichloroethane-d4	44.5		50		89	70	130			
Surr: Toluene-d8	47.4		50		95	70	130			
Surr: 4-Bromofluorobenzene	53.7		50		107	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 17-Feb-10

QC Summary Report

Work Order: 10020506

Sample Matrix Spike Duplicate Type: **MSD** Test Code: **EPA Method SW8260B**

File ID: **10020909.D** Batch ID: **MS15W0209M** Analysis Date: **02/09/2010 11:22**

Sample ID: **10020801-01AMSD** Units : **µg/L** Run ID: **MSD_15_100209B** Prep Date: **02/09/2010 11:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	41.2	2.5	50	0	82	13	167	39.09	5.3(20)	
Chloromethane	36.2	10	50	0	72	28	145	33.17	8.8(20)	
Vinyl chloride	54.2	2.5	50	0	108	43	134	49.79	8.6(20)	
Chloroethane	43.8	2.5	50	0	88	39	154	41.02	6.6(20)	
Bromomethane	29.2	10	50	0	58	19	176	22.24	27.1(20)	R58
Trichlorofluoromethane	48	2.5	50	0	96	34	160	42.57	12.0(20)	
1,1-Dichloroethene	51.7	2.5	50	0	103	60	130	48.06	7.3(20)	
Dichloromethane	50.3	10	50	0	101	68	130	49.6	1.3(20)	
trans-1,2-Dichloroethene	52.6	2.5	50	0	105	63	130	51.37	2.3(20)	
Methyl tert-butyl ether (MTBE)	57.2	1.3	50	0	114	56	141	56.36	1.4(20)	
1,1-Dichloroethane	49.7	2.5	50	0	99	61	130	48.57	2.4(20)	
cis-1,2-Dichloroethene	55.1	2.5	50	0	110	70	130	54.63	0.9(20)	
Bromochloromethane	57.1	2.5	50	0	114	70	130	56.77	0.6(20)	
Chloroform	46.9	2.5	50	0.5	93	67	130	45.7	2.6(20)	
2,2-Dichloropropane	51.1	2.5	50	0	102	30	152	50.13	2.0(20)	
1,2-Dichloroethane	51.4	2.5	50	0	103	60	135	51.77	0.7(20)	
1,1,1-Trichloroethane	50.9	2.5	50	0	102	59	137	49.33	3.1(20)	
1,1-Dichloropropene	53.4	2.5	50	0	107	63	130	51.79	3.0(20)	
Carbon tetrachloride	51.1	2.5	50	0	102	50	147	49.83	2.6(20)	
Benzene	50.2	1.3	50	0	100	67	130	48.42	3.5(20)	
Dibromomethane	56.3	2.5	50	0	113	69	133	56.28	0.0(20)	
1,2-Dichloropropane	54.6	2.5	50	0	109	69	130	53.66	1.7(20)	
Trichloroethene	51.8	2.5	50	0	104	69	130	50.23	3.0(20)	
Bromodichloromethane	56.3	2.5	50	0	113	66	134	55	2.4(20)	
cis-1,3-Dichloropropene	50.4	2.5	50	0	101	63	130	49.56	1.6(20)	
trans-1,3-Dichloropropene	51.4	2.5	50	0	103	66	131	50.92	0.9(20)	
1,1,2-Trichloroethane	55.9	2.5	50	0	112	68	130	54.45	2.6(20)	
Toluene	49.9	1.3	50	0	99.8	66	130	47.26	5.5(20)	
1,3-Dichloropropane	59.6	2.5	50	0	119	70	130	57.37	3.8(20)	
Dibromochloromethane	57.7	2.5	50	0	115	70	130	54.11	6.4(20)	
1,2-Dibromoethane (EDB)	120	5	100	0	120	70	130	115.9	3.1(20)	
Tetrachloroethene	52.6	2.5	50	0	105	61	134	49.73	5.5(20)	
1,1,1,2-Tetrachloroethane	55	2.5	50	0	110	70	130	52.32	5.0(20)	
Chlorobenzene	50.7	2.5	50	0	101	70	130	48.47	4.4(20)	
Ethylbenzene	49.3	1.3	50	0	99	68	130	47.04	4.8(20)	
m,p-Xylene	53.2	1.3	50	0	106	64	130	50.53	5.1(20)	
Bromoform	55.8	2.5	50	0	112	64	138	52.82	5.6(20)	
Styrene	57.6	2.5	50	0	115	69	130	55.13	4.4(20)	
o-Xylene	54.2	1.3	50	0	108	70	130	51.01	6.0(20)	
1,1,2,2-Tetrachloroethane	53	2.5	50	0	106	65	131	51.52	2.8(20)	
1,2,3-Trichloropropane	105	10	100	0	105	70	130	100.3	4.7(20)	
Isopropylbenzene	49.4	2.5	50	0	99	64	138	47.45	4.1(20)	
Bromobenzene	49.4	2.5	50	0	99	70	130	47.59	3.8(20)	
n-Propylbenzene	48.3	2.5	50	0	97	66	132	46.31	4.1(20)	
4-Chlorotoluene	49.9	2.5	50	0	99.8	70	130	47.9	4.1(20)	
2-Chlorotoluene	48.6	2.5	50	0	97	70	130	46.62	4.2(20)	
1,3,5-Trimethylbenzene	46.4	2.5	50	0	93	66	136	44.4	4.5(20)	
tert-Butylbenzene	46.9	2.5	50	0	94	65	137	44.84	4.4(20)	
1,2,4-Trimethylbenzene	46.9	2.5	50	0	94	65	137	44.63	4.9(20)	
sec-Butylbenzene	48.3	2.5	50	0	97	66	134	46.58	3.7(20)	
1,3-Dichlorobenzene	48.5	2.5	50	0	97	70	130	46.18	4.9(20)	
1,4-Dichlorobenzene	47.2	2.5	50	0	94	70	130	44.2	6.6(20)	
4-Isopropyltoluene	46.9	2.5	50	0	94	66	137	44.78	4.7(20)	
1,2-Dichlorobenzene	45.6	2.5	50	0	91	70	130	43.5	4.8(20)	
n-Butylbenzene	46.7	2.5	50	0	93	60	142	44.52	4.8(20)	
1,2-Dibromo-3-chloropropane (DBCP)	257	15	250	0	103	67	130	246.2	4.4(20)	
1,2,4-Trichlorobenzene	49.4	10	50	0	99	61	137	45.02	9.3(20)	
Naphthalene	54.6	10	50	0	109	40	167	50.42	7.9(20)	
Hexachlorobutadiene	84.2	10	100	0	84	61	130	77.2	8.6(20)	
1,2,3-Trichlorobenzene	50.6	10	50	0	101	51	144	45.89	9.7(20)	
Surr: 1,2-Dichloroethane-d4	44.5		50		89	70	130			
Surr: Toluene-d8	48.5		50		97	70	130			
Surr: 4-Bromofluorobenzene	54		50		108	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *17-Feb-10*

QC Summary Report

Work Order: 10020506

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

R58 = MS/MSD RPD exceeded the laboratory control limit.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMIS10020506

Report Due By : 5:00 PM On : 19-Feb-2010

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

PO : 218013

Client's COC # : 28896 Job : G005862/JPL Groundwater Monitoring

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	05-Feb-2010	**05-Feb-2010**

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI10020506-01A	MW-18-5	AQ	02/04/10 08:23	4	0	10	Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020506-02A	MW-18-4	AQ	02/04/10 09:05	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020506-03A	MW-18-3	AQ	02/04/10 09:35	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020506-04A	MW-18-2	AQ	02/04/10 10:02	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020506-05A	DUPE-2-1Q10	AQ	02/04/10 00:00	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020506-06A	EB-3-2/4/10	AQ	02/04/10 09:50	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020506-07A	TB-3-2/4/10	AQ	02/04/10 00:00	0	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 8/25/09

Comments: Security seals intact. Frozen ice. Temp Blank #8631 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2.5.10 1407

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number ______ Fax ______

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? 28896
AZ ___ **CA** ___ **NV** ___ **WA** ___
ID ___ **OR** ___ **OTHER** ___

Client Name	P.O. #	Job #	Required QC Level?
BATTELLE / DAVID CONNER	218013	G005862	I II (III) IV
Address: 3990 OLD TOWN AVE., C-205	EMail Address		EDD / EDF? YES ___ NO ___
City, State, Zip: SAN DIEGO, CA 92110	Phone # (619) 726-7311	Fax #	Global ID # ___

Sampled by ______ Report Attention ______

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	Total C (200.8)	ClO4 - (314.0)				REMARKS
823	2/4/10	AQ	BMI10020506-01	MW-18-5	NORM		V/P 4	X		X				
905			-02	MW-18-4			V/P 5	X	X	X				
935			-03	MW-18-3				X	X	X				
1002			-04	MW-18-2				X	X	X				
—			-05	DUPE-2-1010				X	X	X				DUPLICATE
950			-06	EB-3-2/4/10				X	X	X				EQUIP. BLANK
—			-07	TB-3-2/4/10			V/1	X						TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	MARCO MENDOZA	INSIGHT ENV., INC	2/4/10	1130
Received by	[signature]	Anthony Stark	Alpha Analytical	2/4/10	1130
Relinquished by	[signature]	Anthony Stark	Alpha Analytical	2/4/10	1136
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	2.5.10	1407
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *19-Feb-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10020971 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10020971-01A	MW-20-5	Aqueous
10020971-02A	MW-20-4	Aqueous
10020971-03A	MW-20-3	Aqueous
10020971-04A	MW-20-2	Aqueous
10020971-05A	MW-20-1	Aqueous
10020971-06A	EB-5-2/8/10	Aqueous
10020971-07A	TB-5-2/8/10	Aqueous
10020971-08A	MW-17-4	Aqueous
10020971-09A	MW- 17-3	Aqueous
10020971-10A	MW-17-2	Aqueous
10020971-11A	EB-4-2/5/10	Aqueous
10020971-12A	TB-4-2/5/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10020971-04A	EPA Method 314.0	Perchlorate
10020971-09A	EPA Method 314.0	Perchlorate
10020971-10A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/09/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-20-5**				
Lab ID : BMI10020971-01A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/11/10 21:07
Date Sampled 02/08/10 07:56				
Client ID: **MW-20-4**				
Lab ID : BMI10020971-02A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/11/10 21:26
Date Sampled 02/08/10 08:24				
Client ID: **MW-20-3**				
Lab ID : BMI10020971-03A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/11/10 21:44
Date Sampled 02/08/10 08:57				
Client ID: **MW-20-2**				
Lab ID : BMI10020971-04A Perchlorate	2.99	1.00 µg/L	02/11/10 13:07	02/11/10 22:39
Date Sampled 02/08/10 09:22				
Client ID: **MW-20-1**				
Lab ID : BMI10020971-05A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/11/10 23:35
Date Sampled 02/08/10 09:47				
Client ID: **EB-5-2/8/10**				
Lab ID : BMI10020971-06A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/11/10 23:53
Date Sampled 02/08/10 09:34				
Client ID: **MW-17-4**				
Lab ID : BMI10020971-08A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/12/10 00:11
Date Sampled 02/05/10 08:10				
Client ID: **MW- 17-3**				
Lab ID : BMI10020971-09A Perchlorate	10.7	1.00 µg/L	02/11/10 13:07	02/12/10 00:30
Date Sampled 02/05/10 08:45				
Client ID: **MW-17-2**				
Lab ID : BMI10020971-10A Perchlorate	4.57	1.00 µg/L	02/11/10 13:07	02/12/10 00:48
Date Sampled 02/05/10 09:15				
Client ID: **EB-4-2/5/10**				
Lab ID : BMI10020971-11A Perchlorate	ND	1.00 µg/L	02/11/10 13:07	02/12/10 01:07
Date Sampled 02/05/10 08:59				

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/22/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/09/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-20-5**				
Lab ID : BMI10020971-01A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 05:14
Date Sampled 02/08/10 07:56				
Client ID: **MW-20-4**				
Lab ID : BMI10020971-02A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 05:20
Date Sampled 02/08/10 08:24				
Client ID: **MW-20-3**				
Lab ID : BMI10020971-03A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 05:26
Date Sampled 02/08/10 08:57				
Client ID: **MW-20-2**				
Lab ID : BMI10020971-04A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 05:32
Date Sampled 02/08/10 09:22				
Client ID: **MW-20-1**				
Lab ID : BMI10020971-05A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 05:37
Date Sampled 02/08/10 09:47				
Client ID: **EB-5-2/8/10**				
Lab ID : BMI10020971-06A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 11:41
Date Sampled 02/08/10 09:34				
Client ID: **MW-17-4**				
Lab ID : BMI10020971-08A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 11:47
Date Sampled 02/05/10 08:10				
Client ID: **MW- 17-3**				
Lab ID : BMI10020971-09A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 11:53
Date Sampled 02/05/10 08:45				
Client ID: **MW-17-2**				
Lab ID : BMI10020971-10A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 05:43
Date Sampled 02/05/10 09:15				
Client ID: **EB-4-2/5/10**				
Lab ID : BMI10020971-11A Chromium (Cr)	ND	0.0050 mg/L	02/10/10 16:36	02/12/10 06:11
Date Sampled 02/05/10 08:59				

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/22/10

Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

	Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID : **MW-20-5**					
Lab ID : BMI10020971-01A	Sulfur dioxide	15	2.0 µg/L	02/11/10 14:57	02/11/10 14:57
Date Received : 02/09/10					
Date Sampled : 02/08/10 07:56					
Client ID : **MW-20-4**					
Lab ID : BMI10020971-02A	Sulfur dioxide	16	2.0 µg/L	02/11/10 15:19	02/11/10 15:19
Date Received : 02/09/10					
Date Sampled : 02/08/10 08:24					
Client ID : **MW-20-3**					
Lab ID : BMI10020971-03A	Sulfur dioxide	9.4	2.0 µg/L	02/11/10 15:41	02/11/10 15:41
Date Received : 02/09/10					
Date Sampled : 02/08/10 08:57					
Client ID : **MW-20-2**					
Lab ID : BMI10020971-04A	Sulfur dioxide	3.0	2.0 µg/L	02/11/10 16:04	02/11/10 16:04
Date Received : 02/09/10					
Date Sampled : 02/08/10 09:22					
Client ID : **MW-20-1**					
Lab ID : BMI10020971-05A	Sulfur dioxide	4.6	2.0 µg/L	02/11/10 16:26	02/11/10 16:26
Date Received : 02/09/10					
Date Sampled : 02/08/10 09:47					
Client ID : **EB-5-2/8/10**					
Lab ID : BMI10020971-06A	* * * None Found * * *	ND	2.0 µg/L	02/11/10 12:21	02/11/10 12:21
Date Received : 02/09/10					
Date Sampled : 02/08/10 09:34					
Client ID : **TB-5-2/8/10**					
Lab ID : BMI10020971-07A	* * * None Found * * *	ND	2.0 µg/L	02/11/10 11:58	02/11/10 11:58
Date Received : 02/09/10					
Date Sampled : 02/08/10 00:00					
Client ID : **MW-17-4**					
Lab ID : BMI10020971-08A	* * * None Found * * *	ND	2.0 µg/L	02/11/10 16:48	02/11/10 16:48
Date Received : 02/09/10					
Date Sampled : 02/05/10 08:10					
Client ID : **MW- 17-3**					
Lab ID : BMI10020971-09A	* * * None Found * * *	ND	2.0 µg/L	02/11/10 17:10	02/11/10 17:10
Date Received : 02/09/10					
Date Sampled : 02/05/10 08:45					

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Client ID :	**MW-17-2**					
Lab ID :	BMI10020971-10A	* * * None Found * * *	ND	2.0 µg/L	02/11/10 17:32	02/11/10 17:32
Date Received :	02/09/10					
Date Sampled :	02/05/10 09:15					
Client ID :	**EB-4-2/5/10**					
Lab ID :	BMI10020971-11A	* * * None Found * * *	ND	2.0 µg/L	02/11/10 13:05	02/11/10 13:05
Date Received :	02/09/10					
Date Sampled :	02/05/10 08:59					
Client ID :	**TB-4-2/5/10**					
Lab ID :	BMI10020971-12A	* * * None Found * * *	ND	2.0 µg/L	02/11/10 12:43	02/11/10 12:43
Date Received :	02/09/10					
Date Sampled :	02/05/10 00:00					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/22/10

Report Date

Page 1 of 1

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-01A
Client I.D. Number: MW-20-5

Sampled: 02/08/10 07:56
Received: 02/09/10
Extracted: 02/11/10 14:57
Analyzed: 02/11/10 14:57

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36 1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37 Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38 Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39 m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40 Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41 Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42 o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43 1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44 1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45 Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46 Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47 n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48 4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49 2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50 1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	96	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65 Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66 Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L				
33	Dibromochloromethane	ND		0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L				
35	Tetrachloroethene	ND		0.50	µg/L				

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/22/10
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-02A
Client I.D. Number: MW-20-4

Sampled: 02/08/10 08:24
Received: 02/09/10
Extracted: 02/11/10 15:19
Analyzed: 02/11/10 15:19

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	94	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/22/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-03A
Client I.D. Number: MW-20-3

Sampled: 02/08/10 08:57
Received: 02/09/10
Extracted: 02/11/10 15:41
Analyzed: 02/11/10 15:41

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/22/10
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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-04A
Client I.D. Number: MW-20-2

Sampled: 02/08/10 09:22
Received: 02/09/10
Extracted: 02/11/10 16:04
Analyzed: 02/11/10 16:04

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.99		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	95	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/22/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-05A
Client I.D. Number: MW-20-1

Sampled: 02/08/10 09:47
Received: 02/09/10
Extracted: 02/11/10 16:26
Analyzed: 02/11/10 16:26

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/22/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-06A
Client I.D. Number: EB-5-2/8/10

Sampled: 02/08/10 09:34
Received: 02/09/10
Extracted: 02/11/10 12:21
Analyzed: 02/11/10 12:21

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	93	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	105	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/22/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-07A
Client I.D. Number: TB-5-2/8/10

Sampled: 02/08/10 00:00
Received: 02/09/10
Extracted: 02/11/10 11:58
Analyzed: 02/11/10 11:58

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	92	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	105	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/22/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-08A
Client I.D. Number: MW-17-4

Sampled: 02/05/10 08:10
Received: 02/09/10
Extracted: 02/11/10 16:48
Analyzed: 02/11/10 16:48

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.91		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/22/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-09A
Client I.D. Number: MW- 17-3

Sampled: 02/05/10 08:45
Received: 02/09/10
Extracted: 02/11/10 17:10
Analyzed: 02/11/10 17:10

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36 1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37 Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38 Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39 m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40 Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41 Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42 o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43 1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44 1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45 Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46 Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47 n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48 4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49 2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50 1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	0.50		0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	95	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65 Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66 Surr: 4-Bromofluorobenzene	105	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L				
33	Dibromochloromethane	ND		0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L				
35	Tetrachloroethene	ND		0.50	µg/L				

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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2/22/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-10A
Client I.D. Number: MW-17-2

Sampled: 02/05/10 09:15
Received: 02/09/10
Extracted: 02/11/10 17:32
Analyzed: 02/11/10 17:32

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.0		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	94	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	0.67		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/22/10
Report Date

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-11A
Client I.D. Number: EB-4-2/5/10

Sampled: 02/05/10 08:59
Received: 02/09/10
Extracted: 02/11/10 13:05
Analyzed: 02/11/10 13:05

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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2/22/10
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10020971-12A
Client I.D. Number: TB-4-2/5/10

Sampled: 02/05/10 00:00
Received: 02/09/10
Extracted: 02/11/10 12:43
Analyzed: 02/11/10 12:43

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	95	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/22/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10020971 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10020971-01A	MW-20-5	Aqueous	2
10020971-02A	MW-20-4	Aqueous	2
10020971-03A	MW-20-3	Aqueous	2
10020971-04A	MW-20-2	Aqueous	2
10020971-05A	MW-20-1	Aqueous	2
10020971-06A	EB-5-2/8/10	Aqueous	2
10020971-07A	TB-5-2/8/10	Aqueous	2
10020971-08A	MW-17-4	Aqueous	2
10020971-09A	MW- 17-3	Aqueous	2
10020971-10A	MW-17-2	Aqueous	2
10020971-11A	EB-4-2/5/10	Aqueous	2
10020971-12A	TB-4-2/5/10	Aqueous	2

2/22/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *19-Feb-10*

QC Summary Report

Work Order: 10020971

Method Blank

Type: **MBLK** Test Code: **EPA Method 200.8**

File ID: **021110.B\160SMPL.D** Batch ID: **23572K** Analysis Date: **02/12/2010 04:12**

Sample ID: **MB-23572** Units : **mg/L** Run ID: **ICP/MS_100212C** Prep Date: **02/10/2010 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method 200.8**

File ID: **021110.B\161_LCS.D** Batch ID: **23572K** Analysis Date: **02/12/2010 04:18**

Sample ID: **LCS-23572** Units : **mg/L** Run ID: **ICP/MS_100212C** Prep Date: **02/10/2010 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0489	0.005	0.05		98	80	120			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method 200.8**

File ID: **021110.B\165SMPL.D** Batch ID: **23572K** Analysis Date: **02/12/2010 04:40**

Sample ID: **10020506-02AMS** Units : **mg/L** Run ID: **ICP/MS_100212C** Prep Date: **02/10/2010 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0464	0.005	0.05	0	93	80	120			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method 200.8**

File ID: **021110.B\166SMPL.D** Batch ID: **23572K** Analysis Date: **02/12/2010 04:46**

Sample ID: **10020506-02AMSD** Units : **mg/L** Run ID: **ICP/MS_100212C** Prep Date: **02/10/2010 16:36**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0437	0.005	0.05	0	87	80	120	0.04635	5.9(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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QC Summary Report

Work Order: 10020971

Method Blank

Type: **MBLK** Test Code: **EPA Method 314.0**

File ID: **14** Batch ID: **23577** Analysis Date: **02/11/2010 14:04**

Sample ID: **MB-23577** Units : **µg/L** Run ID: **IC_3_100211A** Prep Date: **02/11/2010 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type: **LFB** Test Code: **EPA Method 314.0**

File ID: **15** Batch ID: **23577** Analysis Date: **02/11/2010 14:22**

Sample ID: **LFB-23577** Units : **µg/L** Run ID: **IC_3_100211A** Prep Date: **02/11/2010 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	25	2	25		100	85	115			

Sample Matrix Spike

Type: **LFM** Test Code: **EPA Method 314.0**

File ID: **40** Batch ID: **23577** Analysis Date: **02/11/2010 22:03**

Sample ID: **10020971-03ALFM** Units : **µg/L** Run ID: **IC_3_100211A** Prep Date: **02/11/2010 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	30.4	2	25	0	122	80	120			M1

Sample Matrix Spike Duplicate

Type: **LFMD** Test Code: **EPA Method 314.0**

File ID: **41** Batch ID: **23577** Analysis Date: **02/11/2010 22:21**

Sample ID: **10020971-03ALFMD** Units : **µg/L** Run ID: **IC_3_100211A** Prep Date: **02/11/2010 13:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	27.7	2	25	0	111	80	120	30.43	9.3(15)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

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Date: *19-Feb-10*

QC Summary Report

Work Order: 10020971

Method Blank Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10021107.D** Batch ID: **MS15W0211M** Analysis Date: **02/11/2010 10:29**

Sample ID: **MBLK MS15W0211M** Units : **µg/L** Run ID: **MSD_15_100211B** Prep Date: **02/11/2010 10:29**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.41		10		94	70	130			
Surr: Toluene-d8	9.87		10		99	70	130			

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QC Summary Report

Work Order: 10020971

Surr: 4-Bromofluorobenzene	10.2		10	102	70	130			

Laboratory Control Spike Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **10021105.D** Batch ID: **MS15W0211M** Analysis Date: **02/11/2010 09:28**

Sample ID: **LCS MS15W0211M** Units : **µg/L** Run ID: **MSD_15_100211B** Prep Date: **02/11/2010 09:28**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	8.84	1	10		88	70	130			
Chloromethane	7.57	2	10		76	70	130			
Vinyl chloride	10.3	1	10		103	70	130			
Chloroethane	8.9	1	10		89	70	130			
Bromomethane	6.59	2	10		66	70(70)	130			L50
Trichlorofluoromethane	10.1	1	10		101	70	130			
1,1-Dichloroethene	10.6	1	10		106	70	130			
Dichloromethane	10.6	2	10		106	70	130			
trans-1,2-Dichloroethene	10.9	1	10		109	70	130			
Methyl tert-butyl ether (MTBE)	12.4	0.5	10		124	70	130			
1,1-Dichloroethane	10.3	1	10		103	70	130			
cis-1,2-Dichloroethene	11.7	1	10		117	70	130			
Bromochloromethane	12.4	1	10		124	70	130			
Chloroform	9.98	1	10		99.8	70	130			
2,2-Dichloropropane	10.9	1	10		109	70	130			
1,2-Dichloroethane	11.6	1	10		116	70	130			
1,1,1-Trichloroethane	10.9	1	10		109	70	130			
1,1-Dichloropropene	10.9	1	10		109	70	130			
Carbon tetrachloride	11	1	10		110	70	130			
Benzene	10.4	0.5	10		104	70	130			
Dibromomethane	12.7	1	10		127	70	130			
1,2-Dichloropropane	11.5	1	10		115	70	130			
Trichloroethene	11	1	10		110	70	130			
Bromodichloromethane	12.2	1	10		122	70	130			
cis-1,3-Dichloropropene	11.2	1	10		112	70	130			
trans-1,3-Dichloropropene	11.7	1	10		117	70	130			
1,1,2-Trichloroethane	12.4	1	10		124	70	130			
Toluene	10.1	0.5	10		101	70	130			
1,3-Dichloropropane	12.6	1	10		126	70	130			
Dibromochloromethane	12.4	1	10		124	70	130			
1,2-Dibromoethane (EDB)	25.8	2	20		129	70	130			
Tetrachloroethene	10.9	1	10		109	70	130			
1,1,1,2-Tetrachloroethane	11.6	1	10		116	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10	0.5	10		100	70	130			
m,p-Xylene	10.8	0.5	10		108	70	130			
Bromoform	11.9	1	10		119	70	130			
Styrene	11.8	1	10		118	70	130			
o-Xylene	10.8	0.5	10		108	70	130			
1,1,2,2-Tetrachloroethane	11.4	1	10		114	70	130			
1,2,3-Trichloropropane	22.3	2	20		111	70	130			
Isopropylbenzene	10.1	1	10		101	70	130			
Bromobenzene	10.4	1	10		104	70	130			
n-Propylbenzene	9.9	1	10		99	70	130			
4-Chlorotoluene	10.4	1	10		104	70	130			
2-Chlorotoluene	10.1	1	10		101	70	130			
1,3,5-Trimethylbenzene	9.68	1	10		97	70	130			
tert-Butylbenzene	9.59	1	10		96	70	130			
1,2,4-Trimethylbenzene	9.79	1	10		98	70	130			
sec-Butylbenzene	10.1	1	10		101	70	130			
1,3-Dichlorobenzene	10.1	1	10		101	70	130			
1,4-Dichlorobenzene	9.74	1	10		97	70	130			
4-Isopropyltoluene	9.63	1	10		96	70	130			
1,2-Dichlorobenzene	9.73	1	10		97	70	130			
n-Butylbenzene	9.85	1	10		99	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	56.8	3	50		114	70	130			
1,2,4-Trichlorobenzene	10.6	2	10		106	70	130			
Naphthalene	12.3	2	10		123	70	130			
Hexachlorobutadiene	17.1	2	20		85	70	130			
1,2,3-Trichlorobenzene	11.1	2	10		111	70	130			
Surr: 1,2-Dichloroethane-d4	9.45		10		95	70	130			
Surr: Toluene-d8	9.35		10		94	70	130			
Surr: 4-Bromofluorobenzene	10.8		10		108	70	130			

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Date: *19-Feb-10*

QC Summary Report

Work Order: 10020971

Sample Matrix Spike Type **MS** Test Code: **EPA Method SW8260B**

File ID: **10021108.D** Batch ID: **MS15W0211M** Analysis Date: **02/11/2010 10:51**

Sample ID: **10020971-03AMS** Units : **µg/L** Run ID: **MSD_15_100211B** Prep Date: **02/11/2010 10:51**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	38.7	2.5	50	0	77	13	167			
Chloromethane	36.7	10	50	0	73	28	145			
Vinyl chloride	50.1	2.5	50	0	100	43	134			
Chloroethane	41.8	2.5	50	0	84	39	154			
Bromomethane	26.3	10	50	0	53	19	176			
Trichlorofluoromethane	48.3	2.5	50	0	97	34	160			
1,1-Dichloroethene	50	2.5	50	0	99.9	60	130			
Dichloromethane	49.8	10	50	0	100	68	130			
trans-1,2-Dichloroethene	51	2.5	50	0	102	63	130			
Methyl tert-butyl ether (MTBE)	55.4	1.3	50	0	111	56	141			
1,1-Dichloroethane	48.3	2.5	50	0	97	61	130			
cis-1,2-Dichloroethene	53.8	2.5	50	0	108	70	130			
Bromochloromethane	58.9	2.5	50	0	118	70	130			
Chloroform	45.5	2.5	50	0	91	67	130			
2,2-Dichloropropane	50.2	2.5	50	0	100	30	152			
1,2-Dichloroethane	53.1	2.5	50	0	106	60	135			
1,1,1-Trichloroethane	50.8	2.5	50	0	102	59	137			
1,1-Dichloropropene	51.2	2.5	50	0	102	63	130			
Carbon tetrachloride	50.8	2.5	50	0	102	50	147			
Benzene	48.2	1.3	50	0	96	67	130			
Dibromomethane	56.6	2.5	50	0	113	69	133			
1,2-Dichloropropane	52.1	2.5	50	0	104	69	130			
Trichloroethene	50.2	2.5	50	0	100	69	130			
Bromodichloromethane	55.2	2.5	50	0	110	66	134			
cis-1,3-Dichloropropene	49.5	2.5	50	0	99	63	130			
trans-1,3-Dichloropropene	51.7	2.5	50	0	103	66	131			
1,1,2-Trichloroethane	55.1	2.5	50	0	110	68	130			
Toluene	48.2	1.3	50	0	96	66	130			
1,3-Dichloropropane	58.5	2.5	50	0	117	70	130			
Dibromochloromethane	57.2	2.5	50	0	114	70	130			
1,2-Dibromoethane (EDB)	120	5	100	0	120	70	130			
Tetrachloroethene	51.3	2.5	50	0	103	61	134			
1,1,1,2-Tetrachloroethane	54.2	2.5	50	0	108	70	130			
Chlorobenzene	49.4	2.5	50	0	99	70	130			
Ethylbenzene	47.6	1.3	50	0	95	68	130			
m,p-Xylene	50.7	1.3	50	0	101	64	130			
Bromoform	54.5	2.5	50	0	109	64	138			
Styrene	55.5	2.5	50	0	111	69	130			
o-Xylene	52.2	1.3	50	0	104	70	130			
1,1,2,2-Tetrachloroethane	52	2.5	50	0	104	65	131			
1,2,3-Trichloropropane	103	10	100	0	103	70	130			
Isopropylbenzene	46.8	2.5	50	0	94	64	138			
Bromobenzene	47.2	2.5	50	0	94	70	130			
n-Propylbenzene	45.2	2.5	50	0	90	66	132			
4-Chlorotoluene	48	2.5	50	0	96	70	130			
2-Chlorotoluene	46.3	2.5	50	0	93	70	130			
1,3,5-Trimethylbenzene	44	2.5	50	0	88	66	136			
tert-Butylbenzene	44.5	2.5	50	0	89	65	137			
1,2,4-Trimethylbenzene	44.6	2.5	50	0	89	65	137			
sec-Butylbenzene	46.9	2.5	50	0	94	66	134			
1,3-Dichlorobenzene	46.2	2.5	50	0	92	70	130			
1,4-Dichlorobenzene	44.2	2.5	50	0	88	70	130			
4-Isopropyltoluene	44.4	2.5	50	0	89	66	137			
1,2-Dichlorobenzene	43.6	2.5	50	0	87	70	130			
n-Butylbenzene	43.6	2.5	50	0	87	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	246	15	250	0	99	67	130			
1,2,4-Trichlorobenzene	44.7	10	50	0	89	61	137			
Naphthalene	46.9	10	50	0	94	40	167			
Hexachlorobutadiene	78.6	10	100	0	79	61	130			
1,2,3-Trichlorobenzene	44.7	10	50	0	89	51	144			
Surr: 1,2-Dichloroethane-d4	46.2		50		92	70	130			
Surr: Toluene-d8	47.9		50		96	70	130			
Surr: 4-Bromofluorobenzene	53.9		50		108	70	130			

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QC Summary Report

Work Order: 10020971

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **10021109.D** Batch ID: **MS15W0211M** Analysis Date: **02/11/2010 11:14**

Sample ID: **10020971-03AMSD** Units : **µg/L** Run ID: **MSD_15_100211B** Prep Date: **02/11/2010 11:14**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	41	2.5	50	0	82	13	167	38.73	5.7(20)	
Chloromethane	39.1	10	50	0	78	28	145	36.69	6.4(20)	
Vinyl chloride	55.4	2.5	50	0	111	43	134	50.11	10.1(20)	
Chloroethane	44.4	2.5	50	0	89	39	154	41.75	6.1(20)	
Bromomethane	29.9	10	50	0	60	19	176	26.32	12.6(20)	
Trichlorofluoromethane	50.8	2.5	50	0	102	34	160	48.29	5.1(20)	
1,1-Dichloroethene	51.9	2.5	50	0	104	60	130	49.96	3.9(20)	
Dichloromethane	50.3	10	50	0	101	68	130	49.75	1.0(20)	
trans-1,2-Dichloroethene	52.3	2.5	50	0	105	63	130	51.01	2.5(20)	
Methyl tert-butyl ether (MTBE)	56	1.3	50	0	112	56	141	55.4	1.0(20)	
1,1-Dichloroethane	49.8	2.5	50	0	99.7	61	130	48.33	3.1(20)	
cis-1,2-Dichloroethene	55.8	2.5	50	0	112	70	130	53.8	3.6(20)	
Bromochloromethane	58.7	2.5	50	0	117	70	130	58.87	0.3(20)	
Chloroform	46.6	2.5	50	0	93	67	130	45.49	2.5(20)	
2,2-Dichloropropane	51.9	2.5	50	0	104	30	152	50.15	3.4(20)	
1,2-Dichloroethane	52.8	2.5	50	0	106	60	135	53.14	0.6(20)	
1,1,1-Trichloroethane	52.5	2.5	50	0	105	59	137	50.76	3.3(20)	
1,1-Dichloropropene	53.1	2.5	50	0	106	63	130	51.18	3.6(20)	
Carbon tetrachloride	53.3	2.5	50	0	107	50	147	50.83	4.7(20)	
Benzene	49.5	1.3	50	0	99	67	130	48.23	2.6(20)	
Dibromomethane	55.6	2.5	50	0	111	69	133	56.63	1.8(20)	
1,2-Dichloropropane	53.8	2.5	50	0	108	69	130	52.09	3.3(20)	
Trichloroethene	51.9	2.5	50	0	104	69	130	50.21	3.4(20)	
Bromodichloromethane	56	2.5	50	0	112	66	134	55.19	1.5(20)	
cis-1,3-Dichloropropene	49.6	2.5	50	0	99	63	130	49.52	0.1(20)	
trans-1,3-Dichloropropene	51.3	2.5	50	0	103	66	131	51.74	0.9(20)	
1,1,2-Trichloroethane	54.6	2.5	50	0	109	68	130	55.05	0.9(20)	
Toluene	49.7	1.3	50	0	99	66	130	48.16	3.1(20)	
1,3-Dichloropropane	57.9	2.5	50	0	116	70	130	58.54	1.1(20)	
Dibromochloromethane	57	2.5	50	0	114	70	130	57.16	0.2(20)	
1,2-Dibromoethane (EDB)	118	5	100	0	118	70	130	119.9	1.5(20)	
Tetrachloroethene	53.8	2.5	50	0	108	61	134	51.29	4.8(20)	
1,1,1,2-Tetrachloroethane	54.3	2.5	50	0	109	70	130	54.16	0.3(20)	
Chlorobenzene	50.5	2.5	50	0	101	70	130	49.4	2.2(20)	
Ethylbenzene	49.5	1.3	50	0	99	68	130	47.56	4.1(20)	
m,p-Xylene	53	1.3	50	0	106	64	130	50.66	4.5(20)	
Bromoform	55	2.5	50	0	110	64	138	54.46	0.9(20)	
Styrene	56.9	2.5	50	0	114	69	130	55.53	2.5(20)	
o-Xylene	53.8	1.3	50	0	108	70	130	52.16	3.0(20)	
1,1,2,2-Tetrachloroethane	52.1	2.5	50	0	104	65	131	52.03	0.1(20)	
1,2,3-Trichloropropane	101	10	100	0	101	70	130	103.5	2.4(20)	
Isopropylbenzene	50	2.5	50	0	99.9	64	138	46.82	6.5(20)	
Bromobenzene	49	2.5	50	0	98	70	130	47.2	3.7(20)	
n-Propylbenzene	48.8	2.5	50	0	98	66	132	45.24	7.5(20)	
4-Chlorotoluene	51.4	2.5	50	0	103	70	130	47.99	6.8(20)	
2-Chlorotoluene	49.4	2.5	50	0	99	70	130	46.26	6.5(20)	
1,3,5-Trimethylbenzene	46.8	2.5	50	0	94	66	136	43.97	6.3(20)	
tert-Butylbenzene	47.4	2.5	50	0	95	65	137	44.47	6.5(20)	
1,2,4-Trimethylbenzene	47.5	2.5	50	0	95	65	137	44.6	6.3(20)	
sec-Butylbenzene	49.9	2.5	50	0	99.8	66	134	46.87	6.2(20)	
1,3-Dichlorobenzene	49.1	2.5	50	0	98	70	130	46.17	6.1(20)	
1,4-Dichlorobenzene	46.7	2.5	50	0	93	70	130	44.17	5.5(20)	
4-Isopropyltoluene	48	2.5	50	0	96	66	137	44.42	7.7(20)	
1,2-Dichlorobenzene	46	2.5	50	0	92	70	130	43.6	5.4(20)	
n-Butylbenzene	47.6	2.5	50	0	95	60	142	43.61	8.8(20)	
1,2-Dibromo-3-chloropropane (DBCP)	250	15	250	0	100	67	130	246.4	1.5(20)	
1,2,4-Trichlorobenzene	49.4	10	50	0	99	61	137	44.71	10.0(20)	
Naphthalene	52.4	10	50	0	105	40	167	46.91	11.1(20)	
Hexachlorobutadiene	86.1	10	100	0	86	61	130	78.55	9.1(20)	
1,2,3-Trichlorobenzene	50.5	10	50	0	101	51	144	44.74	12.1(20)	
Surr: 1,2-Dichloroethane-d4	44.8		50		90	70	130			
Surr: Toluene-d8	48		50		96	70	130			
Surr: 4-Bromofluorobenzene	54.5		50		109	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *19-Feb-10*

QC Summary Report

Work Order: 10020971

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMIS10020971

Report Due By : 5:00 PM On : 23-Feb-10

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 24132, 28875 Job : G005862/JPL Groundwater Monitoring:

Cooler Temp	Samples Received	Date Printed
4 °C	09-Feb-10	09-Feb-10

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI10020971-01A	MW-20-5	AQ	02/08/10 07:56	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020971-02A	MW-20-4	AQ	02/08/10 08:24	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020971-03A	MW-20-3	AQ	02/08/10 08:57	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					MS/MSD
BMI10020971-04A	MW-20-2	AQ	02/08/10 09:22	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020971-05A	MW-20-1	AQ	02/08/10 09:47	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020971-06A	EB-5-2/8/10	AQ	02/08/10 09:34	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					Equip. Blank
BMI10020971-07A	TB-5-2/8/10	AQ	02/08/10 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno TB 8/25/09
BMI10020971-08A	MW-17-4	AQ	02/05/10 08:10	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020971-09A	MW- 17-3	AQ	02/05/10 08:45	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10020971-10A	MW-17-2	AQ	02/05/10 09:15	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					

Comments: Security seal intact. Frozen Ice. Temp Blank #7848 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Reyna Vallejo	Reyna Vallejo	**Alpha Analytical, Inc.**	2/9/10 2:00

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMIS10020971

Report Due By : 5:00 PM On : 23-Feb-10

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 24132, 28875 Job : G005862/JPL Groundwater Monitoring:

Cooler Temp	Samples Received	Date Printed
4 °C	09-Feb-10	09-Feb-10

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI10020971-11A	EB-4-2/5/10	AQ	02/05/10 08:59	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					Equip. Blank
BMI10020971-12A	TB-4-2/5/10	AQ	02/05/10 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno TB 8/25/09

Comments: Security seal intact. Frozen Ice. Temp Blank #7848 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Reyna Valleyo	Reyna Valleyo	**Alpha Analytical, Inc.**	2/9/10 20

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number ______ Fax ______

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA ___ NV ___ WA ___ ID ___ OR ___ OTHER ______

24132

Page # 1 *of* 2

Client Name	P.O. #	Job #
BATTELLE / DAVID CONNER	218013	G005862
Address 3990 OLD TOWN AVE., C-205	EMail Address	
City, State, Zip SAN DIEGO, CA 92110	Phone # (619) 726-7311	Fax #

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # ______

Sampled by: ______ Report Attention: ______

Analyses Required: VOC (524.2); Total Cr (200.8); ClO_4^- (314.0)

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	Total Cr (200.8)	ClO_4^- (314.0)					REMARKS
756	2/8/10	AQ	BMI10208??-01	MW-20-5	Norm		V/P 5	X	X	X					
			~~-02~~												
824			~~-03~~ 02A	MW-20-4				X	X	X					
			~~-04~~												
857			~~-05~~ 03A	MW-20-3			V/P 10	X	X	X					MS/MSD
922			-04A	MW-20-2			V/P 5	X	X	X					
947			-05A	MW-20-1				X	X	X					
934			-06A	EB-5-2/8/10				X	X	X					EQUIP. BLANK
—			-07A	TB-5-2/8/10			V/1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	MARCO MENDOZA	INSIGHT EEC	2/8/10	1150
Received by	[signature]	Anthony Stark	Alpha Analytical	2/8/10	1150
Relinquished by	[signature]	Anthony Stark	ALPHA Analytical	2/8/10	1520
Received by	Reyna Vallejo	Reyna	Alpha	2/9/10	12:59
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 ICING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA ___ NV ___ WA ___ ID ___ OR ___ OTHER ___

28875

Page # 2 of 2

Client Name: BATTELLE / DAVID CONNER
Address: 3990 OLD TOWN AVE., C-205
City, State, Zip: SAN DIEGO, CA 92110
P.O. # 218013
Job # G005862
EMail Address
Phone # (619) 726-7311
Fax #

Required QC Level? I II III IV
EDD / EDF? YES ___ NO ___
Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	Analyses Required: VOC (524.2)	Total Cr (200.8)	Cl04 - (314.0)	REMARKS
810	2/5/10	AQ	-08A	MW-17-4	NORM		V/P 5	X	X	X	
845			-09A	MW-17-3				X	X	X	
915			-10A	MW-17-2				X	X	X	
859			-11A	EB-4-2/5/10				X	X	X	EQUIP BLANK
—			-12A	TB-4.2/5/10			V/1	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by	MARCO MENDOZA	INSIGHT EEC	2/8/10	1150
Received by	Anthony Stark	ALPHA ANALYTICAL	2/8/10	1150
Relinquished by	Anthony Stark	ALPHA Analytical	2/8/10	1520
Received by				
Relinquished by				
Received by				

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *19-Feb-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10021002 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10021002-01A	MW-3-4	Aqueous
10021002-02A	MW-3-3	Aqueous
10021002-03A	MW-3-2	Aqueous
10021002-04A	DUPE-3-1Q10	Aqueous
10021002-05A	MW-4-3	Aqueous
10021002-06A	MW-4-2	Aqueous
10021002-07A	MW-4-1	Aqueous
10021002-08A	EB-6-2/9/10	Aqueous
10021002-09A	TB-6-2/9/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10021002-03A	EPA Method 314.0	Perchlorate
10021002-06A	EPA Method 314.0	Perchlorate
10021002-07A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/10/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-3-4**				
Lab ID : BMI10021002-01A Perchlorate	ND	1.00 µg/L	02/15/10 11:55	02/15/10 15:48
Date Sampled 02/09/10 10:35				
Client ID: **MW-3-3**				
Lab ID : BMI10021002-02A Perchlorate	ND	1.00 µg/L	02/15/10 11:55	02/15/10 16:43
Date Sampled 02/09/10 11:17				
Client ID: **MW-3-2**				
Lab ID : BMI10021002-03A Perchlorate	184	10.0 µg/L	02/15/10 11:55	02/16/10 16:27
Date Sampled 02/09/10 11:37				
Client ID: **DUPE-3-1Q10**				
Lab ID : BMI10021002-04A Perchlorate	ND	1.00 µg/L	02/15/10 11:55	02/15/10 17:20
Date Sampled 02/09/10 00:00				
Client ID: **MW-4-3**				
Lab ID : BMI10021002-05A Perchlorate	ND	1.00 µg/L	02/15/10 11:55	02/15/10 17:39
Date Sampled 02/09/10 08:10				
Client ID: **MW-4-2**				
Lab ID : BMI10021002-06A Perchlorate	2.08	1.00 µg/L	02/15/10 11:55	02/15/10 17:57
Date Sampled 02/09/10 08:32				
Client ID: **MW-4-1**				
Lab ID : BMI10021002-07A Perchlorate	4.09	1.00 µg/L	02/15/10 11:55	02/15/10 18:15
Date Sampled 02/09/10 09:02				
Client ID: **EB-6-2/9/10**				
Lab ID : BMI10021002-08A Perchlorate	ND	1.00 µg/L	02/15/10 11:55	02/15/10 18:34
Date Sampled 02/09/10 08:50				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/23/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/10/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-3-4**				
Lab ID : BMI10021002-01A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 03:10	02/18/10 03:10
Date Sampled 02/09/10 10:35				
Client ID: **MW-3-3**				
Lab ID : BMI10021002-02A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 03:16	02/18/10 03:16
Date Sampled 02/09/10 11:17				
Client ID: **MW-3-2**				
Lab ID : BMI10021002-03A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 03:21	02/18/10 03:21
Date Sampled 02/09/10 11:37				
Client ID: **DUPE-3-1Q10**				
Lab ID : BMI10021002-04A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 03:27	02/18/10 03:27
Date Sampled 02/09/10 00:00				
Client ID: **MW-4-3**				
Lab ID : BMI10021002-05A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 03:32	02/18/10 03:32
Date Sampled 02/09/10 08:10				
Client ID: **MW-4-2**				
Lab ID : BMI10021002-06A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 02:47	02/18/10 02:47
Date Sampled 02/09/10 08:32				
Client ID: **MW-4-1**				
Lab ID : BMI10021002-07A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 03:38	02/18/10 03:38
Date Sampled 02/09/10 09:02				
Client ID: **EB-6-2/9/10**				
Lab ID : BMI10021002-08A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 03:44	02/18/10 03:44
Date Sampled 02/09/10 08:50				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/23/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**MW-3-4**					
Lab ID :	BMI10021002-01A	Sulfur dioxide	25	2.0 µg/L	02/12/10 13:52	02/12/10 13:52
Date Received :	02/10/10					
Date Sampled :	02/09/10 10:35					
Client ID :	**MW-3-3**					
Lab ID :	BMI10021002-02A	Sulfur dioxide	4.6	2.0 µg/L	02/12/10 14:15	02/12/10 14:15
Date Received :	02/10/10					
Date Sampled :	02/09/10 11:17					
Client ID :	**MW-3-2**					
Lab ID :	BMI10021002-03A	* * * None Found * * *	ND	2.0 µg/L	02/12/10 14:37	02/12/10 14:37
Date Received :	02/10/10					
Date Sampled :	02/09/10 11:37					
Client ID :	**DUPE-3-1Q10**					
Lab ID :	BMI10021002-04A	Sulfur dioxide	26	2.0 µg/L	02/12/10 14:59	02/12/10 14:59
Date Received :	02/10/10					
Date Sampled :	02/09/10 00:00					
Client ID :	**MW-4-3**					
Lab ID :	BMI10021002-05A	Sulfur dioxide	4.8	2.0 µg/L	02/12/10 15:21	02/12/10 15:21
Date Received :	02/10/10					
Date Sampled :	02/09/10 08:10					
Client ID :	**MW-4-2**					
Lab ID :	BMI10021002-06A	* * * None Found * * *	ND	2.0 µg/L	02/12/10 15:44	02/12/10 15:44
Date Received :	02/10/10					
Date Sampled :	02/09/10 08:32					
Client ID :	**MW-4-1**					
Lab ID :	BMI10021002-07A	* * * None Found * * *	ND	2.0 µg/L	02/12/10 16:06	02/12/10 16:06
Date Received :	02/10/10					
Date Sampled :	02/09/10 09:02					
Client ID :	**EB-6-2/9/10**					
Lab ID :	BMI10021002-08A	* * * None Found * * *	ND	2.0 µg/L	02/12/10 13:30	02/12/10 13:30
Date Received :	02/10/10					
Date Sampled :	02/09/10 08:50					
Client ID :	**TB-6-2/9/10**					
Lab ID :	BMI10021002-09A	* * * None Found * * *	ND	2.0 µg/L	02/12/10 13:08	02/12/10 13:08
Date Received :	02/10/10					
Date Sampled :	02/09/10 00:00					

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/23/10

Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-01A
Client I.D. Number: MW-3-4

Sampled: 02/09/10 10:35
Received: 02/10/10
Extracted: 02/12/10 13:52
Analyzed: 02/12/10 13:52

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/23/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-02A
Client I.D. Number: MW-3-3

Sampled: 02/09/10 11:17
Received: 02/10/10
Extracted: 02/12/10 14:15
Analyzed: 02/12/10 14:15

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/23/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-03A
Client I.D. Number: MW-3-2

Sampled: 02/09/10 11:37
Received: 02/10/10
Extracted: 02/12/10 14:37
Analyzed: 02/12/10 14:37

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	0.60	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	1.6		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	2.2		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	1.2		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/23/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-04A
Client I.D. Number: DUPE-3-1Q10

Sampled: 02/09/10 00:00
Received: 02/10/10
Extracted: 02/12/10 14:59
Analyzed: 02/12/10 14:59

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/23/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-05A
Client I.D. Number: MW-4-3

Sampled: 02/09/10 08:10
Received: 02/10/10
Extracted: 02/12/10 15:21
Analyzed: 02/12/10 15:21

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	1.5	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	1.0	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	93	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/23/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-06A
Client I.D. Number: MW-4-2

Sampled: 02/09/10 08:32
Received: 02/10/10
Extracted: 02/12/10 15:44
Analyzed: 02/12/10 15:44

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.88		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	95	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	0.57		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/23/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-07A
Client I.D. Number: MW-4-1

Sampled: 02/09/10 09:02
Received: 02/10/10
Extracted: 02/12/10 16:06
Analyzed: 02/12/10 16:06

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	95	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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2/23/10
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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-08A
Client I.D. Number: EB-6-2/9/10

Sampled: 02/09/10 08:50
Received: 02/10/10
Extracted: 02/12/10 13:30
Analyzed: 02/12/10 13:30

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/23/10
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021002-09A
Client I.D. Number: TB-6-2/9/10

Sampled: 02/09/10 00:00
Received: 02/10/10
Extracted: 02/12/10 13:08
Analyzed: 02/12/10 13:08

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/23/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10021002 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10021002-01A	MW-3-4	Aqueous	2
10021002-02A	MW-3-3	Aqueous	2
10021002-03A	MW-3-2	Aqueous	2
10021002-04A	DUPE-3-1Q10	Aqueous	2
10021002-05A	MW-4-3	Aqueous	2
10021002-06A	MW-4-2	Aqueous	2
10021002-07A	MW-4-1	Aqueous	2
10021002-08A	EB-6-2/9/10	Aqueous	2
10021002-09A	TB-6-2/9/10	Aqueous	2

2/23/10

Report Date

Alpha Analytical, Inc.

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Date: *19-Feb-10*

QC Summary Report

Work Order: 10021002

Method Blank Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10021207.D** Batch ID: **MS15W0212M** Analysis Date: **02/12/2010 10:32**

Sample ID: **MBLK MS15W0212M** Units : **µg/L** Run ID: **MSD_15_100212B** Prep Date: **02/12/2010 10:32**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.48		10		95	70	130			
Surr: Toluene-d8	10		10		100	70	130			

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Date: *19-Feb-10*

QC Summary Report

Work Order: 10021002

Surr: 4-Bromofluorobenzene	10.3		10	103	70	130			

Laboratory Control Spike Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **10021205.D** Batch ID: **MS15W0212M** Analysis Date: **02/12/2010 09:31**

Sample ID: **LCS MS15W0212M** Units : **µg/L** Run ID: **MSD_15_100212B** Prep Date: **02/12/2010 09:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	8.99	1	10		90	70	130			
Chloromethane	7.61	2	10		76	70	130			
Vinyl chloride	10.7	1	10		107	70	130			
Chloroethane	8.67	1	10		87	70	130			
Bromomethane	5.39	2	10		54	70(70)	130			L50
Trichlorofluoromethane	10.4	1	10		104	70	130			
1,1-Dichloroethene	10.6	1	10		106	70	130			
Dichloromethane	10.5	2	10		105	70	130			
trans-1,2-Dichloroethene	10.8	1	10		108	70	130			
Methyl tert-butyl ether (MTBE)	11.8	0.5	10		118	70	130			
1,1-Dichloroethane	10.2	1	10		102	70	130			
cis-1,2-Dichloroethene	11.5	1	10		115	70	130			
Bromochloromethane	12.2	1	10		122	70	130			
Chloroform	9.88	1	10		99	70	130			
2,2-Dichloropropane	10.8	1	10		108	70	130			
1,2-Dichloroethane	11.4	1	10		114	70	130			
1,1,1-Trichloroethane	10.9	1	10		109	70	130			
1,1-Dichloropropene	10.8	1	10		108	70	130			
Carbon tetrachloride	11.2	1	10		112	70	130			
Benzene	10.1	0.5	10		101	70	130			
Dibromomethane	12.3	1	10		123	70	130			
1,2-Dichloropropane	11.1	1	10		111	70	130			
Trichloroethene	11	1	10		110	70	130			
Bromodichloromethane	12	1	10		120	70	130			
cis-1,3-Dichloropropene	11	1	10		110	70	130			
trans-1,3-Dichloropropene	11.2	1	10		112	70	130			
1,1,2-Trichloroethane	12	1	10		120	70	130			
Toluene	10.1	0.5	10		101	70	130			
1,3-Dichloropropane	12.3	1	10		123	70	130			
Dibromochloromethane	12.1	1	10		121	70	130			
1,2-Dibromoethane (EDB)	25.6	2	20		128	70	130			
Tetrachloroethene	10.7	1	10		107	70	130			
1,1,1,2-Tetrachloroethane	11.5	1	10		115	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10	0.5	10		100	70	130			
m,p-Xylene	10.7	0.5	10		107	70	130			
Bromoform	11.6	1	10		116	70	130			
Styrene	11.7	1	10		117	70	130			
o-Xylene	10.8	0.5	10		108	70	130			
1,1,2,2-Tetrachloroethane	11.1	1	10		111	70	130			
1,2,3-Trichloropropane	22.1	2	20		110	70	130			
Isopropylbenzene	10.1	1	10		101	70	130			
Bromobenzene	10.2	1	10		102	70	130			
n-Propylbenzene	9.83	1	10		98	70	130			
4-Chlorotoluene	10.4	1	10		104	70	130			
2-Chlorotoluene	9.89	1	10		99	70	130			
1,3,5-Trimethylbenzene	9.5	1	10		95	70	130			
tert-Butylbenzene	9.52	1	10		95	70	130			
1,2,4-Trimethylbenzene	9.67	1	10		97	70	130			
sec-Butylbenzene	9.85	1	10		99	70	130			
1,3-Dichlorobenzene	9.92	1	10		99	70	130			
1,4-Dichlorobenzene	9.57	1	10		96	70	130			
4-Isopropyltoluene	9.66	1	10		97	70	130			
1,2-Dichlorobenzene	9.49	1	10		95	70	130			
n-Butylbenzene	9.66	1	10		97	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	55.5	3	50		111	70	130			
1,2,4-Trichlorobenzene	10.5	2	10		105	70	130			
Naphthalene	12	2	10		120	70	130			
Hexachlorobutadiene	17	2	20		85	70	130			
1,2,3-Trichlorobenzene	10.8	2	10		108	70	130			
Surr: 1,2-Dichloroethane-d4	9.51		10		95	70	130			
Surr: Toluene-d8	9.5		10		95	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

Alpha Analytical, Inc.

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Date: *19-Feb-10*

QC Summary Report

Work Order: 10021002

Sample Matrix Spike Type **MS** Test Code: **EPA Method SW8260B**

File ID: **10021208.D** Batch ID: **MS15W0212M** Analysis Date: **02/12/2010 10:54**

Sample ID: **10021002-06AMS** Units : **µg/L** Run ID: **MSD_15_100212B** Prep Date: **02/12/2010 10:54**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	37.2	2.5	50	0	74	13	167			
Chloromethane	34.9	10	50	0	70	28	145			
Vinyl chloride	47.7	2.5	50	0	95	43	134			
Chloroethane	38.6	2.5	50	0	77	39	154			
Bromomethane	23.9	10	50	0	48	19	176			
Trichlorofluoromethane	46.7	2.5	50	0	93	34	160			
1,1-Dichloroethene	49.3	2.5	50	0	99	60	130			
Dichloromethane	49.7	10	50	0	99	68	130			
trans-1,2-Dichloroethene	50.2	2.5	50	0	100	63	130			
Methyl tert-butyl ether (MTBE)	56.1	1.3	50	0	112	56	141			
1,1-Dichloroethane	48.7	2.5	50	0	97	61	130			
cis-1,2-Dichloroethene	54.9	2.5	50	0	110	70	130			
Bromochloromethane	57.3	2.5	50	0	115	70	130			
Chloroform	46.8	2.5	50	0	94	67	130			
2,2-Dichloropropane	50.5	2.5	50	0	101	30	152			
1,2-Dichloroethane	53.8	2.5	50	0	108	60	135			
1,1,1-Trichloroethane	50.8	2.5	50	0	102	59	137			
1,1-Dichloropropene	51.5	2.5	50	0	103	63	130			
Carbon tetrachloride	51.2	2.5	50	0	102	50	147			
Benzene	48	1.3	50	0	96	67	130			
Dibromomethane	56.4	2.5	50	0	113	69	133			
1,2-Dichloropropane	51.3	2.5	50	0	103	69	130			
Trichloroethene	51.1	2.5	50	0.88	100	69	130			
Bromodichloromethane	56	2.5	50	0	112	66	134			
cis-1,3-Dichloropropene	48.8	2.5	50	0	98	63	130			
trans-1,3-Dichloropropene	51	2.5	50	0	102	66	131			
1,1,2-Trichloroethane	55	2.5	50	0	110	68	130			
Toluene	47.6	1.3	50	0	95	66	130			
1,3-Dichloropropane	57.5	2.5	50	0	115	70	130			
Dibromochloromethane	56.4	2.5	50	0	113	70	130			
1,2-Dibromoethane (EDB)	119	5	100	0	119	70	130			
Tetrachloroethene	51.5	2.5	50	0.57	102	61	134			
1,1,1,2-Tetrachloroethane	53.7	2.5	50	0	107	70	130			
Chlorobenzene	48.4	2.5	50	0	97	70	130			
Ethylbenzene	46.9	1.3	50	0	94	68	130			
m,p-Xylene	50.3	1.3	50	0	101	64	130			
Bromoform	54.5	2.5	50	0	109	64	138			
Styrene	54.5	2.5	50	0	109	69	130			
o-Xylene	50.6	1.3	50	0	101	70	130			
1,1,2,2-Tetrachloroethane	52.1	2.5	50	0	104	65	131			
1,2,3-Trichloropropane	103	10	100	0	103	70	130			
Isopropylbenzene	47.2	2.5	50	0	94	64	138			
Bromobenzene	47.9	2.5	50	0	96	70	130			
n-Propylbenzene	45.7	2.5	50	0	91	66	132			
4-Chlorotoluene	48.5	2.5	50	0	97	70	130			
2-Chlorotoluene	46.5	2.5	50	0	93	70	130			
1,3,5-Trimethylbenzene	44.6	2.5	50	0	89	66	136			
tert-Butylbenzene	44.6	2.5	50	0	89	65	137			
1,2,4-Trimethylbenzene	45.4	2.5	50	0	91	65	137			
sec-Butylbenzene	45.9	2.5	50	0	92	66	134			
1,3-Dichlorobenzene	46.4	2.5	50	0	93	70	130			
1,4-Dichlorobenzene	44.6	2.5	50	0	89	70	130			
4-Isopropyltoluene	45.2	2.5	50	0	90	66	137			
1,2-Dichlorobenzene	44.1	2.5	50	0	88	70	130			
n-Butylbenzene	45.4	2.5	50	0	91	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	253	15	250	0	101	67	130			
1,2,4-Trichlorobenzene	47	10	50	0	94	61	137			
Naphthalene	53.2	10	50	0	106	40	167			
Hexachlorobutadiene	77.2	10	100	0	77	61	130			
1,2,3-Trichlorobenzene	47.4	10	50	0	95	51	144			
Surr: 1,2-Dichloroethane-d4	45.6		50		91	70	130			
Surr: Toluene-d8	47.6		50		95	70	130			
Surr: 4-Bromofluorobenzene	53.8		50		108	70	130			

Alpha Analytical, Inc.

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Date: *19-Feb-10*

QC Summary Report

Work Order: 10021002

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **10021209.D** Batch ID: **MS15W0212M** Analysis Date: **02/12/2010 11:16**

Sample ID: **10021002-06AMSD** Units : **µg/L** Run ID: **MSD_15_100212B** Prep Date: **02/12/2010 11:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	39	2.5	50	0	78	13	167	37.18	4.8(20)	
Chloromethane	33.7	10	50	0	67	28	145	34.87	3.6(20)	
Vinyl chloride	52.2	2.5	50	0	104	43	134	47.69	9.1(20)	
Chloroethane	41.5	2.5	50	0	83	39	154	38.63	7.1(20)	
Bromomethane	28.9	10	50	0	58	19	176	23.92	18.7(20)	
Trichlorofluoromethane	49.1	2.5	50	0	98	34	160	46.66	5.1(20)	
1,1-Dichloroethene	51.3	2.5	50	0	103	60	130	49.3	4.0(20)	
Dichloromethane	52.5	10	50	0	105	68	130	49.65	5.5(20)	
trans-1,2-Dichloroethene	53.4	2.5	50	0	107	63	130	50.15	6.4(20)	
Methyl tert-butyl ether (MTBE)	60.9	1.3	50	0	122	56	141	56.09	8.1(20)	
1,1-Dichloroethane	51.2	2.5	50	0	102	61	130	48.74	4.9(20)	
cis-1,2-Dichloroethene	57.4	2.5	50	0	115	70	130	54.93	4.5(20)	
Bromochloromethane	60.7	2.5	50	0	121	70	130	57.27	5.8(20)	
Chloroform	49	2.5	50	0	98	67	130	46.8	4.6(20)	
2,2-Dichloropropane	53.9	2.5	50	0	108	30	152	50.51	6.4(20)	
1,2-Dichloroethane	56.8	2.5	50	0	114	60	135	53.77	5.6(20)	
1,1,1-Trichloroethane	53.4	2.5	50	0	107	59	137	50.84	5.0(20)	
1,1-Dichloropropene	53.9	2.5	50	0	108	63	130	51.48	4.5(20)	
Carbon tetrachloride	54.9	2.5	50	0	110	50	147	51.21	7.0(20)	
Benzene	50.6	1.3	50	0	101	67	130	48.02	5.3(20)	
Dibromomethane	59.9	2.5	50	0	120	69	133	56.41	6.0(20)	
1,2-Dichloropropane	55.3	2.5	50	0	111	69	130	51.32	7.5(20)	
Trichloroethene	53.5	2.5	50	0.88	105	69	130	51.07	4.7(20)	
Bromodichloromethane	58.9	2.5	50	0	118	66	134	55.98	5.1(20)	
cis-1,3-Dichloropropene	51.9	2.5	50	0	104	63	130	48.75	6.3(20)	
trans-1,3-Dichloropropene	54.4	2.5	50	0	109	66	131	51.02	6.3(20)	
1,1,2-Trichloroethane	58	2.5	50	0	116	68	130	54.97	5.4(20)	
Toluene	49.2	1.3	50	0	98	66	130	47.64	3.2(20)	
1,3-Dichloropropane	59.7	2.5	50	0	119	70	130	57.52	3.8(20)	
Dibromochloromethane	59.1	2.5	50	0	118	70	130	56.42	4.6(20)	
1,2-Dibromoethane (EDB)	124	5	100	0	124	70	130	118.6	4.8(20)	
Tetrachloroethene	53.1	2.5	50	0.57	105	61	134	51.53	2.9(20)	
1,1,1,2-Tetrachloroethane	55.8	2.5	50	0	112	70	130	53.73	3.7(20)	
Chlorobenzene	50	2.5	50	0	99.9	70	130	48.39	3.2(20)	
Ethylbenzene	48.4	1.3	50	0	97	68	130	46.92	3.2(20)	
m,p-Xylene	51.6	1.3	50	0	103	64	130	50.33	2.5(20)	
Bromoform	58	2.5	50	0	116	64	138	54.47	6.2(20)	
Styrene	56.2	2.5	50	0	112	69	130	54.52	3.0(20)	
o-Xylene	52.8	1.3	50	0	106	70	130	50.62	4.1(20)	
1,1,2,2-Tetrachloroethane	54.7	2.5	50	0	109	65	131	52.1	4.8(20)	
1,2,3-Trichloropropane	107	10	100	0	107	70	130	103.3	3.7(20)	
Isopropylbenzene	49.2	2.5	50	0	98	64	138	47.18	4.2(20)	
Bromobenzene	50	2.5	50	0	100	70	130	47.91	4.3(20)	
n-Propylbenzene	47.7	2.5	50	0	95	66	132	45.66	4.4(20)	
4-Chlorotoluene	50.8	2.5	50	0	102	70	130	48.52	4.6(20)	
2-Chlorotoluene	47.4	2.5	50	0	95	70	130	46.49	2.0(20)	
1,3,5-Trimethylbenzene	46.2	2.5	50	0	92	66	136	44.58	3.6(20)	
tert-Butylbenzene	46.5	2.5	50	0	93	65	137	44.58	4.2(20)	
1,2,4-Trimethylbenzene	47.2	2.5	50	0	94	65	137	45.43	3.9(20)	
sec-Butylbenzene	48.8	2.5	50	0	98	66	134	45.87	6.1(20)	
1,3-Dichlorobenzene	48.6	2.5	50	0	97	70	130	46.44	4.5(20)	
1,4-Dichlorobenzene	46.3	2.5	50	0	93	70	130	44.61	3.7(20)	
4-Isopropyltoluene	46.8	2.5	50	0	94	66	137	45.19	3.5(20)	
1,2-Dichlorobenzene	46.3	2.5	50	0	93	70	130	44.11	4.9(20)	
n-Butylbenzene	47.4	2.5	50	0	95	60	142	45.44	4.2(20)	
1,2-Dibromo-3-chloropropane (DBCP)	273	15	250	0	109	67	130	253.2	7.5(20)	
1,2,4-Trichlorobenzene	52.4	10	50	0	105	61	137	47.04	10.8(20)	
Naphthalene	59.3	10	50	0	119	40	167	53.16	11.0(20)	
Hexachlorobutadiene	83.6	10	100	0	84	61	130	77.23	7.9(20)	
1,2,3-Trichlorobenzene	53.5	10	50	0	107	51	144	47.4	12.0(20)	
Surr: 1,2-Dichloroethane-d4	47.5		50		95	70	130			
Surr: Toluene-d8	46.8		50		94	70	130			
Surr: 4-Bromofluorobenzene	54.8		50		110	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *19-Feb-10*

QC Summary Report

Work Order: 10021002

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *19-Feb-10*

QC Summary Report

Work Order: 10021002

Method Blank

Type: **MBLK** Test Code: **EPA Method 314.0**

File ID: **17** Batch ID: **23602** Analysis Date: **02/15/2010 13:58**

Sample ID: **MB-23602** Units : **µg/L** Run ID: **IC_3_100215A** Prep Date: **02/15/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type: **LFB** Test Code: **EPA Method 314.0**

File ID: **19** Batch ID: **23602** Analysis Date: **02/15/2010 14:35**

Sample ID: **LFB-23602** Units : **µg/L** Run ID: **IC_3_100215A** Prep Date: **02/15/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	26.9	2	25		107	85	115			

Sample Matrix Spike

Type: **LFM** Test Code: **EPA Method 314.0**

File ID: **24** Batch ID: **23602** Analysis Date: **02/15/2010 16:07**

Sample ID: **10021002-01ALFM** Units : **µg/L** Run ID: **IC_3_100215A** Prep Date: **02/15/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.3	2	25	0	89	80	120			

Sample Matrix Spike Duplicate

Type: **LFMD** Test Code: **EPA Method 314.0**

File ID: **25** Batch ID: **23602** Analysis Date: **02/15/2010 16:25**

Sample ID: **10021002-01ALFMD** Units : **µg/L** Run ID: **IC_3_100215A** Prep Date: **02/15/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.6	2	25	0	90	80	120	22.27	1.5(15)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *19-Feb-10*

QC Summary Report

Work Order: 10021002

Method Blank

Type: **MBLK** Test Code: **EPA Method 200.8**

File ID: **021710.B\142SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:25**

Sample ID: **MB-23613** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method 200.8**

File ID: **021710.B\143_LCS.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:31**

Sample ID: **LCS-23613** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0513	0.005	0.05		103	80	120			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method 200.8**

File ID: **021710.B\147SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:53**

Sample ID: **10021002-06AMS** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0527	0.005	0.05	0	105	80	120			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method 200.8**

File ID: **021710.B\148SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:59**

Sample ID: **10021002-06AMSD** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0535	0.005	0.05	0	107	80	120	0.05268	1.5(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Billing Information :

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

CA

WorkOrder : BMIS10021002

Report Due By : 5:00 PM On : 24-Feb-2010

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 28882, 28881 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	10-Feb-2010	**10-Feb-2010**

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI10021002-01A	MW-3-4	AQ	02/09/10 10:35	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021002-02A	MW-3-3	AQ	02/09/10 11:17	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021002-03A	MW-3-2	AQ	02/09/10 11:37	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021002-04A	DUPE-3-1Q10	AQ	02/09/10 00:00	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021002-05A	MW-4-3	AQ	02/09/10 08:10	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021002-06A	MW-4-2	AQ	02/09/10 08:32	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					Level IV QC
BMI10021002-07A	MW-4-1	AQ	02/09/10 09:02	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021002-08A	EB-6-2/9/10	AQ	02/09/10 08:50	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021002-09A	TB-6-2/9/10	AQ	02/09/10 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 8/25/09

Comments: Security seals intact. Frozen ice. Temp Blank #8541 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2·10·10 1042

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA ___ NV ___ WA ___ ID ___ OR ___ OTHER ___

28882

Page # ___ of ___

Client Name	P.O. #	Job #
BATTELLE / DAVID CONNER	218013	G005862
Address: 3990 OLD TOWN AVE., C-205	EMail Address	
City, State, Zip: SAN DIEGO, CA 92110	Phone # (619) 726-7311	Fax #

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	Total Cr (218.6)	ClO4 - (314.0)					REMARKS
1035	2/9/10	AQ	BMI1002-01	MW-3-4	NORM		V/P 5	X	X	X					
1117			-02	MW-3-3				X	X	X					
1157			-03	MW-3-2				X	X	X					
—			-04	DUPE-3-1010				X	X	X					DUPLICATE
				EB-3-1110				X	X	X					EQUIP. BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		MARCO MENDOZA	INSIGHT EEC	2/9/10	1230
Received by		Anthony Clark	Alpha Analytical	2/9/10	1230
Relinquished by					
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	2-10-10	1042
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:

Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA ___ NV ___ WA ___ ID ___ OR ___ OTHER ___

28881

Page # 1 of 1

Client Name: BATTELLE / DAVID CONNER
P.O. #: 218013
Job #: G005862
Address: 3990 OLD TOWN AVE., C-205
EMail Address:
City, State, Zip: SAN DIEGO, CA 92110
Phone #: (619) 726-7311
Fax #:

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	Total Cr (200.8)	Cl, NO3 - (300.0)					REMARKS
810	2/9/10	AQ	-05	MW-4-3	NORM		V/P 5	X	X	X					
832			-06	MW-4-2				X	X	X					LEVEL IV QC
902			-07	MW-4-1				X	X	X					
858			-08	EB-6-2/9/10				X	X	X					EQUIP. BLANK
—			-09	TB-6-2/9/10			V/1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		MARCO MENDOZA	INSIGHT ENV	2/9/10	1230
Received by		Anthony Hall	Alpha Analytical	2/9/10	1230
Relinquished by					
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	2-10-10	1042
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *22-Feb-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10021110 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10021110-01A	MW-23-4	Aqueous
10021110-02A	MW-23-3	Aqueous
10021110-03A	MW-23-2	Aqueous
10021110-04A	MW-23-1	Aqueous
10021110-05A	EB-7-2/10/10	Aqueous
10021110-06A	TB-7-2/10/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10021110-03A	EPA Method 314.0	Perchlorate
10021110-04A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/11/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-23-3**				
Lab ID : BMI10021110-02A Perchlorate	ND	1.00 µg/L	02/15/10 11:55	02/15/10 19:29
Date Sampled 02/10/10 08:38				
Client ID: **MW-23-2**				
Lab ID : BMI10021110-03A Perchlorate	3.74	1.00 µg/L	02/15/10 11:55	02/15/10 19:47
Date Sampled 02/10/10 08:58				
Client ID: **MW-23-1**				
Lab ID : BMI10021110-04A Perchlorate	2.79	1.00 µg/L	02/15/10 11:55	02/15/10 20:06
Date Sampled 02/10/10 09:33				
Client ID: **EB-7-2/10/10**				
Lab ID : BMI10021110-05A Perchlorate	ND	1.00 µg/L	02/15/10 11:55	02/15/10 20:24
Date Sampled 02/10/10 09:15				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/24/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/11/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter		Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-23-4**					
Lab ID : BMI10021110-01A	Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 03:50
Date Sampled 02/10/10 08:12					
Client ID: **MW-23-3**					
Lab ID : BMI10021110-02A	Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 03:55
Date Sampled 02/10/10 08:38					
Client ID: **MW-23-2**					
Lab ID : BMI10021110-03A	Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 04:24
Date Sampled 02/10/10 08:58					
Client ID: **MW-23-1**					
Lab ID : BMI10021110-04A	Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 04:29
Date Sampled 02/10/10 09:33					
Client ID: **EB-7-2/10/10**					
Lab ID : BMI10021110-05A	Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 04:35
Date Sampled 02/10/10 09:15					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/24/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**MW-23-3**					
Lab ID :	BMI10021110-02A	*** None Found ***	ND	2.0 µg/L	02/16/10 13:29	02/16/10 13:29
Date Received :	02/11/10					
Date Sampled :	02/10/10 08:38					
Client ID :	**MW-23-2**					
Lab ID :	BMI10021110-03A	*** None Found ***	ND	2.0 µg/L	02/16/10 13:52	02/16/10 13:52
Date Received :	02/11/10					
Date Sampled :	02/10/10 08:58					
Client ID :	**MW-23-1**					
Lab ID :	BMI10021110-04A	*** None Found ***	ND	2.0 µg/L	02/16/10 14:14	02/16/10 14:14
Date Received :	02/11/10					
Date Sampled :	02/10/10 09:33					
Client ID :	**EB-7-2/10/10**					
Lab ID :	BMI10021110-05A	*** None Found ***	ND	2.0 µg/L	02/16/10 12:22	02/16/10 12:22
Date Received :	02/11/10					
Date Sampled :	02/10/10 09:15					
Client ID :	**TB-7-2/10/10**					
Lab ID :	BMI10021110-06A	*** None Found ***	ND	2.0 µg/L	02/16/10 12:00	02/16/10 12:00
Date Received :	02/11/10					
Date Sampled :	02/10/10 00:00					

Note: Analysis conducted using EPA Method 524.2 criteria.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/24/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021110-02A
Client I.D. Number: MW-23-3

Sampled: 02/10/10 08:38
Received: 02/11/10
Extracted: 02/16/10 13:29
Analyzed: 02/16/10 13:29

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/24/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021110-03A
Client I.D. Number: MW-23-2

Sampled: 02/10/10 08:58
Received: 02/11/10
Extracted: 02/16/10 13:52
Analyzed: 02/16/10 13:52

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.2		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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2/24/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021110-04A
Client I.D. Number: MW-23-1

Sampled: 02/10/10 09:33
Received: 02/11/10
Extracted: 02/16/10 14:14
Analyzed: 02/16/10 14:14

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	3.2		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	0.55		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/24/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021110-05A
Client I.D. Number: EB-7-2/10/10

Sampled: 02/10/10 09:15
Received: 02/11/10
Extracted: 02/16/10 12:22
Analyzed: 02/16/10 12:22

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/24/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021110-06A
Client I.D. Number: TB-7-2/10/10

Sampled: 02/10/10 00:00
Received: 02/11/10
Extracted: 02/16/10 12:00
Analyzed: 02/16/10 12:00

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/24/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10021110 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10021110-02A	MW-23-3	Aqueous	2
10021110-03A	MW-23-2	Aqueous	2
10021110-04A	MW-23-1	Aqueous	2
10021110-05A	EB-7-2/10/10	Aqueous	2
10021110-06A	TB-7-2/10/10	Aqueous	2

2/24/10

Report Date

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Date: *22-Feb-10*

QC Summary Report

Work Order: 10021110

Method Blank

Type: **MBLK** Test Code: **EPA Method 314.0**

File ID: **17** Batch ID: **23602** Analysis Date: **02/15/2010 13:58**

Sample ID: **MB-23602** Units : **µg/L** Run ID: **IC_3_100215A** Prep Date: **02/15/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type: **LFB** Test Code: **EPA Method 314.0**

File ID: **19** Batch ID: **23602** Analysis Date: **02/15/2010 14:35**

Sample ID: **LFB-23602** Units : **µg/L** Run ID: **IC_3_100215A** Prep Date: **02/15/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	26.9	2	25		107	85	115			

Sample Matrix Spike

Type: **LFM** Test Code: **EPA Method 314.0**

File ID: **24** Batch ID: **23602** Analysis Date: **02/15/2010 16:07**

Sample ID: **10021002-01ALFM** Units : **µg/L** Run ID: **IC_3_100215A** Prep Date: **02/15/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.3	2	25	0	89	80	120			

Sample Matrix Spike Duplicate

Type: **LFMD** Test Code: **EPA Method 314.0**

File ID: **25** Batch ID: **23602** Analysis Date: **02/15/2010 16:25**

Sample ID: **10021002-01ALFMD** Units : **µg/L** Run ID: **IC_3_100215A** Prep Date: **02/15/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.6	2	25	0	90	80	120	22.27	1.5(15)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *22-Feb-10*

QC Summary Report

Work Order: 10021110

Method Blank

Type: **MBLK** Test Code: **EPA Method 200.8**

File ID: **021710.B\142SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:25**

Sample ID: **MB-23613** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type: **LCS** Test Code: **EPA Method 200.8**

File ID: **021710.B\143_LCS.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:31**

Sample ID: **LCS-23613** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0513	0.005	0.05		103	80	120			

Sample Matrix Spike

Type: **MS** Test Code: **EPA Method 200.8**

File ID: **021710.B\147SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:53**

Sample ID: **10021002-06AMS** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0527	0.005	0.05	0	105	80	120			

Sample Matrix Spike Duplicate

Type: **MSD** Test Code: **EPA Method 200.8**

File ID: **021710.B\148SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:59**

Sample ID: **10021002-06AMSD** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0535	0.005	0.05	0	107	80	120	0.05268	1.5(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

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Date: *22-Feb-2010*

QC Summary Report

Work Order: 10021110

Method Blank Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10021607.D** Batch ID: **MS15W0216M** Analysis Date: **02/16/2010 10:31**

Sample ID: **MBLK MS15W0216M** Units : **µg/L** Run ID: **MSD_15_100216B** Prep Date: **02/16/2010 10:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.54		10		95	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			

Alpha Analytical, Inc.

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Date: 22-Feb-2010

QC Summary Report

Work Order: 10021110

Surr: 4-Bromofluorobenzene	10.3		10	103	70	130			

Laboratory Control Spike Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **10021605.D** Batch ID: **MS15W0216M** Analysis Date: **02/16/2010 09:31**

Sample ID: **LCS MS15W0216M** Units : **µg/L** Run ID: **MSD_15_100216B** Prep Date: **02/16/2010 09:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	8.69	1	10		87	70	130			
Chloromethane	6.86	2	10		69	70(70)	130			L50
Vinyl chloride	10.4	1	10		104	70	130			
Chloroethane	8.41	1	10		84	70	130			
Bromomethane	5.95	2	10		60	70(70)	130			L50
Trichlorofluoromethane	10.4	1	10		104	70	130			
1,1-Dichloroethene	10.5	1	10		105	70	130			
Dichloromethane	10.3	2	10		103	70	130			
trans-1,2-Dichloroethene	10.9	1	10		109	70	130			
Methyl tert-butyl ether (MTBE)	12.2	0.5	10		122	70	130			
1,1-Dichloroethane	10.2	1	10		102	70	130			
cis-1,2-Dichloroethene	11.6	1	10		116	70	130			
Bromochloromethane	12.2	1	10		122	70	130			
Chloroform	10.1	1	10		101	70	130			
2,2-Dichloropropane	11.1	1	10		111	70	130			
1,2-Dichloroethane	11.8	1	10		118	70	130			
1,1,1-Trichloroethane	11.1	1	10		111	70	130			
1,1-Dichloropropene	10.8	1	10		108	70	130			
Carbon tetrachloride	11.4	1	10		114	70	130			
Benzene	10.2	0.5	10		102	70	130			
Dibromomethane	12.6	1	10		126	70	130			
1,2-Dichloropropane	11.2	1	10		112	70	130			
Trichloroethene	11.3	1	10		113	70	130			
Bromodichloromethane	12.4	1	10		124	70	130			
cis-1,3-Dichloropropene	11.1	1	10		111	70	130			
trans-1,3-Dichloropropene	11.6	1	10		116	70	130			
1,1,2-Trichloroethane	12.1	1	10		121	70	130			
Toluene	10.2	0.5	10		102	70	130			
1,3-Dichloropropane	12.6	1	10		126	70	130			
Dibromochloromethane	12.4	1	10		124	70	130			
1,2-Dibromoethane (EDB)	26.3	2	20		131	70	130(130)			L51
Tetrachloroethene	11	1	10		110	70	130			
1,1,1,2-Tetrachloroethane	11.8	1	10		118	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10.1	0.5	10		101	70	130			
m,p-Xylene	10.8	0.5	10		108	70	130			
Bromoform	12	1	10		120	70	130			
Styrene	11.7	1	10		117	70	130			
o-Xylene	11	0.5	10		110	70	130			
1,1,2,2-Tetrachloroethane	11.4	1	10		114	70	130			
1,2,3-Trichloropropane	22.8	2	20		114	70	130			
Isopropylbenzene	10.3	1	10		103	70	130			
Bromobenzene	10.4	1	10		104	70	130			
n-Propylbenzene	9.94	1	10		99	70	130			
4-Chlorotoluene	10.5	1	10		105	70	130			
2-Chlorotoluene	10.1	1	10		101	70	130			
1,3,5-Trimethylbenzene	9.67	1	10		97	70	130			
tert-Butylbenzene	9.72	1	10		97	70	130			
1,2,4-Trimethylbenzene	9.76	1	10		98	70	130			
sec-Butylbenzene	10.1	1	10		101	70	130			
1,3-Dichlorobenzene	10.1	1	10		101	70	130			
1,4-Dichlorobenzene	9.7	1	10		97	70	130			
4-Isopropyltoluene	9.75	1	10		98	70	130			
1,2-Dichlorobenzene	9.72	1	10		97	70	130			
n-Butylbenzene	9.8	1	10		98	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	57.3	3	50		115	70	130			
1,2,4-Trichlorobenzene	10.8	2	10		108	70	130			
Naphthalene	12.2	2	10		122	70	130			
Hexachlorobutadiene	17.3	2	20		87	70	130			
1,2,3-Trichlorobenzene	11.1	2	10		111	70	130			
Surr: 1,2-Dichloroethane-d4	9.72		10		97	70	130			
Surr: Toluene-d8	9.48		10		95	70	130			
Surr: 4-Bromofluorobenzene	10.9		10		109	70	130			

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Date: 22-Feb-2010

QC Summary Report

Work Order: 10021110

Sample Matrix Spike Type **MS** Test Code: **EPA Method SW8260B**

File ID: **10021608.D** Batch ID: **MS15W0216M** Analysis Date: **02/16/2010 10:53**

Sample ID: **10021203-03AMS** Units : **µg/L** Run ID: **MSD_15_100216B** Prep Date: **02/16/2010 10:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	42.9	2.5	50	0	86	13	167			
Chloromethane	37.5	10	50	0	75	28	145			
Vinyl chloride	50.5	2.5	50	0	101	43	134			
Chloroethane	40.2	2.5	50	0	80	39	154			
Bromomethane	21.1	10	50	0	42	19	176			
Trichlorofluoromethane	42	2.5	50	0	84	34	160			
1,1-Dichloroethene	46.4	2.5	50	0	93	60	130			
Dichloromethane	50.3	10	50	0	101	68	130			
trans-1,2-Dichloroethene	50.6	2.5	50	0	101	63	130			
Methyl tert-butyl ether (MTBE)	59.3	1.3	50	0	119	56	141			
1,1-Dichloroethane	47.8	2.5	50	0	96	61	130			
cis-1,2-Dichloroethene	54.1	2.5	50	0	108	70	130			
Bromochloromethane	58.2	2.5	50	0	116	70	130			
Chloroform	46.3	2.5	50	0	93	67	130			
2,2-Dichloropropane	50.7	2.5	50	0	101	30	152			
1,2-Dichloroethane	55.2	2.5	50	0	110	60	135			
1,1,1-Trichloroethane	50.7	2.5	50	0	101	59	137			
1,1-Dichloropropene	50.6	2.5	50	0	101	63	130			
Carbon tetrachloride	51.1	2.5	50	0	102	50	147			
Benzene	47.3	1.3	50	0	95	67	130			
Dibromomethane	59.1	2.5	50	0	118	69	133			
1,2-Dichloropropane	51.7	2.5	50	0	103	69	130			
Trichloroethene	50.1	2.5	50	0	100	69	130			
Bromodichloromethane	55	2.5	50	0	110	66	134			
cis-1,3-Dichloropropene	49.5	2.5	50	0	99	63	130			
trans-1,3-Dichloropropene	51.5	2.5	50	0	103	66	131			
1,1,2-Trichloroethane	55.5	2.5	50	0	111	68	130			
Toluene	46.8	1.3	50	0	94	66	130			
1,3-Dichloropropane	58.6	2.5	50	0	117	70	130			
Dibromochloromethane	57.4	2.5	50	0	115	70	130			
1,2-Dibromoethane (EDB)	123	5	100	0	123	70	130			
Tetrachloroethene	50.3	2.5	50	0	101	61	134			
1,1,1,2-Tetrachloroethane	52.9	2.5	50	0	106	70	130			
Chlorobenzene	48.1	2.5	50	0	96	70	130			
Ethylbenzene	46.3	1.3	50	0	93	68	130			
m,p-Xylene	49.9	1.3	50	0	99.8	64	130			
Bromoform	55.3	2.5	50	0	111	64	138			
Styrene	54.2	2.5	50	0	108	69	130			
o-Xylene	50.2	1.3	50	0	100	70	130			
1,1,2,2-Tetrachloroethane	53.8	2.5	50	0	108	65	131			
1,2,3-Trichloropropane	105	10	100	0	105	70	130			
Isopropylbenzene	44.7	2.5	50	0	89	64	138			
Bromobenzene	45.9	2.5	50	0	92	70	130			
n-Propylbenzene	43.5	2.5	50	0	87	66	132			
4-Chlorotoluene	46.1	2.5	50	0	92	70	130			
2-Chlorotoluene	43.4	2.5	50	0	87	70	130			
1,3,5-Trimethylbenzene	42.2	2.5	50	0	84	66	136			
tert-Butylbenzene	42.3	2.5	50	0	85	65	137			
1,2,4-Trimethylbenzene	42.9	2.5	50	0	86	65	137			
sec-Butylbenzene	43.4	2.5	50	0	87	66	134			
1,3-Dichlorobenzene	44.5	2.5	50	0	89	70	130			
1,4-Dichlorobenzene	42.7	2.5	50	0	85	70	130			
4-Isopropyltoluene	42.6	2.5	50	0	85	66	137			
1,2-Dichlorobenzene	42	2.5	50	0	84	70	130			
n-Butylbenzene	42.6	2.5	50	0	85	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	255	15	250	0	102	67	130			
1,2,4-Trichlorobenzene	45.7	10	50	0	91	61	137			
Naphthalene	53.7	10	50	0	107	40	167			
Hexachlorobutadiene	73.9	10	100	0	74	61	130			
1,2,3-Trichlorobenzene	47.2	10	50	0	94	51	144			
Surr: 1,2-Dichloroethane-d4	48.4		50		97	70	130			
Surr: Toluene-d8	47.9		50		96	70	130			
Surr: 4-Bromofluorobenzene	53.1		50		106	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 22-Feb-2010

QC Summary Report

Work Order: 10021110

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **10021609.D** Batch ID: **MS15W0216M** Analysis Date: **02/16/2010 11:16**

Sample ID: **10021203-03AMSD** Units : **µg/L** Run ID: **MSD_15_100216B** Prep Date: **02/16/2010 11:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	47.2	2.5	50	0	94	13	167	42.9	9.5(20)	
Chloromethane	41.6	10	50	0	83	28	145	37.45	10.6(20)	
Vinyl chloride	57.4	2.5	50	0	115	43	134	50.46	12.8(20)	
Chloroethane	43.8	2.5	50	0	88	39	154	40.22	8.5(20)	
Bromomethane	31.2	10	50	0	62	19	176	21.06	38.7(20)	R58
Trichlorofluoromethane	51.9	2.5	50	0	104	34	160	42.04	21.0(20)	R5
1,1-Dichloroethene	51.4	2.5	50	0	103	60	130	46.41	10.3(20)	
Dichloromethane	52.3	10	50	0	105	68	130	50.3	3.8(20)	
trans-1,2-Dichloroethene	53.4	2.5	50	0	107	63	130	50.59	5.3(20)	
Methyl tert-butyl ether (MTBE)	60.9	1.3	50	0	122	56	141	59.26	2.7(20)	
1,1-Dichloroethane	50.3	2.5	50	0	101	61	130	47.81	5.1(20)	
cis-1,2-Dichloroethene	56.8	2.5	50	0	114	70	130	54.06	4.9(20)	
Bromochloromethane	60	2.5	50	0	120	70	130	58.16	3.2(20)	
Chloroform	48.7	2.5	50	0	97	67	130	46.3	5.0(20)	
2,2-Dichloropropane	53.9	2.5	50	0	108	30	152	50.7	6.2(20)	
1,2-Dichloroethane	56.9	2.5	50	0	114	60	135	55.16	3.0(20)	
1,1,1-Trichloroethane	53.5	2.5	50	0	107	59	137	50.67	5.4(20)	
1,1-Dichloropropene	53.5	2.5	50	0	107	63	130	50.55	5.6(20)	
Carbon tetrachloride	55.4	2.5	50	0	111	50	147	51.08	8.2(20)	
Benzene	49.9	1.3	50	0	99.7	67	130	47.33	5.2(20)	
Dibromomethane	59.9	2.5	50	0	120	69	133	59.1	1.3(20)	
1,2-Dichloropropane	53.4	2.5	50	0	107	69	130	51.66	3.3(20)	
Trichloroethene	53	2.5	50	0	106	69	130	50.05	5.7(20)	
Bromodichloromethane	59.1	2.5	50	0	118	66	134	55.04	7.1(20)	
cis-1,3-Dichloropropene	51.3	2.5	50	0	103	63	130	49.5	3.7(20)	
trans-1,3-Dichloropropene	54.3	2.5	50	0	109	66	131	51.45	5.4(20)	
1,1,2-Trichloroethane	58.4	2.5	50	0	117	68	130	55.51	5.1(20)	
Toluene	48.7	1.3	50	0	97	66	130	46.78	4.1(20)	
1,3-Dichloropropane	60.7	2.5	50	0	121	70	130	58.63	3.4(20)	
Dibromochloromethane	59.6	2.5	50	0	119	70	130	57.37	3.8(20)	
1,2-Dibromoethane (EDB)	126	5	100	0	126	70	130	123.2	2.6(20)	
Tetrachloroethene	53.2	2.5	50	0	106	61	134	50.31	5.6(20)	
1,1,1,2-Tetrachloroethane	55.8	2.5	50	0	112	70	130	52.92	5.2(20)	
Chlorobenzene	49.6	2.5	50	0	99	70	130	48.09	3.1(20)	
Ethylbenzene	48.2	1.3	50	0	96	68	130	46.27	4.1(20)	
m,p-Xylene	52	1.3	50	0	104	64	130	49.91	4.1(20)	
Bromoform	59.1	2.5	50	0	118	64	138	55.3	6.6(20)	
Styrene	56.8	2.5	50	0	114	69	130	54.21	4.7(20)	
o-Xylene	52.3	1.3	50	0	105	70	130	50.23	4.1(20)	
1,1,2,2-Tetrachloroethane	55.8	2.5	50	0	112	65	131	53.75	3.8(20)	
1,2,3-Trichloropropane	109	10	100	0	109	70	130	105.3	3.9(20)	
Isopropylbenzene	48.1	2.5	50	0	96	64	138	44.68	7.4(20)	
Bromobenzene	48.6	2.5	50	0	97	70	130	45.89	5.6(20)	
n-Propylbenzene	46.4	2.5	50	0	93	66	132	43.53	6.4(20)	
4-Chlorotoluene	49.3	2.5	50	0	99	70	130	46.06	6.7(20)	
2-Chlorotoluene	46.8	2.5	50	0	94	70	130	43.4	7.5(20)	
1,3,5-Trimethylbenzene	45.3	2.5	50	0	91	66	136	42.23	7.1(20)	
tert-Butylbenzene	45.6	2.5	50	0	91	65	137	42.34	7.5(20)	
1,2,4-Trimethylbenzene	46.1	2.5	50	0	92	65	137	42.86	7.3(20)	
sec-Butylbenzene	47.3	2.5	50	0	95	66	134	43.44	8.5(20)	
1,3-Dichlorobenzene	48.1	2.5	50	0	96	70	130	44.5	7.7(20)	
1,4-Dichlorobenzene	45.7	2.5	50	0	91	70	130	42.66	7.0(20)	
4-Isopropyltoluene	46	2.5	50	0	92	66	137	42.58	7.6(20)	
1,2-Dichlorobenzene	46.1	2.5	50	0	92	70	130	41.97	9.3(20)	
n-Butylbenzene	46.6	2.5	50	0	93	60	142	42.58	9.1(20)	
1,2-Dibromo-3-chloropropane (DBCP)	277	15	250	0	111	67	130	255.5	8.0(20)	
1,2,4-Trichlorobenzene	51.2	10	50	0	102	61	137	45.65	11.5(20)	
Naphthalene	59.7	10	50	0	119	40	167	53.7	10.6(20)	
Hexachlorobutadiene	81.5	10	100	0	81	61	130	73.9	9.7(20)	
1,2,3-Trichlorobenzene	53.7	10	50	0	107	51	144	47.21	12.9(20)	
Surr: 1,2-Dichloroethane-d4	48.2		50		96	70	130			
Surr: Toluene-d8	47		50		94	70	130			
Surr: 4-Bromofluorobenzene	54.5		50		109	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *22-Feb-2010*

QC Summary Report

Work Order: 10021110

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

L51 = Analyte recovery was above acceptance limits for the LCS, but was acceptable in the MS/MSD.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

R58 = MS/MSD RPD exceeded the laboratory control limit.

Billing Information :

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

CA

WorkOrder : BMIS10021110

Report Due By : 5:00 PM On : 25-Feb-2010

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

PO : 218013

Client's COC # : 24129 Job : G005862/JPL Groundwater Monitoring

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	11-Feb-2010	**11-Feb-2010**

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI10021110-01A	MW-23-4	AQ	02/10/10 08:12	1	0	10		Cr							
BMI10021110-02A	MW-23-3	AQ	02/10/10 08:38	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					Level IV QC
BMI10021110-03A	MW-23-2	AQ	02/10/10 08:58	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021110-04A	MW-23-1	AQ	02/10/10 09:33	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021110-05A	EB-7-2/10/10	AQ	02/10/10 09:15	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI10021110-06A	TB-7-2/10/10	AQ	02/10/10 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 8/25/09

Comments: Security seals intact. Frozen ice. Temp Blank #7707 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2-11-10 1618

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE.
City, State, Zip COLUMBUS, OH 43201
Phone Number ______ Fax ______

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? 24129
AZ ___ CA ___ NV ___ WA ___
ID ___ OR ___ OTHER ___ Page # 1 of 1

Client Name: BATTELLE / DAVID CONNER	P.O. # 218013	Job # G005862
Address: 3990 OLD TOWN AVE., C-205	EMail Address	
City, State, Zip: SAN DIEGO, CA 92110	Phone # (619) 726-7311	Fax #

Required QC Level? I II (III) IV
EDD / EDF? YES ___ NO ___
Global ID # ______

Sampled by: ______ Report Attention: ______

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TOTAL Cr (200.8)	ClO$_4^-$ (314.0)	REMARKS
812	2/10/10	AQ	BMI100211110-01	MW-23-4	NORM		P/1		X		
838			-02	MW-23-3			V/P 5	X	X	X	LEVEL ~~IV~~ QC
858			-03	MW-23-2				X	X	X	
933			-04	MW-23-1				X	X	X	
915			-05	EB-7-2/10/10				X	X	X	EQUIP. BLANK
—			-06	TB-7-2/10/10			V/1	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	MARCO MENDOZA	INSIGHT EEL, INC.	2/10/10	1101
Received by	[signature]	Anthony Stark	Alpha Analytical	2/10/10	1101
Relinquished by	[signature]	Anthony Stark	Alpha Analytical	2/10/10	1101
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	2-11-10	1618
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *25-Feb-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10021203 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10021203-01A	MW-11-4	Aqueous
10021203-02A	MW-11-3	Aqueous
10021203-03A	MW-11-2	Aqueous
10021203-04A	MW-11-1	Aqueous
10021203-05A	DUPE-4-1Q10	Aqueous
10021203-06A	MW-22-3	Aqueous
10021203-07A	MW-22-2	Aqueous
10021203-08A	MW-22-1	Aqueous
10021203-09A	EB-8-2/11/10	Aqueous
10021203-10A	TB-8-2/11/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10021203-04A	EPA Method 314.0	Perchlorate
10021203-05A	EPA Method 314.0	Perchlorate
10021203-06A	EPA Method 314.0	Perchlorate
10021203-07A	EPA Method 314.0	Perchlorate
10021203-08A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/12/10

Job: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0

	Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-11-1**					
Lab ID : BMI10021203-04A	Nitrite (NO2) - N	ND	0.25 mg/L	02/12/10 12:43	02/12/10 14:03
Date Sampled 02/11/10 11:15	Nitrate (NO3) - N	1.1	0.25 mg/L	02/12/10 12:43	02/12/10 14:03
	Phosphate, ortho - P	ND	0.50 mg/L	02/12/10 12:43	02/12/10 14:03
	Sulfate (SO4)	58	0.50 mg/L	02/12/10 12:43	02/12/10 14:03
	Chloride	29	0.50 mg/L	02/12/10 12:43	02/12/10 14:03
Client ID: **DUPE-4-1Q10**					
Lab ID : BMI10021203-05A	Nitrite (NO2) - N	ND	0.25 mg/L	02/12/10 12:43	02/12/10 14:59
Date Sampled 02/11/10 00:00	Nitrate (NO3) - N	1.1	0.25 mg/L	02/12/10 12:43	02/12/10 14:59
	Phosphate, ortho - P	ND	0.50 mg/L	02/12/10 12:43	02/12/10 14:59
	Sulfate (SO4)	58	0.50 mg/L	02/12/10 12:43	02/12/10 14:59
	Chloride	30	0.50 mg/L	02/12/10 12:43	02/12/10 14:59

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/12/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-11-4**				
Lab ID : BMI10021203-01A Perchlorate	ND	1.00 µg/L	02/12/10 11:07	02/12/10 16:04
Date Sampled 02/11/10 09:50				
Client ID: **MW-11-3**				
Lab ID : BMI10021203-02A Perchlorate	ND	1.00 µg/L	02/12/10 11:07	02/12/10 16:22
Date Sampled 02/11/10 10:16				
Client ID: **MW-11-2**				
Lab ID : BMI10021203-03A Perchlorate	ND	1.00 µg/L	02/12/10 11:07	02/12/10 16:41
Date Sampled 02/11/10 10:47				
Client ID: **MW-11-1**				
Lab ID : BMI10021203-04A Perchlorate	1.14	1.00 µg/L	02/12/10 11:07	02/12/10 17:36
Date Sampled 02/11/10 11:15				
Client ID: **DUPE-4-1Q10**				
Lab ID : BMI10021203-05A Perchlorate	1.12	1.00 µg/L	02/12/10 11:07	02/12/10 17:54
Date Sampled 02/11/10 00:00				
Client ID: **MW-22-3**				
Lab ID : BMI10021203-06A Perchlorate	2.71	1.00 µg/L	02/12/10 11:07	02/12/10 18:13
Date Sampled 02/11/10 07:53				
Client ID: **MW-22-2**				
Lab ID : BMI10021203-07A Perchlorate	2.13	1.00 µg/L	02/12/10 11:07	02/12/10 18:31
Date Sampled 02/11/10 08:15				
Client ID: **MW-22-1**				
Lab ID : BMI10021203-08A Perchlorate	2.55	1.00 µg/L	02/12/10 11:07	02/12/10 19:26
Date Sampled 02/11/10 08:40				
Client ID: **EB-8-2/11/10**				
Lab ID : BMI10021203-09A Perchlorate	ND	1.00 µg/L	02/12/10 11:07	02/12/10 19:45
Date Sampled 02/11/10 08:29				

Alpha Analytical, Inc.

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ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/25/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/12/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-11-3**				
Lab ID : BMI10021203-02A Chromium (Cr)	ND	0.0050 mg/L	02/12/10 11:22	02/17/10 20:53
Date Sampled 02/11/10 10:16				
Client ID: **MW-11-2**				
Lab ID : BMI10021203-03A Chromium (Cr)	ND	0.0050 mg/L	02/12/10 11:22	02/17/10 20:31
Date Sampled 02/11/10 10:47				
Client ID: **MW-11-1**				
Lab ID : BMI10021203-04A Chromium (Cr)	ND	0.0050 mg/L	02/12/10 11:22	02/17/10 20:59
Date Sampled 02/11/10 11:15				
Client ID: **DUPE-4-1Q10**				
Lab ID : BMI10021203-05A Chromium (Cr)	ND	0.0050 mg/L	02/12/10 11:22	02/17/10 21:04
Date Sampled 02/11/10 00:00				
Client ID: **MW-22-3**				
Lab ID : BMI10021203-06A Chromium (Cr)	ND	0.0050 mg/L	02/12/10 11:22	02/17/10 21:10
Date Sampled 02/11/10 07:53				
Client ID: **MW-22-2**				
Lab ID : BMI10021203-07A Chromium (Cr)	ND	0.0050 mg/L	02/12/10 11:22	02/17/10 21:16
Date Sampled 02/11/10 08:15				
Client ID: **MW-22-1**				
Lab ID : BMI10021203-08A Chromium (Cr)	ND	0.0050 mg/L	02/12/10 11:22	02/17/10 21:21
Date Sampled 02/11/10 08:40				
Client ID: **EB-8-2/11/10**				
Lab ID : BMI10021203-09A Chromium (Cr)	ND	0.0050 mg/L	02/12/10 11:22	02/17/10 21:27
Date Sampled 02/11/10 08:29				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

	Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID : **MW-11-4** Lab ID : BMI10021203-01A Date Received : 02/12/10 Date Sampled : 02/11/10 09:50	Sulfur dioxide	4.5	2.0 µg/L	02/16/10 14:36	02/16/10 14:36
Client ID : **MW-11-3** Lab ID : BMI10021203-02A Date Received : 02/12/10 Date Sampled : 02/11/10 10:16	Sulfur dioxide	5.9	2.0 µg/L	02/16/10 14:58	02/16/10 14:58
Client ID : **MW-11-2** Lab ID : BMI10021203-03A Date Received : 02/12/10 Date Sampled : 02/11/10 10:47	Sulfur dioxide	5.6	2.0 µg/L	02/16/10 15:20	02/16/10 15:20
Client ID : **MW-11-1** Lab ID : BMI10021203-04A Date Received : 02/12/10 Date Sampled : 02/11/10 11:15	Sulfur dioxide	2.6	2.0 µg/L	02/16/10 15:42	02/16/10 15:42
Client ID : **DUPE-4-1Q10** Lab ID : BMI10021203-05A Date Received : 02/12/10 Date Sampled : 02/11/10 00:00	* * * None Found * * *	ND	2.0 µg/L	02/16/10 16:05	02/16/10 16:05
Client ID : **MW-22-3** Lab ID : BMI10021203-06A Date Received : 02/12/10 Date Sampled : 02/11/10 07:53	* * * None Found * * *	ND	2.0 µg/L	02/16/10 16:27	02/16/10 16:27
Client ID : **MW-22-2** Lab ID : BMI10021203-07A Date Received : 02/12/10 Date Sampled : 02/11/10 08:15	* * * None Found * * *	ND	2.0 µg/L	02/16/10 16:49	02/16/10 16:49
Client ID : **MW-22-1** Lab ID : BMI10021203-08A Date Received : 02/12/10 Date Sampled : 02/11/10 08:40	* * * None Found * * *	ND	2.0 µg/L	02/16/10 17:11	02/16/10 17:11
Client ID : **EB-8-2/11/10** Lab ID : BMI10021203-09A Date Received : 02/12/10 Date Sampled : 02/11/10 08:29	* * * None Found * * *	ND	2.0 µg/L	02/16/10 13:07	02/16/10 13:07

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Client ID : **TB-8-2/11/10**

Lab ID :	BMI10021203-10A	*** None Found ***	ND	2.0 µg/L	02/16/10 12:45	02/16/10 12:45

Date Received : 02/12/10
Date Sampled : 02/11/10 00:00

Note: Analysis conducted using EPA Method 524.2 criteria.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-01A
Client I.D. Number: MW-11-4

Sampled: 02/11/10 09:50
Received: 02/12/10
Extracted: 02/16/10 14:36
Analyzed: 02/16/10 14:36

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	95	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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2/25/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-02A
Client I.D. Number: MW-11-3

Sampled: 02/11/10 10:16
Received: 02/12/10
Extracted: 02/16/10 14:58
Analyzed: 02/16/10 14:58

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-03A
Client I.D. Number: MW-11-2

Sampled: 02/11/10 10:47
Received: 02/12/10
Extracted: 02/16/10 15:20
Analyzed: 02/16/10 15:20

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	J	1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

J=Estimated: The analyte was positively identified; the quanitation is an estimation.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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2/25/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-04A
Client I.D. Number: MW-11-1

Sampled: 02/11/10 11:15
Received: 02/12/10
Extracted: 02/16/10 15:42
Analyzed: 02/16/10 15:42

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-05A
Client I.D. Number: DUPE-4-1Q10

Sampled: 02/11/10 00:00
Received: 02/12/10
Extracted: 02/16/10 16:05
Analyzed: 02/16/10 16:05

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-06A
Client I.D. Number: MW-22-3

Sampled: 02/11/10 07:53
Received: 02/12/10
Extracted: 02/16/10 16:27
Analyzed: 02/16/10 16:27

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-07A
Client I.D. Number: MW-22-2

Sampled: 02/11/10 08:15
Received: 02/12/10
Extracted: 02/16/10 16:49
Analyzed: 02/16/10 16:49

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

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2/25/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-08A
Client I.D. Number: MW-22-1

Sampled: 02/11/10 08:40
Received: 02/12/10
Extracted: 02/16/10 17:11
Analyzed: 02/16/10 17:11

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36 1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37 Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38 Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39 m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40 Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41 Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42 o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43 1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44 1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45 Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46 Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47 n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48 4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49 2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50 1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.1		0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65 Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66 Surr: 4-Bromofluorobenzene	97	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L				
33	Dibromochloromethane	ND		0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L				
35	Tetrachloroethene	1.1		0.50	µg/L				

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-09A
Client I.D. Number: EB-8-2/11/10

Sampled: 02/11/10 08:29
Received: 02/12/10
Extracted: 02/16/10 13:07
Analyzed: 02/16/10 13:07

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36 1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37 Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38 Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39 m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40 Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41 Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42 o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43 1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44 1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45 Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46 Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47 n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48 4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49 2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50 1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65 Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66 Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L				
33	Dibromochloromethane	ND		0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L				
35	Tetrachloroethene	ND		0.50	µg/L				

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

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2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021203-10A
Client I.D. Number: TB-8-2/11/10

Sampled: 02/11/10 00:00
Received: 02/12/10
Extracted: 02/16/10 12:45
Analyzed: 02/16/10 12:45

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36 1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37 Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38 Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39 m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40 Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41 Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42 o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43 1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44 1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45 Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46 Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47 n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48 4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49 2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50 1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65 Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66 Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L				
33	Dibromochloromethane	ND		0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L				
35	Tetrachloroethene	ND		0.50	µg/L				

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10021203 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10021203-01A	MW-11-4	Aqueous	2
10021203-02A	MW-11-3	Aqueous	2
10021203-03A	MW-11-2	Aqueous	2
10021203-04A	MW-11-1	Aqueous	2
10021203-05A	DUPE-4-1Q10	Aqueous	2
10021203-06A	MW-22-3	Aqueous	2
10021203-07A	MW-22-2	Aqueous	2
10021203-08A	MW-22-1	Aqueous	2
10021203-09A	EB-8-2/11/10	Aqueous	2
10021203-10A	TB-8-2/11/10	Aqueous	2

2/25/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *23-Feb-10*

QC Summary Report

Work Order: 10021203

Method Blank

Type **MBLK** Test Code: **EPA Method 300.0**

File ID: **24** Batch ID: **23589** Analysis Date: **02/12/2010 13:08**

Sample ID: **MB-23589** Units : **mg/L** Run ID: **IC_1_100212A** Prep Date: **02/12/2010 12:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Nitrite (NO2) - N	ND	0.25								
Nitrate (NO3) - N	ND	0.25								
Phosphate, ortho - P	ND	0.5								
Sulfate (SO4)	ND	0.5								
Chloride	ND	0.5								

Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 300.0**

File ID: **25** Batch ID: **23589** Analysis Date: **02/12/2010 13:26**

Sample ID: **LFB-23589** Units : **mg/L** Run ID: **IC_1_100212A** Prep Date: **02/12/2010 12:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Nitrite (NO2) - N	1.24	0.25	1.25		99	90	110			
Nitrate (NO3) - N	1.33	0.25	1.25		107	90	110			
Phosphate, ortho - P	1.14	0.5	1.25		91	90	110			
Sulfate (SO4)	108	0.5	100		108	90	110			
Chloride	54.9	0.5	50		110	90	110			

Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 300.0**

File ID: **28** Batch ID: **23589** Analysis Date: **02/12/2010 14:22**

Sample ID: **10021203-04ALFM** Units : **mg/L** Run ID: **IC_1_100212A** Prep Date: **02/12/2010 12:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Nitrite (NO2) - N	1.09	0.25	1.25	0	87	80	120			
Nitrate (NO3) - N	2.27	0.25	1.25	1.051	97	80	120			
Phosphate, ortho - P	1.35	0.5	1.25	0	108	80	120			
Sulfate (SO4)	139	0.5	100	57.67	81	80	120			
Chloride	74.2	0.5	50	29.01	90	80	120			

Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 300.0**

File ID: **29** Batch ID: **23589** Analysis Date: **02/12/2010 14:40**

Sample ID: **10021203-04ALFMD** Units : **mg/L** Run ID: **IC_1_100212A** Prep Date: **02/12/2010 12:43**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Nitrite (NO2) - N	1.11	0.25	1.25	0	88	80	120	1.091	1.3(10)	
Nitrate (NO3) - N	2.32	0.25	1.25	1.051	102	80	120	2.269	2.3(10)	
Phosphate, ortho - P	1.1	0.5	1.25	0	88	80	120	1.35	20.0(10)	R5
Sulfate (SO4)	138	0.5	100	57.67	81	80	120	139.1	0.5(10)	
Chloride	74.1	0.5	50	29.01	90	80	120	74.19	0.1(10)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *23-Feb-10*

QC Summary Report

Work Order: 10021203

Method Blank

Type **MBLK** Test Code: **EPA Method 314.0**

File ID: **15** Batch ID: **23586** Analysis Date: **02/12/2010 14:13**

Sample ID: **MB-23586** Units : **µg/L** Run ID: **IC_3_100212A** Prep Date: **02/12/2010 11:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 314.0**

File ID: **16** Batch ID: **23586** Analysis Date: **02/12/2010 14:32**

Sample ID: **LFB-23586** Units : **µg/L** Run ID: **IC_3_100212A** Prep Date: **02/12/2010 11:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24.3	2	25		97	85	115			

Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 314.0**

File ID: **24** Batch ID: **23586** Analysis Date: **02/12/2010 16:59**

Sample ID: **10021203-03ALFM** Units : **µg/L** Run ID: **IC_3_100212A** Prep Date: **02/12/2010 11:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	25.8	2	25	0	103	80	120			

Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 314.0**

File ID: **25** Batch ID: **23586** Analysis Date: **02/12/2010 17:17**

Sample ID: **10021203-03ALFMD** Units : **µg/L** Run ID: **IC_3_100212A** Prep Date: **02/12/2010 11:07**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	26.2	2	25	0	105	80	120	25.85	1.3(15)	

Comments:

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Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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Date: *24-Feb-10*

QC Summary Report

Work Order: 10021203

Method Blank

Type **MBLK** Test Code: **EPA Method 200.8**

File ID: **021710.B\075SMPL.D** Batch ID: **23588K** Analysis Date: **02/17/2010 20:08**

Sample ID: **MB-23588** Units : **mg/L** Run ID: **ICP/MS_100217E** Prep Date: **02/12/2010 11:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 200.8**

File ID: **021710.B\076_LCS.D** Batch ID: **23588K** Analysis Date: **02/17/2010 20:14**

Sample ID: **LCS-23588** Units : **mg/L** Run ID: **ICP/MS_100217E** Prep Date: **02/12/2010 11:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0542	0.005	0.05		108	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 200.8**

File ID: **021710.B\080SMPL.D** Batch ID: **23588K** Analysis Date: **02/17/2010 20:36**

Sample ID: **10021203-03AMS** Units : **mg/L** Run ID: **ICP/MS_100217E** Prep Date: **02/12/2010 11:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0498	0.005	0.05	0	99.6	80	120			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 200.8**

File ID: **021710.B\081SMPL.D** Batch ID: **23588K** Analysis Date: **02/17/2010 20:42**

Sample ID: **10021203-03AMSD** Units : **mg/L** Run ID: **ICP/MS_100217E** Prep Date: **02/12/2010 11:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0504	0.005	0.05	0	101	80	120	0.04979	1.2(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha Analytical, Inc.

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Date: *22-Feb-2010*

QC Summary Report

Work Order: 10021203

Method Blank Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10021607.D** Batch ID: **MS15W0216M** Analysis Date: **02/16/2010 10:31**

Sample ID: **MBLK MS15W0216M** Units : **µg/L** Run ID: **MSD_15_100216B** Prep Date: **02/16/2010 10:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.54		10		95	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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Date: 22-Feb-2010

QC Summary Report

Work Order: 10021203

Surr: 4-Bromofluorobenzene	10.3		10	103	70	130			

Laboratory Control Spike Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **10021605.D** Batch ID: **MS15W0216M** Analysis Date: **02/16/2010 09:31**

Sample ID: **LCS MS15W0216M** Units : **µg/L** Run ID: **MSD_15_100216B** Prep Date: **02/16/2010 09:31**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	8.69	1	10		87	70	130			
Chloromethane	6.86	2	10		69	70(70)	130			L50
Vinyl chloride	10.4	1	10		104	70	130			
Chloroethane	8.41	1	10		84	70	130			
Bromomethane	5.95	2	10		60	70(70)	130			L50
Trichlorofluoromethane	10.4	1	10		104	70	130			
1,1-Dichloroethene	10.5	1	10		105	70	130			
Dichloromethane	10.3	2	10		103	70	130			
trans-1,2-Dichloroethene	10.9	1	10		109	70	130			
Methyl tert-butyl ether (MTBE)	12.2	0.5	10		122	70	130			
1,1-Dichloroethane	10.2	1	10		102	70	130			
cis-1,2-Dichloroethene	11.6	1	10		116	70	130			
Bromochloromethane	12.2	1	10		122	70	130			
Chloroform	10.1	1	10		101	70	130			
2,2-Dichloropropane	11.1	1	10		111	70	130			
1,2-Dichloroethane	11.8	1	10		118	70	130			
1,1,1-Trichloroethane	11.1	1	10		111	70	130			
1,1-Dichloropropene	10.8	1	10		108	70	130			
Carbon tetrachloride	11.4	1	10		114	70	130			
Benzene	10.2	0.5	10		102	70	130			
Dibromomethane	12.6	1	10		126	70	130			
1,2-Dichloropropane	11.2	1	10		112	70	130			
Trichloroethene	11.3	1	10		113	70	130			
Bromodichloromethane	12.4	1	10		124	70	130			
cis-1,3-Dichloropropene	11.1	1	10		111	70	130			
trans-1,3-Dichloropropene	11.6	1	10		116	70	130			
1,1,2-Trichloroethane	12.1	1	10		121	70	130			
Toluene	10.2	0.5	10		102	70	130			
1,3-Dichloropropane	12.6	1	10		126	70	130			
Dibromochloromethane	12.4	1	10		124	70	130			
1,2-Dibromoethane (EDB)	26.3	2	20		131	70	130(130)			L51
Tetrachloroethene	11	1	10		110	70	130			
1,1,1,2-Tetrachloroethane	11.8	1	10		118	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10.1	0.5	10		101	70	130			
m,p-Xylene	10.8	0.5	10		108	70	130			
Bromoform	12	1	10		120	70	130			
Styrene	11.7	1	10		117	70	130			
o-Xylene	11	0.5	10		110	70	130			
1,1,2,2-Tetrachloroethane	11.4	1	10		114	70	130			
1,2,3-Trichloropropane	22.8	2	20		114	70	130			
Isopropylbenzene	10.3	1	10		103	70	130			
Bromobenzene	10.4	1	10		104	70	130			
n-Propylbenzene	9.94	1	10		99	70	130			
4-Chlorotoluene	10.5	1	10		105	70	130			
2-Chlorotoluene	10.1	1	10		101	70	130			
1,3,5-Trimethylbenzene	9.67	1	10		97	70	130			
tert-Butylbenzene	9.72	1	10		97	70	130			
1,2,4-Trimethylbenzene	9.76	1	10		98	70	130			
sec-Butylbenzene	10.1	1	10		101	70	130			
1,3-Dichlorobenzene	10.1	1	10		101	70	130			
1,4-Dichlorobenzene	9.7	1	10		97	70	130			
4-Isopropyltoluene	9.75	1	10		98	70	130			
1,2-Dichlorobenzene	9.72	1	10		97	70	130			
n-Butylbenzene	9.8	1	10		98	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	57.3	3	50		115	70	130			
1,2,4-Trichlorobenzene	10.8	2	10		108	70	130			
Naphthalene	12.2	2	10		122	70	130			
Hexachlorobutadiene	17.3	2	20		87	70	130			
1,2,3-Trichlorobenzene	11.1	2	10		111	70	130			
Surr: 1,2-Dichloroethane-d4	9.72		10		97	70	130			
Surr: Toluene-d8	9.48		10		95	70	130			
Surr: 4-Bromofluorobenzene	10.9		10		109	70	130			

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Date: 22-Feb-2010

QC Summary Report

Work Order: 10021203

Sample Matrix Spike Type **MS** Test Code: **EPA Method SW8260B**

File ID: **10021608.D** Batch ID: **MS15W0216M** Analysis Date: **02/16/2010 10:53**

Sample ID: **10021203-03AMS** Units : **µg/L** Run ID: **MSD_15_100216B** Prep Date: **02/16/2010 10:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	42.9	2.5	50	0	86	13	167			
Chloromethane	37.5	10	50	0	75	28	145			
Vinyl chloride	50.5	2.5	50	0	101	43	134			
Chloroethane	40.2	2.5	50	0	80	39	154			
Bromomethane	21.1	10	50	0	42	19	176			
Trichlorofluoromethane	42	2.5	50	0	84	34	160			
1,1-Dichloroethene	46.4	2.5	50	0	93	60	130			
Dichloromethane	50.3	10	50	0	101	68	130			
trans-1,2-Dichloroethene	50.6	2.5	50	0	101	63	130			
Methyl tert-butyl ether (MTBE)	59.3	1.3	50	0	119	56	141			
1,1-Dichloroethane	47.8	2.5	50	0	96	61	130			
cis-1,2-Dichloroethene	54.1	2.5	50	0	108	70	130			
Bromochloromethane	58.2	2.5	50	0	116	70	130			
Chloroform	46.3	2.5	50	0	93	67	130			
2,2-Dichloropropane	50.7	2.5	50	0	101	30	152			
1,2-Dichloroethane	55.2	2.5	50	0	110	60	135			
1,1,1-Trichloroethane	50.7	2.5	50	0	101	59	137			
1,1-Dichloropropene	50.6	2.5	50	0	101	63	130			
Carbon tetrachloride	51.1	2.5	50	0	102	50	147			
Benzene	47.3	1.3	50	0	95	67	130			
Dibromomethane	59.1	2.5	50	0	118	69	133			
1,2-Dichloropropane	51.7	2.5	50	0	103	69	130			
Trichloroethene	50.1	2.5	50	0	100	69	130			
Bromodichloromethane	55	2.5	50	0	110	66	134			
cis-1,3-Dichloropropene	49.5	2.5	50	0	99	63	130			
trans-1,3-Dichloropropene	51.5	2.5	50	0	103	66	131			
1,1,2-Trichloroethane	55.5	2.5	50	0	111	68	130			
Toluene	46.8	1.3	50	0	94	66	130			
1,3-Dichloropropane	58.6	2.5	50	0	117	70	130			
Dibromochloromethane	57.4	2.5	50	0	115	70	130			
1,2-Dibromoethane (EDB)	123	5	100	0	123	70	130			
Tetrachloroethene	50.3	2.5	50	0	101	61	134			
1,1,1,2-Tetrachloroethane	52.9	2.5	50	0	106	70	130			
Chlorobenzene	48.1	2.5	50	0	96	70	130			
Ethylbenzene	46.3	1.3	50	0	93	68	130			
m,p-Xylene	49.9	1.3	50	0	99.8	64	130			
Bromoform	55.3	2.5	50	0	111	64	138			
Styrene	54.2	2.5	50	0	108	69	130			
o-Xylene	50.2	1.3	50	0	100	70	130			
1,1,2,2-Tetrachloroethane	53.8	2.5	50	0	108	65	131			
1,2,3-Trichloropropane	105	10	100	0	105	70	130			
Isopropylbenzene	44.7	2.5	50	0	89	64	138			
Bromobenzene	45.9	2.5	50	0	92	70	130			
n-Propylbenzene	43.5	2.5	50	0	87	66	132			
4-Chlorotoluene	46.1	2.5	50	0	92	70	130			
2-Chlorotoluene	43.4	2.5	50	0	87	70	130			
1,3,5-Trimethylbenzene	42.2	2.5	50	0	84	66	136			
tert-Butylbenzene	42.3	2.5	50	0	85	65	137			
1,2,4-Trimethylbenzene	42.9	2.5	50	0	86	65	137			
sec-Butylbenzene	43.4	2.5	50	0	87	66	134			
1,3-Dichlorobenzene	44.5	2.5	50	0	89	70	130			
1,4-Dichlorobenzene	42.7	2.5	50	0	85	70	130			
4-Isopropyltoluene	42.6	2.5	50	0	85	66	137			
1,2-Dichlorobenzene	42	2.5	50	0	84	70	130			
n-Butylbenzene	42.6	2.5	50	0	85	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	255	15	250	0	102	67	130			
1,2,4-Trichlorobenzene	45.7	10	50	0	91	61	137			
Naphthalene	53.7	10	50	0	107	40	167			
Hexachlorobutadiene	73.9	10	100	0	74	61	130			
1,2,3-Trichlorobenzene	47.2	10	50	0	94	51	144			
Surr: 1,2-Dichloroethane-d4	48.4		50		97	70	130			
Surr: Toluene-d8	47.9		50		96	70	130			
Surr: 4-Bromofluorobenzene	53.1		50		106	70	130			

Alpha Analytical, Inc.

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Date: *22-Feb-2010*

QC Summary Report

Work Order: 10021203

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **10021609.D** Batch ID: **MS15W0216M** Analysis Date: **02/16/2010 11:16**

Sample ID: **10021203-03AMSD** Units : **µg/L** Run ID: **MSD_15_100216B** Prep Date: **02/16/2010 11:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	47.2	2.5	50	0	94	13	167	42.9	9.5(20)	
Chloromethane	41.6	10	50	0	83	28	145	37.45	10.6(20)	
Vinyl chloride	57.4	2.5	50	0	115	43	134	50.46	12.8(20)	
Chloroethane	43.8	2.5	50	0	88	39	154	40.22	8.5(20)	
Bromomethane	31.2	10	50	0	62	19	176	21.06	38.7(20)	R58
Trichlorofluoromethane	51.9	2.5	50	0	104	34	160	42.04	21.0(20)	R5
1,1-Dichloroethene	51.4	2.5	50	0	103	60	130	46.41	10.3(20)	
Dichloromethane	52.3	10	50	0	105	68	130	50.3	3.8(20)	
trans-1,2-Dichloroethene	53.4	2.5	50	0	107	63	130	50.59	5.3(20)	
Methyl tert-butyl ether (MTBE)	60.9	1.3	50	0	122	56	141	59.26	2.7(20)	
1,1-Dichloroethane	50.3	2.5	50	0	101	61	130	47.81	5.1(20)	
cis-1,2-Dichloroethene	56.8	2.5	50	0	114	70	130	54.06	4.9(20)	
Bromochloromethane	60	2.5	50	0	120	70	130	58.16	3.2(20)	
Chloroform	48.7	2.5	50	0	97	67	130	46.3	5.0(20)	
2,2-Dichloropropane	53.9	2.5	50	0	108	30	152	50.7	6.2(20)	
1,2-Dichloroethane	56.9	2.5	50	0	114	60	135	55.16	3.0(20)	
1,1,1-Trichloroethane	53.5	2.5	50	0	107	59	137	50.67	5.4(20)	
1,1-Dichloropropene	53.5	2.5	50	0	107	63	130	50.55	5.6(20)	
Carbon tetrachloride	55.4	2.5	50	0	111	50	147	51.08	8.2(20)	
Benzene	49.9	1.3	50	0	99.7	67	130	47.33	5.2(20)	
Dibromomethane	59.9	2.5	50	0	120	69	133	59.1	1.3(20)	
1,2-Dichloropropane	53.4	2.5	50	0	107	69	130	51.66	3.3(20)	
Trichloroethene	53	2.5	50	0	106	69	130	50.05	5.7(20)	
Bromodichloromethane	59.1	2.5	50	0	118	66	134	55.04	7.1(20)	
cis-1,3-Dichloropropene	51.3	2.5	50	0	103	63	130	49.5	3.7(20)	
trans-1,3-Dichloropropene	54.3	2.5	50	0	109	66	131	51.45	5.4(20)	
1,1,2-Trichloroethane	58.4	2.5	50	0	117	68	130	55.51	5.1(20)	
Toluene	48.7	1.3	50	0	97	66	130	46.78	4.1(20)	
1,3-Dichloropropane	60.7	2.5	50	0	121	70	130	58.63	3.4(20)	
Dibromochloromethane	59.6	2.5	50	0	119	70	130	57.37	3.8(20)	
1,2-Dibromoethane (EDB)	126	5	100	0	126	70	130	123.2	2.6(20)	
Tetrachloroethene	53.2	2.5	50	0	106	61	134	50.31	5.6(20)	
1,1,1,2-Tetrachloroethane	55.8	2.5	50	0	112	70	130	52.92	5.2(20)	
Chlorobenzene	49.6	2.5	50	0	99	70	130	48.09	3.1(20)	
Ethylbenzene	48.2	1.3	50	0	96	68	130	46.27	4.1(20)	
m,p-Xylene	52	1.3	50	0	104	64	130	49.91	4.1(20)	
Bromoform	59.1	2.5	50	0	118	64	138	55.3	6.6(20)	
Styrene	56.8	2.5	50	0	114	69	130	54.21	4.7(20)	
o-Xylene	52.3	1.3	50	0	105	70	130	50.23	4.1(20)	
1,1,2,2-Tetrachloroethane	55.8	2.5	50	0	112	65	131	53.75	3.8(20)	
1,2,3-Trichloropropane	109	10	100	0	109	70	130	105.3	3.9(20)	
Isopropylbenzene	48.1	2.5	50	0	96	64	138	44.68	7.4(20)	
Bromobenzene	48.6	2.5	50	0	97	70	130	45.89	5.6(20)	
n-Propylbenzene	46.4	2.5	50	0	93	66	132	43.53	6.4(20)	
4-Chlorotoluene	49.3	2.5	50	0	99	70	130	46.06	6.7(20)	
2-Chlorotoluene	46.8	2.5	50	0	94	70	130	43.4	7.5(20)	
1,3,5-Trimethylbenzene	45.3	2.5	50	0	91	66	136	42.23	7.1(20)	
tert-Butylbenzene	45.6	2.5	50	0	91	65	137	42.34	7.5(20)	
1,2,4-Trimethylbenzene	46.1	2.5	50	0	92	65	137	42.86	7.3(20)	
sec-Butylbenzene	47.3	2.5	50	0	95	66	134	43.44	8.5(20)	
1,3-Dichlorobenzene	48.1	2.5	50	0	96	70	130	44.5	7.7(20)	
1,4-Dichlorobenzene	45.7	2.5	50	0	91	70	130	42.66	7.0(20)	
4-Isopropyltoluene	46	2.5	50	0	92	66	137	42.58	7.6(20)	
1,2-Dichlorobenzene	46.1	2.5	50	0	92	70	130	41.97	9.3(20)	
n-Butylbenzene	46.6	2.5	50	0	93	60	142	42.58	9.1(20)	
1,2-Dibromo-3-chloropropane (DBCP)	277	15	250	0	111	67	130	255.5	8.0(20)	
1,2,4-Trichlorobenzene	51.2	10	50	0	102	61	137	45.65	11.5(20)	
Naphthalene	59.7	10	50	0	119	40	167	53.7	10.6(20)	
Hexachlorobutadiene	81.5	10	100	0	81	61	130	73.9	9.7(20)	
1,2,3-Trichlorobenzene	53.7	10	50	0	107	51	144	47.21	12.9(20)	
Surr: 1,2-Dichloroethane-d4	48.2		50		96	70	130			
Surr: Toluene-d8	47		50		94	70	130			
Surr: 4-Bromofluorobenzene	54.5		50		109	70	130			

Alpha Analytical, Inc.

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Date: *22-Feb-2010*

QC Summary Report

Work Order: 10021203

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

L51 = Analyte recovery was above acceptance limits for the LCS, but was acceptable in the MS/MSD.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

R58 = MS/MSD RPD exceeded the laboratory control limit.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMIS10021203

Report Due By : 5:00 PM On : 26-Feb-2010

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 28880, 24130 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	12-Feb-2010	**12-Feb-2010**

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0_W	314_W	METALS_DW	VOC_TIC_W	VOC_W				Sample Remarks
BMI10021203-01A	MW-11-4	AQ	02/11/10 09:50	4	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021203-02A	MW-11-3	AQ	02/11/10 10:16	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				Level IV QC
BMI10021203-03A	MW-11-2	AQ	02/11/10 10:47	10	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				MS/MSD
BMI10021203-04A	MW-11-1	AQ	02/11/10 11:15	5	0	10	NO2, NO3, SO4, Cl, PO4	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021203-05A	DUPE-4-1Q10	AQ	02/11/10 00:00	5	0	10	NO2, NO3, SO4, Cl, PO4	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021203-06A	MW-22-3	AQ	02/11/10 07:53	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021203-07A	MW-22-2	AQ	02/11/10 08:15	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				Level IV QC
BMI10021203-08A	MW-22-1	AQ	02/11/10 08:40	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021203-09A	EB-8-2/11/10	AQ	02/11/10 08:29	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021203-10A	TB-8-2/11/10	AQ	02/11/10 00:00	1	0	10				VOC by 524 Criteria	VOC by 524 Criteria				Reno Trip Blank 8/25/09

Comments: Security seals intact. Frozen ice. Temp Blank #8720 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2.12.10 1036

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number ______ Fax ______

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? 28880
AZ ___ **CA** ___ **NV** ___ **WA** ___
ID ___ **OR** ___ **OTHER** ___
Page # ___ ***of*** ___

Client Name: BATTELLE / DAVID CONNER
Address: 3990 OLD TOWN AVE., C-205
City, State, Zip: SAN DIEGO, CA 92110
P.O. # 218013
EMail Address:
Phone # (619) 726-7311
Job # G005862
Fax #
Sampled by:
Report Attention:

Analyses Required

Required QC Level? I II (III) IV
EDD / EDF? YES ___ ***NO*** ___
Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	Total Cr (200.8)	ClO4 - (314.0)	Cl-, SO4-, NO3-, NO2, PO4-3 (300.0)			REMARKS
950	2/11/10	AQ	BMI10021203-01	MW-11-4	NORM		V/P 4	X		X				
1016			-02	MW-11-3			V/P 5	X	X	X				LEVEL IV QC
1047			-03	MW-11-2			V/P 10	X	X	X				MS/MSD
1115			-04	MW-11-1				X	X	X	X			
—			-05	DUPE-4-1010			V/P 5	X	X	X	X			DUPLICATE
~~—~~				~~EB- - / /10~~			~~V/P 5~~	~~X~~	~~X~~	~~X~~				~~EQUIP. BLANK~~ (2)

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	MARCO MENDOZA	INSIGHT EEC, INC	2/11/10	1230
Received by	[signature]	Anthony Stark	ALPHA	2/11/10	1230
Relinquished by	Anthony Stark	Anthony Stark	ALPHA	2/11/10	1700
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	2-12-10	1036
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA ___ NV ___ WA ___ ID ___ OR ___ OTHER ___

24130

Page # ___ of ___

Client Name	P.O. #	Job #
BATTELLE / DAVID CONNER	218013	G005862
Address	**EMail Address**	
3990 OLD TOWN AVE, C-205		
City, State, Zip	**Phone #**	**Fax #**
SAN DIEGO, CA 92110	(619) 726-7311	

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (5242)	Total Cr (2008)	C10-C40 (3140)	REMARKS
753	2/11/10	AQ	-06	MW-22-3	NORM		VIP 5	X	X	X	
815			-07	MW-22-2				X	X	X	LEVEL IV QC
840			-08	MW-22-1				X	X	X	
829			-09	EB-8-2/11/10				X	X	X	EQUIP. BLANK
—			-10	TB-8-2/11/10			V/1	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by	MARCO MENDOZA	INSIGHT	2/11/10	1230
Received by	Arthur Stark	ALPHA	2/11/10	1230
Relinquished by	Arthur Stark	ALPHA	2/11/10	100
Received by Elizabeth Adcox	Elizabeth Adcox	Alpha	2-12-10	1036
Relinquished by				
Received by				

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *26-Feb-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10021640 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10021640-01A	MW-19-5	Aqueous
10021640-02A	MW-19-4	Aqueous
10021640-03A	MW-19-3	Aqueous
10021640-04A	MW-19-2	Aqueous
10021640-05A	MW-19-1	Aqueous
10021640-06A	EB-9-2/12/10	Aqueous
10021640-07A	TB-9-2/12/10	Aqueous
10021640-08A	MW-12-5	Aqueous
10021640-09A	MW-12-4	Aqueous
10021640-10A	MW-12-3	Aqueous
10021640-11A	MW-12-2	Aqueous
10021640-12A	MW-12-1	Aqueous
10021640-13A	EB-10-2/15/10	Aqueous
10021640-14A	TB-10-2/15/10	Aqueous
10021640-15A	MW-7	Aqueous
10021640-16A	MW-16	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10021640-01A	EPA Method 314.0	Perchlorate
10021640-02A	EPA Method 314.0	Perchlorate
10021640-03A	EPA Method 314.0	Perchlorate
10021640-04A	EPA Method 314.0	Perchlorate
10021640-05A	EPA Method 314.0	Perchlorate
10021640-08A	EPA Method 314.0	Perchlorate
10021640-09A	EPA Method 314.0	Perchlorate
10021640-11A	EPA Method 314.0	Perchlorate
10021640-16A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/16/10

Job: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-7**				
Lab ID : BMI10021640-15A Nitrite (NO2) - N	ND	0.25 mg/L	02/16/10 12:57	02/16/10 16:56
Date Sampled 02/15/10 09:15 Nitrate (NO3) - N	1.1	0.25 mg/L	02/16/10 12:57	02/16/10 16:56
Phosphate, ortho - P	ND	0.50 mg/L	02/16/10 12:57	02/16/10 16:56
Sulfate (SO4)	46	0.50 mg/L	02/16/10 12:57	02/16/10 16:56
Chloride	73	50 mg/L	02/16/10 12:57	02/16/10 16:56
Client ID: **MW-16**				
Lab ID : BMI10021640-16A Nitrite (NO2) - N	ND	0.25 mg/L	02/16/10 12:57	02/16/10 17:15
Date Sampled 02/15/10 11:40 Nitrate (NO3) - N	1.2	0.25 mg/L	02/16/10 12:57	02/16/10 17:15
Phosphate, ortho - P	ND	0.50 mg/L	02/16/10 12:57	02/16/10 17:15
Sulfate (SO4)	49	0.50 mg/L	02/16/10 12:57	02/16/10 17:15
Chloride	74	50 mg/L	02/16/10 12:57	02/16/10 17:15

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/16/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-19-5**				
Lab ID : BMI10021640-01A Perchlorate	2.76	1.00 µg/L	02/16/10 14:16	02/16/10 16:45
Date Sampled 02/12/10 08:00				
Client ID: **MW-19-4**				
Lab ID : BMI10021640-02A Perchlorate	2.72	1.00 µg/L	02/16/10 14:16	02/16/10 17:03
Date Sampled 02/12/10 08:22				
Client ID: **MW-19-3**				
Lab ID : BMI10021640-03A Perchlorate	2.52	1.00 µg/L	02/16/10 14:16	02/16/10 17:22
Date Sampled 02/12/10 08:44				
Client ID: **MW-19-2**				
Lab ID : BMI10021640-04A Perchlorate	5.42	1.00 µg/L	02/16/10 14:16	02/16/10 17:40
Date Sampled 02/12/10 09:08				
Client ID: **MW-19-1**				
Lab ID : BMI10021640-05A Perchlorate	6.68	1.00 µg/L	02/16/10 14:16	02/16/10 17:59
Date Sampled 02/12/10 09:30				
Client ID: **EB-9-2/12/10**				
Lab ID : BMI10021640-06A Perchlorate	ND	1.00 µg/L	02/16/10 14:16	02/16/10 18:17
Date Sampled 02/12/10 09:20				
Client ID: **MW-12-5**				
Lab ID : BMI10021640-08A Perchlorate	1.32	1.00 µg/L	02/16/10 14:16	02/16/10 18:35
Date Sampled 02/15/10 09:51				
Client ID: **MW-12-4**				
Lab ID : BMI10021640-09A Perchlorate	2.75	1.00 µg/L	02/16/10 14:16	02/16/10 18:54
Date Sampled 02/15/10 10:17				
Client ID: **MW-12-3**				
Lab ID : BMI10021640-10A Perchlorate	ND	1.00 µg/L	02/16/10 14:16	02/16/10 20:26
Date Sampled 02/15/10 10:40				
Client ID: **MW-12-2**				
Lab ID : BMI10021640-11A Perchlorate	2.41	1.00 µg/L	02/16/10 14:16	02/16/10 20:44
Date Sampled 02/15/10 11:03				
Client ID: **MW-12-1**				
Lab ID : BMI10021640-12A Perchlorate	ND	1.00 µg/L	02/16/10 14:16	02/16/10 21:03
Date Sampled 02/15/10 11:31				

Alpha Analytical, Inc.

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Client ID: **EB-10-2/15/10**						
Lab ID : BMI10021640-13A	Perchlorate	ND		1.00 µg/L	02/16/10 14:16	02/16/10 21:21
Date Sampled 02/15/10 11:17						
Client ID: **MW-7**						
Lab ID : BMI10021640-15A	Perchlorate	ND		1.00 µg/L	02/16/10 14:16	02/16/10 21:39
Date Sampled 02/15/10 09:15						
Client ID: **MW-16**						
Lab ID : BMI10021640-16A	Perchlorate	3.77		1.00 µg/L	02/16/10 14:16	02/16/10 21:58
Date Sampled 02/15/10 11:40						

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

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3/1/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/16/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-12-3**				
Lab ID : BMI10021640-10A Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 04:41
Date Sampled 02/15/10 10:40				
Client ID: **MW-12-2**				
Lab ID : BMI10021640-11A Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 04:46
Date Sampled 02/15/10 11:03				
Client ID: **MW-12-1**				
Lab ID : BMI10021640-12A Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 04:52
Date Sampled 02/15/10 11:31				
Client ID: **EB-10-2/15/10**				
Lab ID : BMI10021640-13A Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 04:58
Date Sampled 02/15/10 11:17				
Client ID: **MW-7**				
Lab ID : BMI10021640-15A Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 05:03
Date Sampled 02/15/10 09:15				
Client ID: **MW-16**				
Lab ID : BMI10021640-16A Chromium (Cr)	ND	0.0050 mg/L	02/16/10 14:22	02/18/10 05:09
Date Sampled 02/15/10 11:40				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

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3/1/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

	Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID : **MW-19-5** Lab ID : BMI10021640-01A Date Received : 02/16/10 Date Sampled : 02/12/10 08:00	* * * None Found * * *	ND	2.0 µg/L	02/18/10 15:15	02/18/10 15:15
Client ID : **MW-19-4** Lab ID : BMI10021640-02A Date Received : 02/16/10 Date Sampled : 02/12/10 08:22	* * * None Found * * *	ND	2.0 µg/L	02/18/10 15:37	02/18/10 15:37
Client ID : **MW-19-3** Lab ID : BMI10021640-03A Date Received : 02/16/10 Date Sampled : 02/12/10 08:44	* * * None Found * * *	ND	2.0 µg/L	02/18/10 15:59	02/18/10 15:59
Client ID : **MW-19-2** Lab ID : BMI10021640-04A Date Received : 02/16/10 Date Sampled : 02/12/10 09:08	* * * None Found * * *	ND	2.0 µg/L	02/18/10 16:22	02/18/10 16:22
Client ID : **MW-19-1** Lab ID : BMI10021640-05A Date Received : 02/16/10 Date Sampled : 02/12/10 09:30	* * * None Found * * *	ND	2.0 µg/L	02/18/10 16:44	02/18/10 16:44
Client ID : **EB-9-2/12/10** Lab ID : BMI10021640-06A Date Received : 02/16/10 Date Sampled : 02/12/10 09:20	* * * None Found * * *	ND	2.0 µg/L	02/18/10 14:08	02/18/10 14:08
Client ID : **TB-9-2/12/10** Lab ID : BMI10021640-07A Date Received : 02/16/10 Date Sampled : 02/12/10 00:00	* * * None Found * * *	ND	2.0 µg/L	02/18/10 13:46	02/18/10 13:46
Client ID : **MW-12-5** Lab ID : BMI10021640-08A Date Received : 02/16/10 Date Sampled : 02/15/10 09:51	* * * None Found * * *	ND	2.0 µg/L	02/18/10 17:06	02/18/10 17:06
Client ID : **MW-12-4** Lab ID : BMI10021640-09A Date Received : 02/16/10 Date Sampled : 02/15/10 10:17	Sulfur dioxide	2.1	2.0 µg/L	02/18/10 17:28	02/18/10 17:28

Alpha Analytical, Inc.

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Client ID : **MW-12-3**						
Lab ID :	BMI10021640-10A	*** None Found ***	ND	2.0 µg/L	02/18/10 17:51	02/18/10 17:51
Date Received :	02/16/10					
Date Sampled :	02/15/10 10:40					
Client ID : **MW-12-2**						
Lab ID :	BMI10021640-11A	*** None Found ***	ND	2.0 µg/L	02/18/10 18:13	02/18/10 18:13
Date Received :	02/16/10					
Date Sampled :	02/15/10 11:03					
Client ID : **MW-12-1**						
Lab ID :	BMI10021640-12A	*** None Found ***	ND	2.0 µg/L	02/18/10 18:35	02/18/10 18:35
Date Received :	02/16/10					
Date Sampled :	02/15/10 11:31					
Client ID : **EB-10-2/15/10**						
Lab ID :	BMI10021640-13A	*** None Found ***	ND	2.0 µg/L	02/18/10 14:53	02/18/10 14:53
Date Received :	02/16/10					
Date Sampled :	02/15/10 11:17					
Client ID : **TB-10-2/15/10**						
Lab ID :	BMI10021640-14A	*** None Found ***	ND	2.0 µg/L	02/18/10 14:30	02/18/10 14:30
Date Received :	02/16/10					
Date Sampled :	02/15/10 00:00					
Client ID : **MW-7**						
Lab ID :	BMI10021640-15A	*** None Found ***	ND	2.0 µg/L	02/18/10 18:57	02/18/10 18:57
Date Received :	02/16/10					
Date Sampled :	02/15/10 09:15					
Client ID : **MW-16**						
Lab ID :	BMI10021640-16A	*** None Found ***	ND	2.0 µg/L	02/18/10 19:20	02/18/10 19:20
Date Received :	02/16/10					
Date Sampled :	02/15/10 11:40					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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3/1/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-01A
Client I.D. Number: MW-19-5

Sampled: 02/12/10 08:00
Received: 02/16/10
Extracted: 02/18/10 15:15
Analyzed: 02/18/10 15:15

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	2.5		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-02A
Client I.D. Number: MW-19-4

Sampled: 02/12/10 08:22
Received: 02/16/10
Extracted: 02/18/10 15:37
Analyzed: 02/18/10 15:37

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-03A
Client I.D. Number: MW-19-3

Sampled: 02/12/10 08:44
Received: 02/16/10
Extracted: 02/18/10 15:59
Analyzed: 02/18/10 15:59

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-04A
Client I.D. Number: MW-19-2

Sampled: 02/12/10 09:08
Received: 02/16/10
Extracted: 02/18/10 16:22
Analyzed: 02/18/10 16:22

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.2		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	0.59		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/1/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-05A
Client I.D. Number: MW-19-1

Sampled: 02/12/10 09:30
Received: 02/16/10
Extracted: 02/18/10 16:44
Analyzed: 02/18/10 16:44

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36 1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37 Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38 Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39 m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40 Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41 Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42 o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43 1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44 1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45 Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46 Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47 n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48 4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49 2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50 1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.59		0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65 Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66 Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L				
33	Dibromochloromethane	ND		0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L				
35	Tetrachloroethene	ND		0.50	µg/L				

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-06A
Client I.D. Number: EB-9-2/12/10

Sampled: 02/12/10 09:20
Received: 02/16/10
Extracted: 02/18/10 14:08
Analyzed: 02/18/10 14:08

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-07A
Client I.D. Number: TB-9-2/12/10

Sampled: 02/12/10 00:00
Received: 02/16/10
Extracted: 02/18/10 13:46
Analyzed: 02/18/10 13:46

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-08A
Client I.D. Number: MW-12-5

Sampled: 02/15/10 09:51
Received: 02/16/10
Extracted: 02/18/10 17:06
Analyzed: 02/18/10 17:06

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/1/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-09A
Client I.D. Number: MW-12-4

Sampled: 02/15/10 10:17
Received: 02/16/10
Extracted: 02/18/10 17:28
Analyzed: 02/18/10 17:28

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.54		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	0.86		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

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3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-10A
Client I.D. Number: MW-12-3

Sampled: 02/15/10 10:40
Received: 02/16/10
Extracted: 02/18/10 17:51
Analyzed: 02/18/10 17:51

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	6.7		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.72		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-11A
Client I.D. Number: MW-12-2

Sampled: 02/15/10 11:03
Received: 02/16/10
Extracted: 02/18/10 18:13
Analyzed: 02/18/10 18:13

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-12A
Client I.D. Number: MW-12-1

Sampled: 02/15/10 11:31
Received: 02/16/10
Extracted: 02/18/10 18:35
Analyzed: 02/18/10 18:35

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-13A
Client I.D. Number: EB-10-2/15/10

Sampled: 02/15/10 11:17
Received: 02/16/10
Extracted: 02/18/10 14:53
Analyzed: 02/18/10 14:53

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-14A
Client I.D. Number: TB-10-2/15/10

Sampled: 02/15/10 00:00
Received: 02/16/10
Extracted: 02/18/10 14:30
Analyzed: 02/18/10 14:30

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-15A
Client I.D. Number: MW-7

Sampled: 02/15/10 09:15
Received: 02/16/10
Extracted: 02/18/10 18:57
Analyzed: 02/18/10 18:57

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.51		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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3/1/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021640-16A
Client I.D. Number: MW-16

Sampled: 02/15/10 11:40
Received: 02/16/10
Extracted: 02/18/10 19:20
Analyzed: 02/18/10 19:20

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

3/1/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10021640 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10021640-01A	MW-19-5	Aqueous	2
10021640-02A	MW-19-4	Aqueous	2
10021640-03A	MW-19-3	Aqueous	2
10021640-04A	MW-19-2	Aqueous	2
10021640-05A	MW-19-1	Aqueous	2
10021640-06A	EB-9-2/12/10	Aqueous	2
10021640-07A	TB-9-2/12/10	Aqueous	2
10021640-08A	MW-12-5	Aqueous	2
10021640-09A	MW-12-4	Aqueous	2
10021640-10A	MW-12-3	Aqueous	2
10021640-11A	MW-12-2	Aqueous	2
10021640-12A	MW-12-1	Aqueous	2
10021640-13A	EB-10-2/15/10	Aqueous	2
10021640-14A	TB-10-2/15/10	Aqueous	2
10021640-15A	MW-7	Aqueous	2
10021640-16A	MW-16	Aqueous	2

3/1/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 26-Feb-10

QC Summary Report

Work Order: 10021640

Method Blank

Type: **MBLK** Test Code: **EPA Method 300.0**

File ID: **20** Batch ID: **23610** Analysis Date: **02/16/2010 13:15**

Sample ID: **MB-23610** Units : **mg/L** Run ID: **IC_1_100216A** Prep Date: **02/16/2010 12:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	ND	0.5								
Nitrite (NO2) - N	ND	0.25								
Nitrate (NO3) - N	ND	0.25								
Phosphate, ortho - P	ND	0.5								
Sulfate (SO4)	ND	0.5								

Laboratory Fortified Blank

Type: **LFB** Test Code: **EPA Method 300.0**

File ID: **21** Batch ID: **23610** Analysis Date: **02/16/2010 13:33**

Sample ID: **LFB-23610** Units : **mg/L** Run ID: **IC_1_100216A** Prep Date: **02/16/2010 12:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	52.4	0.5	50		105	90	110			
Nitrite (NO2) - N	1.15	0.25	1.25		92	90	110			
Nitrate (NO3) - N	1.13	0.25	1.25		90	90	110			
Phosphate, ortho - P	1.59	0.5	1.25		127	90	110			L51
Sulfate (SO4)	106	0.5	100		106	90	110			

Laboratory Fortified Blank Duplicate

Type: **LFBD** Test Code: **EPA Method 300.0**

File ID: **22** Batch ID: **23610** Analysis Date: **02/16/2010 13:52**

Sample ID: **LFBD-23610** Units : **mg/L** Run ID: **IC_1_100216A** Prep Date: **02/16/2010 12:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	52.7	0.5	50		105	90	110	52.44	0.5(10)	
Nitrite (NO2) - N	1.36	0.25	1.25		109	90	110	1.153	16.5(10)	R5
Nitrate (NO3) - N	1.22	0.25	1.25		97	90	110	1.128	7.5(10)	
Phosphate, ortho - P	1.2	0.5	1.25		96	90	110	1.59	28.0(10)	R5
Sulfate (SO4)	106	0.5	100		106	90	110	105.5	0.9(10)	

Sample Matrix Spike

Type: **LFM** Test Code: **EPA Method 300.0**

File ID: **28** Batch ID: **23610** Analysis Date: **02/16/2010 15:42**

Sample ID: **10021601-06ALFM** Units : **mg/L** Run ID: **IC_1_100216A** Prep Date: **02/16/2010 12:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	64	0.5	50	15.43	97	80	120			
Nitrite (NO2) - N	1.18	0.25	1.25	0	95	80	120			
Nitrate (NO3) - N	3.38	0.25	1.25	2.611	62	80	120			M2
Phosphate, ortho - P	1.27	0.5	1.25	0	102	80	120			
Sulfate (SO4)	109	0.5	100	12.95	96	80	120			

Sample Matrix Spike Duplicate

Type: **LFMD** Test Code: **EPA Method 300.0**

File ID: **29** Batch ID: **23610** Analysis Date: **02/16/2010 16:01**

Sample ID: **10021601-06ALFMD** Units : **mg/L** Run ID: **IC_1_100216A** Prep Date: **02/16/2010 12:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	64.4	0.5	50	15.43	98	80	120	64.03	0.5(10)	
Nitrite (NO2) - N	1.17	0.25	1.25	0	93	80	120	1.184	1.3(10)	
Nitrate (NO3) - N	3.34	0.25	1.25	2.611	59	80	120	3.382	1.2(10)	M2
Phosphate, ortho - P	1.31	0.5	1.25	0	105	80	120	1.269	3.4(10)	
Sulfate (SO4)	109	0.5	100	12.95	96	80	120	108.8	0.5(10)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L51 = Analyte recovery was above acceptance limits for the LCS, but was acceptable in the MS/MSD.

M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *24-Feb-10*

QC Summary Report

Work Order: 10021640

Method Blank

Type **MBLK** Test Code: **EPA Method 314.0**

File ID: **14** Batch ID: **23612** Analysis Date: **02/16/2010 15:13**

Sample ID: **MB-23612** Units : **µg/L** Run ID: **IC_3_100216A** Prep Date: **02/16/2010 14:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 314.0**

File ID: **15** Batch ID: **23612** Analysis Date: **02/16/2010 15:31**

Sample ID: **LFB-23612** Units : **µg/L** Run ID: **IC_3_100216A** Prep Date: **02/16/2010 14:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24	2	25		96	85	115			

Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 314.0**

File ID: **27** Batch ID: **23612** Analysis Date: **02/16/2010 19:12**

Sample ID: **10021640-09ALFM** Units : **µg/L** Run ID: **IC_3_100216A** Prep Date: **02/16/2010 14:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	27.1	2	25	2.746	98	80	120			

Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 314.0**

File ID: **28** Batch ID: **23612** Analysis Date: **02/16/2010 19:31**

Sample ID: **10021640-09ALFMD** Units : **µg/L** Run ID: **IC_3_100216A** Prep Date: **02/16/2010 14:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	27.6	2	25	2.746	99	80	120	27.12	1.8(15)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *24-Feb-10*

QC Summary Report

Work Order: 10021640

Method Blank

Type **MBLK** Test Code: **EPA Method 200.8**

File ID: **021710.B\142SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:25**

Sample ID: **MB-23613** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 200.8**

File ID: **021710.B\143_LCS.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:31**

Sample ID: **LCS-23613** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0513	0.005	0.05		103	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 200.8**

File ID: **021710.B\147SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:53**

Sample ID: **10021002-06AMS** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0527	0.005	0.05	0	105	80	120			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 200.8**

File ID: **021710.B\148SMPL.D** Batch ID: **23613K** Analysis Date: **02/18/2010 02:59**

Sample ID: **10021002-06AMSD** Units : **mg/L** Run ID: **ICP/MS_100217G** Prep Date: **02/16/2010 14:22**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0535	0.005	0.05	0	107	80	120	0.05268	1.5(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: 25-Feb-10

QC Summary Report

Work Order: 10021640

Method Blank Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10021807.D** Batch ID: **MS15W0218M** Analysis Date: **02/18/2010 10:26**

Sample ID: **MBLK MS15W0218M** Units : **µg/L** Run ID: **MSD_15_100218B** Prep Date: **02/18/2010 10:26**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.19		10		92	70	130			
Surr: Toluene-d8	9.89		10		99	70	130			

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Date: 25-Feb-10

QC Summary Report

Work Order: 10021640

Surr: 4-Bromofluorobenzene	10.6		10	106	70	130			

Laboratory Control Spike Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **10021805.D** Batch ID: **MS15W0218M** Analysis Date: **02/18/2010 09:41**

Sample ID: **LCS MS15W0218M** Units : **µg/L** Run ID: **MSD_15_100218B** Prep Date: **02/18/2010 09:41**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	7.51	1	10		75	70	130			
Chloromethane	7.12	2	10		71	70	130			
Vinyl chloride	9.91	1	10		99	70	130			
Chloroethane	8.72	1	10		87	70	130			
Bromomethane	6.71	2	10		67	70(70)	130			L50
Trichlorofluoromethane	9.47	1	10		95	70	130			
1,1-Dichloroethene	10.3	1	10		103	70	130			
Dichloromethane	10.2	2	10		102	70	130			
trans-1,2-Dichloroethene	10.6	1	10		106	70	130			
Methyl tert-butyl ether (MTBE)	11.9	0.5	10		119	70	130			
1,1-Dichloroethane	9.91	1	10		99	70	130			
cis-1,2-Dichloroethene	11.5	1	10		115	70	130			
Bromochloromethane	12	1	10		120	70	130			
Chloroform	9.43	1	10		94	70	130			
2,2-Dichloropropane	11.1	1	10		111	70	130			
1,2-Dichloroethane	11.2	1	10		112	70	130			
1,1,1-Trichloroethane	10.8	1	10		108	70	130			
1,1-Dichloropropene	10.6	1	10		106	70	130			
Carbon tetrachloride	10.9	1	10		109	70	130			
Benzene	10	0.5	10		100	70	130			
Dibromomethane	11.6	1	10		116	70	130			
1,2-Dichloropropane	10.9	1	10		109	70	130			
Trichloroethene	10.8	1	10		108	70	130			
Bromodichloromethane	11.7	1	10		117	70	130			
cis-1,3-Dichloropropene	10.8	1	10		108	70	130			
trans-1,3-Dichloropropene	11.1	1	10		111	70	130			
1,1,2-Trichloroethane	11.5	1	10		115	70	130			
Toluene	9.97	0.5	10		99.7	70	130			
1,3-Dichloropropane	12.1	1	10		121	70	130			
Dibromochloromethane	11.6	1	10		116	70	130			
1,2-Dibromoethane (EDB)	24.7	2	20		124	70	130			
Tetrachloroethene	10.8	1	10		108	70	130			
1,1,1,2-Tetrachloroethane	11.3	1	10		113	70	130			
Chlorobenzene	10.2	1	10		102	70	130			
Ethylbenzene	9.86	0.5	10		99	70	130			
m,p-Xylene	10.7	0.5	10		107	70	130			
Bromoform	11.2	1	10		112	70	130			
Styrene	11.7	1	10		117	70	130			
o-Xylene	10.7	0.5	10		107	70	130			
1,1,2,2-Tetrachloroethane	10.9	1	10		109	70	130			
1,2,3-Trichloropropane	22.1	2	20		110	70	130			
Isopropylbenzene	9.91	1	10		99	70	130			
Bromobenzene	10.1	1	10		101	70	130			
n-Propylbenzene	9.65	1	10		97	70	130			
4-Chlorotoluene	10.3	1	10		103	70	130			
2-Chlorotoluene	9.92	1	10		99	70	130			
1,3,5-Trimethylbenzene	9.47	1	10		95	70	130			
tert-Butylbenzene	9.55	1	10		96	70	130			
1,2,4-Trimethylbenzene	9.63	1	10		96	70	130			
sec-Butylbenzene	9.98	1	10		99.8	70	130			
1,3-Dichlorobenzene	9.89	1	10		99	70	130			
1,4-Dichlorobenzene	9.55	1	10		96	70	130			
4-Isopropyltoluene	9.63	1	10		96	70	130			
1,2-Dichlorobenzene	9.33	1	10		93	70	130			
n-Butylbenzene	9.62	1	10		96	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	54.1	3	50		108	70	130			
1,2,4-Trichlorobenzene	10.8	2	10		108	70	130			
Naphthalene	12.4	2	10		124	70	130			
Hexachlorobutadiene	17.4	2	20		87	70	130			
1,2,3-Trichlorobenzene	11.1	2	10		111	70	130			
Surr: 1,2-Dichloroethane-d4	9.26		10		93	70	130			
Surr: Toluene-d8	9.45		10		95	70	130			
Surr: 4-Bromofluorobenzene	10.7		10		107	70	130			

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Date: 25-Feb-10

QC Summary Report

Work Order: 10021640

Sample Matrix Spike Type **MS** Test Code: **EPA Method SW8260B**

File ID: **10021811.D** Batch ID: **MS15W0218M** Analysis Date: **02/18/2010 11:55**

Sample ID: **10021640-09AMS** Units : **µg/L** Run ID: **MSD_15_100218B** Prep Date: **02/18/2010 11:55**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	41.1	2.5	50	0	82	13	167			
Chloromethane	38.8	10	50	0	78	28	145			
Vinyl chloride	49.4	2.5	50	0	99	43	134			
Chloroethane	39.9	2.5	50	0	80	39	154			
Bromomethane	28.8	10	50	0	58	19	176			
Trichlorofluoromethane	46.1	2.5	50	0	92	34	160			
1,1-Dichloroethene	47.1	2.5	50	0	94	60	130			
Dichloromethane	47.7	10	50	0	95	68	130			
trans-1,2-Dichloroethene	49.1	2.5	50	0	98	63	130			
Methyl tert-butyl ether (MTBE)	57.8	1.3	50	0	116	56	141			
1,1-Dichloroethane	45.6	2.5	50	0	91	61	130			
cis-1,2-Dichloroethene	53	2.5	50	0	106	70	130			
Bromochloromethane	56.8	2.5	50	0	114	70	130			
Chloroform	45.3	2.5	50	0.54	90	67	130			
2,2-Dichloropropane	49.1	2.5	50	0	98	30	152			
1,2-Dichloroethane	53.2	2.5	50	0	106	60	135			
1,1,1-Trichloroethane	49.2	2.5	50	0	98	59	137			
1,1-Dichloropropene	48.7	2.5	50	0	97	63	130			
Carbon tetrachloride	50.2	2.5	50	0.86	99	50	147			
Benzene	45.9	1.3	50	0	92	67	130			
Dibromomethane	56	2.5	50	0	112	69	133			
1,2-Dichloropropane	49.5	2.5	50	0	99	69	130			
Trichloroethene	49.3	2.5	50	0	99	69	130			
Bromodichloromethane	54	2.5	50	0	108	66	134			
cis-1,3-Dichloropropene	47.7	2.5	50	0	95	63	130			
trans-1,3-Dichloropropene	51	2.5	50	0	102	66	131			
1,1,2-Trichloroethane	54.8	2.5	50	0	110	68	130			
Toluene	45.6	1.3	50	0	91	66	130			
1,3-Dichloropropane	58	2.5	50	0	116	70	130			
Dibromochloromethane	55.4	2.5	50	0	111	70	130			
1,2-Dibromoethane (EDB)	121	5	100	0	121	70	130			
Tetrachloroethene	49.6	2.5	50	0	99	61	134			
1,1,1,2-Tetrachloroethane	52.9	2.5	50	0	106	70	130			
Chlorobenzene	46.9	2.5	50	0	94	70	130			
Ethylbenzene	45.1	1.3	50	0	90	68	130			
m,p-Xylene	48.8	1.3	50	0	98	64	130			
Bromoform	54.1	2.5	50	0	108	64	138			
Styrene	53.1	2.5	50	0	106	69	130			
o-Xylene	49.4	1.3	50	0	99	70	130			
1,1,2,2-Tetrachloroethane	52	2.5	50	0	104	65	131			
1,2,3-Trichloropropane	105	10	100	0	105	70	130			
Isopropylbenzene	44.3	2.5	50	0	89	64	138			
Bromobenzene	46	2.5	50	0	92	70	130			
n-Propylbenzene	42.7	2.5	50	0	85	66	132			
4-Chlorotoluene	45.1	2.5	50	0	90	70	130			
2-Chlorotoluene	43.2	2.5	50	0	86	70	130			
1,3,5-Trimethylbenzene	41.8	2.5	50	0	84	66	136			
tert-Butylbenzene	41.9	2.5	50	0	84	65	137			
1,2,4-Trimethylbenzene	43	2.5	50	0	86	65	137			
sec-Butylbenzene	43.4	2.5	50	0	87	66	134			
1,3-Dichlorobenzene	44.1	2.5	50	0	88	70	130			
1,4-Dichlorobenzene	42.3	2.5	50	0	85	70	130			
4-Isopropyltoluene	42	2.5	50	0	84	66	137			
1,2-Dichlorobenzene	42.5	2.5	50	0	85	70	130			
n-Butylbenzene	42	2.5	50	0	84	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	249	15	250	0	99.8	67	130			
1,2,4-Trichlorobenzene	47.3	10	50	0	95	61	137			
Naphthalene	55	10	50	0	110	40	167			
Hexachlorobutadiene	75	10	100	0	75	61	130			
1,2,3-Trichlorobenzene	50	10	50	0	99.9	51	144			
Surr: 1,2-Dichloroethane-d4	46.4		50		93	70	130			
Surr: Toluene-d8	47.8		50		96	70	130			
Surr: 4-Bromofluorobenzene	53.6		50		107	70	130			

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Date: 25-Feb-10

QC Summary Report

Work Order: 10021640

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **10021812.D** Batch ID: **MS15W0218M** Analysis Date: **02/18/2010 12:17**

Sample ID: **10021640-09AMSD** Units : **µg/L** Run ID: **MSD_15_100218B** Prep Date: **02/18/2010 12:17**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	43.9	2.5	50	0	88	13	167	41.13	6.6(20)	
Chloromethane	40.9	10	50	0	82	28	145	38.81	5.3(20)	
Vinyl chloride	52.1	2.5	50	0	104	43	134	49.38	5.4(20)	
Chloroethane	41.5	2.5	50	0	83	39	154	39.9	4.0(20)	
Bromomethane	32.4	10	50	0	65	19	176	28.82	11.7(20)	
Trichlorofluoromethane	46.7	2.5	50	0	93	34	160	46.12	1.2(20)	
1,1-Dichloroethene	48.5	2.5	50	0	97	60	130	47.13	2.9(20)	
Dichloromethane	50.1	10	50	0	100	68	130	47.66	5.1(20)	
trans-1,2-Dichloroethene	50.1	2.5	50	0	100	63	130	49.05	2.2(20)	
Methyl tert-butyl ether (MTBE)	60.6	1.3	50	0	121	56	141	57.84	4.6(20)	
1,1-Dichloroethane	47.1	2.5	50	0	94	61	130	45.61	3.2(20)	
cis-1,2-Dichloroethene	52.3	2.5	50	0	105	70	130	53	1.4(20)	
Bromochloromethane	57.5	2.5	50	0	115	70	130	56.79	1.2(20)	
Chloroform	46.5	2.5	50	0.54	92	67	130	45.31	2.6(20)	
2,2-Dichloropropane	51.3	2.5	50	0	103	30	152	49.06	4.5(20)	
1,2-Dichloroethane	55.1	2.5	50	0	110	60	135	53.22	3.4(20)	
1,1,1-Trichloroethane	50.8	2.5	50	0	102	59	137	49.2	3.2(20)	
1,1-Dichloropropene	50	2.5	50	0	99.9	63	130	48.72	2.5(20)	
Carbon tetrachloride	52.7	2.5	50	0.86	104	50	147	50.15	5.0(20)	
Benzene	47.2	1.3	50	0	94	67	130	45.85	2.9(20)	
Dibromomethane	59.5	2.5	50	0	119	69	133	56.04	5.9(20)	
1,2-Dichloropropane	52	2.5	50	0	104	69	130	49.54	4.9(20)	
Trichloroethene	50.7	2.5	50	0	101	69	130	49.29	2.8(20)	
Bromodichloromethane	56.1	2.5	50	0	112	66	134	53.95	3.8(20)	
cis-1,3-Dichloropropene	50	2.5	50	0	100	63	130	47.69	4.8(20)	
trans-1,3-Dichloropropene	54.1	2.5	50	0	108	66	131	51.04	5.8(20)	
1,1,2-Trichloroethane	56.5	2.5	50	0	113	68	130	54.8	3.1(20)	
Toluene	46.9	1.3	50	0	94	66	130	45.58	2.9(20)	
1,3-Dichloropropane	59.9	2.5	50	0	120	70	130	58.04	3.1(20)	
Dibromochloromethane	57.8	2.5	50	0	116	70	130	55.44	4.2(20)	
1,2-Dibromoethane (EDB)	126	5	100	0	126	70	130	120.8	4.4(20)	
Tetrachloroethene	50.5	2.5	50	0	101	61	134	49.6	1.8(20)	
1,1,1,2-Tetrachloroethane	54.4	2.5	50	0	109	70	130	52.89	2.9(20)	
Chlorobenzene	48.6	2.5	50	0	97	70	130	46.93	3.4(20)	
Ethylbenzene	46.2	1.3	50	0	92	68	130	45.05	2.6(20)	
m,p-Xylene	49.9	1.3	50	0	99.9	64	130	48.75	2.4(20)	
Bromoform	56.7	2.5	50	0	113	64	138	54.13	4.6(20)	
Styrene	55.2	2.5	50	0	110	69	130	53.1	3.8(20)	
o-Xylene	50.6	1.3	50	0	101	70	130	49.43	2.3(20)	
1,1,2,2-Tetrachloroethane	54.9	2.5	50	0	110	65	131	52	5.4(20)	
1,2,3-Trichloropropane	111	10	100	0	111	70	130	105	5.4(20)	
Isopropylbenzene	45	2.5	50	0	90	64	138	44.28	1.7(20)	
Bromobenzene	47.3	2.5	50	0	95	70	130	46.04	2.8(20)	
n-Propylbenzene	43.5	2.5	50	0	87	66	132	42.66	1.8(20)	
4-Chlorotoluene	46.5	2.5	50	0	93	70	130	45.05	3.1(20)	
2-Chlorotoluene	44.6	2.5	50	0	89	70	130	43.23	3.1(20)	
1,3,5-Trimethylbenzene	42.8	2.5	50	0	86	66	136	41.83	2.4(20)	
tert-Butylbenzene	42.9	2.5	50	0	86	65	137	41.92	2.2(20)	
1,2,4-Trimethylbenzene	43.7	2.5	50	0	87	65	137	42.95	1.8(20)	
sec-Butylbenzene	44.5	2.5	50	0	89	66	134	43.41	2.4(20)	
1,3-Dichlorobenzene	46	2.5	50	0	92	70	130	44.09	4.1(20)	
1,4-Dichlorobenzene	43.8	2.5	50	0	88	70	130	42.32	3.5(20)	
4-Isopropyltoluene	42.9	2.5	50	0	86	66	137	41.99	2.2(20)	
1,2-Dichlorobenzene	44.1	2.5	50	0	88	70	130	42.54	3.7(20)	
n-Butylbenzene	43.7	2.5	50	0	87	60	142	41.97	4.1(20)	
1,2-Dibromo-3-chloropropane (DBCP)	262	15	250	0	105	67	130	249.4	5.0(20)	
1,2,4-Trichlorobenzene	51	10	50	0	102	61	137	47.27	7.6(20)	
Naphthalene	60.8	10	50	0	122	40	167	55.03	9.9(20)	
Hexachlorobutadiene	79.8	10	100	0	80	61	130	74.95	6.3(20)	
1,2,3-Trichlorobenzene	53.3	10	50	0	107	51	144	49.96	6.4(20)	
Surr: 1,2-Dichloroethane-d4	46.2		50		92	70	130			
Surr: Toluene-d8	47.2		50		94	70	130			
Surr: 4-Bromofluorobenzene	52.6		50		105	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *25-Feb-10*

QC Summary Report

Work Order: 10021640

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

Billing Information :

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

CA

WorkOrder : BMIS10021640

Report Due By : 5:00 PM On : 02-Mar-10

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : David Loera

PO : 218013

Client's COC # : 24133, 28879, 024223 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	16-Feb-10	**16-Feb-10**

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0_W	314_W	METALS_D W	VOC_TIC_ W	VOC_W				Sample Remarks
BMI10021640-01A	MW-19-5	AQ	02/12/10 08:00	4	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021640-02A	MW-19-4	AQ	02/12/10 08:22	4	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021640-03A	MW-19-3	AQ	02/12/10 08:44	4	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021640-04A	MW-19-2	AQ	02/12/10 09:08	4	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				Level IV QC
BMI10021640-05A	MW-19-1	AQ	02/12/10 09:30	4	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021640-06A	EB-9-2/12/10	AQ	02/12/10 09:20	4	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				Equip. Blank
BMI10021640-07A	TB-9-2/12/10	AQ	02/12/10 00:00	1	0	10				VOC by 524 Criteria	VOC by 524 Criteria				Reno TB, 8/25/09
BMI10021640-08A	MW-12-5	AQ	02/15/10 09:51	4	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021640-09A	MW-12-4	AQ	02/15/10 10:17	8	0	10		Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				MS/MSD
BMI10021640-10A	MW-12-3	AQ	02/15/10 10:40	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				

Comments: Security seals intact. Frozen ice. Temp Blank # 7570 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Dana Dickinson	Dana Dickinson	**Alpha Analytical, Inc.**	2/16/10 11:00

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMIS10021640

Report Due By : 5:00 PM On : 02-Mar-10

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : David Loera

PO : 218013

Client's COC # : 24133, 28879, 024223 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	16-Feb-10	16-Feb-10

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0_W	314_W	METALS_D W	VOC_TIC_ W	VOC_W				Sample Remarks
BMI10021640-11A	MW-12-2	AQ	02/15/10 11:03	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021640-12A	MW-12-1	AQ	02/15/10 11:31	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				Level IV QC
BMI10021640-13A	EB-10-2/15/10	AQ	02/15/10 11:17	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				Equip. Blank
BMI10021640-14A	TB-10-2/15/10	AQ	02/15/10 00:00	1	0	10				VOC by 524 Criteria	VOC by 524 Criteria				Reno TB, 8/25/09
BMI10021640-15A	MW-7	AQ	02/15/10 09:15	5	0	10	X	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021640-16A	MW-16	AQ	02/15/10 11:40	5	0	10	X	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				

Comments: Security seals intact. Frozen ice. Temp Blank # 7570 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tate Dickinson	Tate Dickinson	Alpha Analytical, Inc.	2/16/10 11:00

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA ___ NV ___ WA ___ ID ___ OR ___ OTHER ___

24133

Page # ___ of ___

Client Name: BATTELLE / DAVID CONNER
Address: 3990 OLD TOWN AVE, C-205
City, State, Zip: SAN DIEGO, CA 92110
P.O. # 218013
Job # G005862
EMail Address
Phone # (619) 726-7311
Fax #

Required QC Level? I II (III) IV
EDD / EDF? YES ___ NO ___
Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (5242)	C10 - C40 (3,40)						REMARKS
800	2/11/10	AQ	BMI10021640-01	MW-19-5	NORM		V/P 4	X	X						
822			-02	MW-19-4				X	X						
844			-03	MW-19-3				X	X						
908			-04	MW-19-2				X	X						LEVEL IV QC
930			-05	MW-19-1				X	X						
920			-06	EB-9-2/12/10				X	X						EQUIP. BLANK
—			-07	TB-9-2/12/10			V/2	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		MARCO MENDOZA	INSIGHT GEC, INC	2/15/10	1307
Received by		Anthony Clark	ALPHA	2/15/10	1307
Relinquished by		Anthony Starks	ALPHA	2/15/10	1400
Received by		K Murray	AAI	2/16/10	1020
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:

Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA ___ NV ___ WA ___ ID ___ OR ___ OTHER ___

28879

Page # 1 of 1

Client Name: BATTELLE / DAVID CONNER
Address: 3990 OLD TOWN AVE., C-205
City, State, Zip: SAN DIEGO, CA 92110
P.O. #: 218013
Job #: G005862
EMail Address:
Phone #: (619) 726-7311
Fax #:

Analyses Required: VOC (524.2) | Total Cr (200.8) | ClO4 - (314.0)

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	Total Cr (200.8)	ClO4 - (314.0)	REMARKS
951	2/15/10	AQ	BMI10021164008	MW-12-5	NORM		VP 4	X		X	
1017			-09	MW-12-4			VP 8	X		X	MS/MSD
1040			-10	MW-12-3			V/P 5	X	X	X	
1103			-11	MW-12-2				X	X	X	
1131			-12	MW-12-1				X	X	X	LEVEL IV QC
1117			-13	EB-10-2/15/10				X	X	X	EQUIP. BLANK
—			-14	TB-10-2/15/10			V/L	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by	MARCO MENDOZA	INSIGHT	2/15/10	1307
Received by	Anthony Stark	ALPHA	2/15/10	1307
Relinquished by	Anthony Stark	ALPHA	2/15/10	1400
Received by	K Murray	AAI	2/16/10	1020
Relinquished by				
Received by				

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:
Name Gerald Tompkins
Address 505 King Ave
City, State, Zip Columbus OH 43201
Phone Number 614 424-4849 Fax 614 424-3667

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA X NV ___ WA ___ ID ___ OR ___ OTHER ___

024225

Page # 1 of 1

Client Name	David Conner	P.O. #	218013	Job #	G005862
Address	4800 Oak Grove Dr M/S 180-801	EMail Address	connerd@battelle.org		
City, State, Zip	Pasadena CA 91109	Phone #	(619) 726-7311	Fax #	(614)458-6641

Analyses Required

Required QC Level? I II (III) IV

(EDD) / EDF? YES X NO ___

Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by: David Loera / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOCs (524.2)	Total Cr (200.8)	ClO4 - (314.0)	Cl-, SO4, NO3-N, NO2-N, PO4 (300.0)				REMARKS
0915	2/15/10	AQ	BMI1002164O-15	MW-7			5	X	X	X	X				
1140	2/15/10	AQ	-16	MW-16			5	X	X	X	X				

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	David L	David Loera	Battelle	2-15-10	1235
Received by		MARCO MENDOZA	INSIGHT	2-15-10	1235
Relinquished by		MARCO MENDOZA	INSIGHT	2-15-10	1307
Received by	Anthony Stark	Anthony Stark	ALPHA	2-15-10	1307
Relinquished by		Anthony Stark	ALPHA	2-16-10	1400
Received by	K Murray	K Murray	AAI	2/16/10	1020

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *02-Mar-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10021705 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10021705-01A	MW-6	Aqueous
10021705-02A	MW-13	Aqueous
10021705-03A	MW-24-4	Aqueous
10021705-04A	MW-24-3	Aqueous
10021705-05A	MW-24-2	Aqueous
10021705-06A	MW-24-1	Aqueous
10021705-07A	DUPE-5-1Q10	Aqueous
10021705-08A	EB-11-02/16/10	Aqueous
10021705-09A	TB-11-02/16/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10021705-01A	EPA Method 314.0	Perchlorate
10021705-02A	EPA Method 314.0	Perchlorate
10021705-06A	EPA Method 314.0	Perchlorate
10021705-07A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/17/10

Job: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0

	Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-13**					
Lab ID : BMI10021705-02A	Chloride	85	50 mg/L	02/17/10 11:27	02/17/10 12:56
Date Sampled 02/16/10 12:50	Nitrite (NO2) - N	ND	0.25 mg/L	02/17/10 11:27	02/17/10 12:56
	Nitrate (NO3) - N	7.8	0.25 mg/L	02/17/10 11:27	02/17/10 12:56
	Phosphate, ortho - P	ND	0.50 mg/L	02/17/10 11:27	02/17/10 12:56
	Sulfate (SO4)	97	0.50 mg/L	02/17/10 11:27	02/17/10 12:56
Client ID: **MW-24-1**					
Lab ID : BMI10021705-06A	Chloride	73	50 mg/L	02/17/10 11:27	02/17/10 13:15
Date Sampled 02/16/10 09:32	Nitrite (NO2) - N	ND	0.25 mg/L	02/17/10 11:27	02/17/10 13:15
	Nitrate (NO3) - N	1.7	0.25 mg/L	02/17/10 11:27	02/17/10 13:15
	Phosphate, ortho - P	ND	0.50 mg/L	02/17/10 11:27	02/17/10 13:15
	Sulfate (SO4)	46	0.50 mg/L	02/17/10 11:27	02/17/10 13:15
Client ID: **DUPE-5-1Q10**					
Lab ID : BMI10021705-07A	Chloride	73	50 mg/L	02/17/10 11:27	02/17/10 13:33
Date Sampled 02/16/10 00:00	Nitrite (NO2) - N	ND	0.25 mg/L	02/17/10 11:27	02/17/10 13:33
	Nitrate (NO3) - N	1.7	0.25 mg/L	02/17/10 11:27	02/17/10 13:33
	Phosphate, ortho - P	ND	0.50 mg/L	02/17/10 11:27	02/17/10 13:33
	Sulfate (SO4)	47	0.50 mg/L	02/17/10 11:27	02/17/10 13:33

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/2/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/17/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-6**				
Lab ID : BMI10021705-01A Perchlorate	2.68	1.00 µg/L	02/18/10 13:37	02/22/10 17:58
Date Sampled 02/15/10 14:40				
Client ID: **MW-13**				
Lab ID : BMI10021705-02A Perchlorate	5.02	1.00 µg/L	02/18/10 13:37	02/22/10 18:53
Date Sampled 02/16/10 12:50				
Client ID: **MW-24-3**				
Lab ID : BMI10021705-04A Perchlorate	ND	1.00 µg/L	02/18/10 13:37	02/22/10 19:12
Date Sampled 02/16/10 08:30				
Client ID: **MW-24-2**				
Lab ID : BMI10021705-05A Perchlorate	9.81	1.00 µg/L	02/18/10 13:37	02/22/10 19:30
Date Sampled 02/16/10 08:53				
Client ID: **MW-24-1**				
Lab ID : BMI10021705-06A Perchlorate	232	10.0 µg/L	02/18/10 13:37	02/22/10 19:49
Date Sampled 02/16/10 09:32				
Client ID: **DUPE-5-1Q10**				
Lab ID : BMI10021705-07A Perchlorate	228	10.0 µg/L	02/18/10 13:37	02/22/10 20:07
Date Sampled 02/16/10 00:00				
Client ID: **EB-11-02/16/10**				
Lab ID : BMI10021705-08A Perchlorate	ND	1.00 µg/L	02/18/10 13:37	02/22/10 20:25
Date Sampled 02/16/10 09:25				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/2/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/17/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-6**				
Lab ID : BMI10021705-01A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 16:06
Date Sampled 02/15/10 14:40				
Client ID: **MW-13**				
Lab ID : BMI10021705-02A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 16:28
Date Sampled 02/16/10 12:50				
Client ID: **MW-24-4**				
Lab ID : BMI10021705-03A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 16:34
Date Sampled 02/16/10 08:06				
Client ID: **MW-24-3**				
Lab ID : BMI10021705-04A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 16:39
Date Sampled 02/16/10 08:30				
Client ID: **MW-24-2**				
Lab ID : BMI10021705-05A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 16:45
Date Sampled 02/16/10 08:53				
Client ID: **MW-24-1**				
Lab ID : BMI10021705-06A Chromium (Cr)	0.025	0.0050 mg/L	02/18/10 13:15	02/19/10 16:51
Date Sampled 02/16/10 09:32				
Client ID: **DUPE-5-1Q10**				
Lab ID : BMI10021705-07A Chromium (Cr)	0.013	0.0050 mg/L	02/18/10 13:15	02/19/10 16:56
Date Sampled 02/16/10 00:00				
Client ID: **EB-11-02/16/10**				
Lab ID : BMI10021705-08A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 17:02
Date Sampled 02/16/10 09:25				

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

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3/2/10
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**MW-6**					
Lab ID :	BMI10021705-01A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 14:33	02/19/10 14:33
Date Received :	02/17/10					
Date Sampled :	02/15/10 14:40					
Client ID :	**MW-13**					
Lab ID :	BMI10021705-02A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 14:55	02/19/10 14:55
Date Received :	02/17/10					
Date Sampled :	02/16/10 12:50					
Client ID :	**MW-24-3**					
Lab ID :	BMI10021705-04A	Sulfur dioxide	7.2	2.0 µg/L	02/19/10 15:17	02/19/10 15:17
Date Received :	02/17/10					
Date Sampled :	02/16/10 08:30					
Client ID :	**MW-24-2**					
Lab ID :	BMI10021705-05A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 15:39	02/19/10 15:39
Date Received :	02/17/10					
Date Sampled :	02/16/10 08:53					
Client ID :	**MW-24-1**					
Lab ID :	BMI10021705-06A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 16:01	02/19/10 16:01
Date Received :	02/17/10					
Date Sampled :	02/16/10 09:32					
Client ID :	**DUPE-5-1Q10**					
Lab ID :	BMI10021705-07A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 16:23	02/19/10 16:23
Date Received :	02/17/10					
Date Sampled :	02/16/10 00:00					
Client ID :	**EB-11-02/16/10**					
Lab ID :	BMI10021705-08A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 13:26	02/19/10 13:26
Date Received :	02/17/10					
Date Sampled :	02/16/10 09:25					
Client ID :	**TB-11-02/16/10**					
Lab ID :	BMI10021705-09A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 13:03	02/19/10 13:03
Date Received :	02/17/10					
Date Sampled :	02/16/10 00:00					

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Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021705-01A
Client I.D. Number: MW-6

Sampled: 02/15/10 14:40
Received: 02/17/10
Extracted: 02/19/10 14:33
Analyzed: 02/19/10 14:33

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.54		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	4.0		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	1.1		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021705-02A
Client I.D. Number: MW-13

Sampled: 02/16/10 12:50
Received: 02/17/10
Extracted: 02/19/10 14:55
Analyzed: 02/19/10 14:55

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36 1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37 Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38 Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39 m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40 Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41 Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42 o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43 1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44 1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45 Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46 Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	0.82		0.50	µg/L	47 n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48 4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49 2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50 1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65 Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66 Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L				
33	Dibromochloromethane	ND		0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L				
35	Tetrachloroethene	2.0		0.50	µg/L				

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021705-04A
Client I.D. Number: MW-24-3

Sampled: 02/16/10 08:30
Received: 02/17/10
Extracted: 02/19/10 15:17
Analyzed: 02/19/10 15:17

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021705-05A
Client I.D. Number: MW-24-2

Sampled: 02/16/10 08:53
Received: 02/17/10
Extracted: 02/19/10 15:39
Analyzed: 02/19/10 15:39

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

3/2/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021705-06A
Client I.D. Number: MW-24-1

Sampled: 02/16/10 09:32
Received: 02/17/10
Extracted: 02/19/10 16:01
Analyzed: 02/19/10 16:01

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	2.1		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	0.82		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	1.6		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

3/2/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021705-07A
Client I.D. Number: DUPE-5-1Q10

Sampled: 02/16/10 00:00
Received: 02/17/10
Extracted: 02/19/10 16:23
Analyzed: 02/19/10 16:23

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	2.2		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	0.79		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	1.7		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

3/2/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021705-08A
Client I.D. Number: EB-11-02/16/10

Sampled: 02/16/10 09:25
Received: 02/17/10
Extracted: 02/19/10 13:26
Analyzed: 02/19/10 13:26

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/2/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021705-09A
Client I.D. Number: TB-11-02/16/10

Sampled: 02/16/10 00:00
Received: 02/17/10
Extracted: 02/19/10 13:03
Analyzed: 02/19/10 13:03

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Note: Analysis conducted using EPA Method 524.2 criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/2/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10021705 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10021705-01A	MW-6	Aqueous	2
10021705-02A	MW-13	Aqueous	2
10021705-04A	MW-24-3	Aqueous	2
10021705-05A	MW-24-2	Aqueous	2
10021705-06A	MW-24-1	Aqueous	2
10021705-07A	DUPE-5-1Q10	Aqueous	2
10021705-08A	EB-11-02/16/10	Aqueous	2
10021705-09A	TB-11-02/16/10	Aqueous	2

3/2/10

Report Date

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Date: *25-Feb-10*

QC Summary Report

Work Order: 10021705

Method Blank

Type **MBLK** Test Code: **EPA Method 300.0**

File ID: **20** Batch ID: **23617** Analysis Date: **02/17/2010 11:42**

Sample ID: **MB-23617** Units : **mg/L** Run ID: **IC_1_100217A** Prep Date: **02/17/2010 11:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	ND	0.5								
Nitrite (NO2) - N	ND	0.25								
Nitrate (NO3) - N	ND	0.25								
Phosphate, ortho - P	ND	0.5								
Sulfate (SO4)	ND	0.5								

Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 300.0**

File ID: **21** Batch ID: **23617** Analysis Date: **02/17/2010 12:00**

Sample ID: **LFB-23617** Units : **mg/L** Run ID: **IC_1_100217A** Prep Date: **02/17/2010 11:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	52.7	0.5	50		105	90	110			
Nitrite (NO2) - N	1.33	0.25	1.25		106	90	110			
Nitrate (NO3) - N	1.22	0.25	1.25		97	90	110			
Phosphate, ortho - P	1.19	0.5	1.25		95	90	110			
Sulfate (SO4)	107	0.5	100		107	90	110			

Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 300.0**

File ID: **34** Batch ID: **23617** Analysis Date: **02/17/2010 16:02**

Sample ID: **10021705-07ALFM** Units : **mg/L** Run ID: **IC_1_100217A** Prep Date: **02/17/2010 11:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	100	0.5	50	73.08	54	80	120			M2
Nitrite (NO2) - N	1.27	0.25	1.25	0	101	80	120			
Nitrate (NO3) - N	2.51	0.25	1.25	1.699	65	80	120			M2
Phosphate, ortho - P	1.42	0.5	1.25	0	114	80	120			
Sulfate (SO4)	130	0.5	100	46.72	83	80	120			

Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 300.0**

File ID: **35** Batch ID: **23617** Analysis Date: **02/17/2010 16:20**

Sample ID: **10021705-07ALFMD** Units : **mg/L** Run ID: **IC_1_100217A** Prep Date: **02/17/2010 11:27**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	101	0.5	50	73.08	55	80	120	100.1	0.5(10)	M2
Nitrite (NO2) - N	1.11	0.25	1.25	0	89	80	120	1.266	13.1(10)	R5
Nitrate (NO3) - N	2.39	0.25	1.25	1.699	55	80	120	2.512	4.9(10)	M2
Phosphate, ortho - P	1.13	0.5	1.25	0	90	80	120	1.424	22.9(10)	R5
Sulfate (SO4)	130	0.5	100	46.72	83	80	120	129.8	0.0(10)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.

Alpha Analytical, Inc.

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Date: *26-Feb-10*

QC Summary Report

Work Order: 10021705

Method Blank

Type **MBLK** Test Code: **EPA Method 314.0**

File ID: **15** Batch ID: **23631** Analysis Date: **02/22/2010 16:26**

Sample ID: **MB-23631** Units : **µg/L** Run ID: **IC_3_100222A** Prep Date: **02/18/2010 13:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	ND	1								

Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 314.0**

File ID: **16** Batch ID: **23631** Analysis Date: **02/22/2010 16:44**

Sample ID: **LFB-23631** Units : **µg/L** Run ID: **IC_3_100222A** Prep Date: **02/18/2010 13:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24.5	2	25		98	85	115			

Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 314.0**

File ID: **21** Batch ID: **23631** Analysis Date: **02/22/2010 18:16**

Sample ID: **10021705-01ALFM** Units : **µg/L** Run ID: **IC_3_100222A** Prep Date: **02/18/2010 13:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	27.2	2	25	2.677	98	80	120			

Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 314.0**

File ID: **22** Batch ID: **23631** Analysis Date: **02/22/2010 18:35**

Sample ID: **10021705-01ALFMD** Units : **µg/L** Run ID: **IC_3_100222A** Prep Date: **02/18/2010 13:37**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	27.2	2	25	2.677	98	80	120	27.24	0.2(15)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *25-Feb-10*

QC Summary Report

Work Order: 10021705

Method Blank

Type **MBLK** Test Code: **EPA Method 200.8**

File ID: **021910.B\032SMPL.D** Batch ID: **23630K** Analysis Date: **02/19/2010 15:43**

Sample ID: **MB-23630** Units : **mg/L** Run ID: **ICP/MS_100219A** Prep Date: **02/18/2010 13:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	ND	0.005								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 200.8**

File ID: **021910.B\033_LCS.D** Batch ID: **23630K** Analysis Date: **02/19/2010 15:49**

Sample ID: **LCS-23630** Units : **mg/L** Run ID: **ICP/MS_100219A** Prep Date: **02/18/2010 13:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0505	0.005	0.05		101	80	120			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method 200.8**

File ID: **021910.B\037SMPL.D** Batch ID: **23630K** Analysis Date: **02/19/2010 16:11**

Sample ID: **10021705-01AMS** Units : **mg/L** Run ID: **ICP/MS_100219A** Prep Date: **02/18/2010 13:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0482	0.005	0.05	0	96	80	120			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 200.8**

File ID: **021910.B\038SMPL.D** Batch ID: **23630K** Analysis Date: **02/19/2010 16:17**

Sample ID: **10021705-01AMSD** Units : **mg/L** Run ID: **ICP/MS_100219A** Prep Date: **02/18/2010 13:15**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0467	0.005	0.05	0	93	80	120	0.04821	3.2(20)	

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *26-Feb-10*

QC Summary Report

Work Order: 10021705

Method Blank Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **10021907.D** Batch ID: **MS15W0219M** Analysis Date: **02/19/2010 10:50**

Sample ID: **MBLK MS15W0219M** Units : **µg/L** Run ID: **MSD_15_100219A** Prep Date: **02/19/2010 10:50**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.64		10		96	70	130			
Surr: Toluene-d8	10		10		100	70	130			

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Date: 26-Feb-10

QC Summary Report

Work Order: 10021705

Surr: 4-Bromofluorobenzene	10.1			10		101	70	130		

Laboratory Control Spike Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **10021905.D** Batch ID: **MS15W0219M** Analysis Date: **02/19/2010 09:53**

Sample ID: **LCS MS15W0219M** Units : **µg/L** Run ID: **MSD_15_100219A** Prep Date: **02/19/2010 09:53**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	7.56	1	10		76	70	130			
Chloromethane	7.18	2	10		72	70	130			
Vinyl chloride	10.4	1	10		104	70	130			
Chloroethane	8.4	1	10		84	70	130			
Bromomethane	5.93	2	10		59	70(70)	130			L50
Trichlorofluoromethane	10	1	10		100	70	130			
1,1-Dichloroethene	10.2	1	10		102	70	130			
Dichloromethane	10.2	2	10		102	70	130			
trans-1,2-Dichloroethene	10.5	1	10		105	70	130			
Methyl tert-butyl ether (MTBE)	12.2	0.5	10		122	70	130			
1,1-Dichloroethane	9.82	1	10		98	70	130			
cis-1,2-Dichloroethene	11.2	1	10		112	70	130			
Bromochloromethane	11.9	1	10		119	70	130			
Chloroform	9.67	1	10		97	70	130			
2,2-Dichloropropane	11.1	1	10		111	70	130			
1,2-Dichloroethane	11.5	1	10		115	70	130			
1,1,1-Trichloroethane	10.9	1	10		109	70	130			
1,1-Dichloropropene	10.6	1	10		106	70	130			
Carbon tetrachloride	11.3	1	10		113	70	130			
Benzene	9.76	0.5	10		98	70	130			
Dibromomethane	12.3	1	10		123	70	130			
1,2-Dichloropropane	10.6	1	10		106	70	130			
Trichloroethene	10.9	1	10		109	70	130			
Bromodichloromethane	11.9	1	10		119	70	130			
cis-1,3-Dichloropropene	10.7	1	10		107	70	130			
trans-1,3-Dichloropropene	11.2	1	10		112	70	130			
1,1,2-Trichloroethane	11.8	1	10		118	70	130			
Toluene	9.94	0.5	10		99	70	130			
1,3-Dichloropropane	12.3	1	10		123	70	130			
Dibromochloromethane	12.3	1	10		123	70	130			
1,2-Dibromoethane (EDB)	25.6	2	20		128	70	130			
Tetrachloroethene	11	1	10		110	70	130			
1,1,1,2-Tetrachloroethane	11.6	1	10		116	70	130			
Chlorobenzene	10.2	1	10		102	70	130			
Ethylbenzene	9.81	0.5	10		98	70	130			
m,p-Xylene	10.5	0.5	10		105	70	130			
Bromoform	12.1	1	10		121	70	130			
Styrene	11.6	1	10		116	70	130			
o-Xylene	10.5	0.5	10		105	70	130			
1,1,2,2-Tetrachloroethane	10.9	1	10		109	70	130			
1,2,3-Trichloropropane	22.7	2	20		113	70	130			
Isopropylbenzene	9.76	1	10		98	70	130			
Bromobenzene	10.3	1	10		103	70	130			
n-Propylbenzene	9.54	1	10		95	70	130			
4-Chlorotoluene	9.94	1	10		99	70	130			
2-Chlorotoluene	9.72	1	10		97	70	130			
1,3,5-Trimethylbenzene	9.23	1	10		92	70	130			
tert-Butylbenzene	9.33	1	10		93	70	130			
1,2,4-Trimethylbenzene	9.45	1	10		95	70	130			
sec-Butylbenzene	9.61	1	10		96	70	130			
1,3-Dichlorobenzene	9.88	1	10		99	70	130			
1,4-Dichlorobenzene	9.23	1	10		92	70	130			
4-Isopropyltoluene	9.32	1	10		93	70	130			
1,2-Dichlorobenzene	9.38	1	10		94	70	130			
n-Butylbenzene	9.38	1	10		94	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	55.5	3	50		111	70	130			
1,2,4-Trichlorobenzene	10.8	2	10		108	70	130			
Naphthalene	12.3	2	10		123	70	130			
Hexachlorobutadiene	17.1	2	20		86	70	130			
1,2,3-Trichlorobenzene	10.9	2	10		109	70	130			
Surr: 1,2-Dichloroethane-d4	9.75		10		98	70	130			
Surr: Toluene-d8	9.45		10		95	70	130			
Surr: 4-Bromofluorobenzene	11.1		10		111	70	130			

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Date: 26-Feb-10

QC Summary Report

Work Order: 10021705

Sample Matrix Spike Type **MS** Test Code: **EPA Method SW8260B**

File ID: **10021908.D** Batch ID: **MS15W0219M** Analysis Date: **02/19/2010 11:12**

Sample ID: **10021705-01AMS** Units : **µg/L** Run ID: **MSD_15_100219A** Prep Date: **02/19/2010 11:12**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	46.5	2.5	50	0	93	13	167			
Chloromethane	40.9	10	50	0	82	28	145			
Vinyl chloride	55.2	2.5	50	0	110	43	134			
Chloroethane	41.1	2.5	50	0	82	39	154			
Bromomethane	29.1	10	50	0	58	19	176			
Trichlorofluoromethane	50.2	2.5	50	0	100	34	160			
1,1-Dichloroethene	51.5	2.5	50	0	103	60	130			
Dichloromethane	50.6	10	50	0	101	68	130			
trans-1,2-Dichloroethene	53.4	2.5	50	0	107	63	130			
Methyl tert-butyl ether (MTBE)	60.2	1.3	50	0	120	56	141			
1,1-Dichloroethane	49.5	2.5	50	0	99	61	130			
cis-1,2-Dichloroethene	56.2	2.5	50	0	112	70	130			
Bromochloromethane	60.2	2.5	50	0	120	70	130			
Chloroform	49	2.5	50	0.54	97	67	130			
2,2-Dichloropropane	55.3	2.5	50	0	111	30	152			
1,2-Dichloroethane	57.2	2.5	50	0	114	60	135			
1,1,1-Trichloroethane	54.1	2.5	50	0	108	59	137			
1,1-Dichloropropene	53.6	2.5	50	0	107	63	130			
Carbon tetrachloride	55.9	2.5	50	0	112	50	147			
Benzene	49.1	1.3	50	0	98	67	130			
Dibromomethane	59.1	2.5	50	0	118	69	133			
1,2-Dichloropropane	52.6	2.5	50	0	105	69	130			
Trichloroethene	57	2.5	50	4.04	106	69	130			
Bromodichloromethane	58.6	2.5	50	0	117	66	134			
cis-1,3-Dichloropropene	51.5	2.5	50	0	103	63	130			
trans-1,3-Dichloropropene	54.4	2.5	50	0	109	66	131			
1,1,2-Trichloroethane	56.2	2.5	50	0	112	68	130			
Toluene	48.5	1.3	50	0	97	66	130			
1,3-Dichloropropane	59.9	2.5	50	0	120	70	130			
Dibromochloromethane	59	2.5	50	0	118	70	130			
1,2-Dibromoethane (EDB)	125	5	100	0	125	70	130			
Tetrachloroethene	55.3	2.5	50	1.07	108	61	134			
1,1,1,2-Tetrachloroethane	56.3	2.5	50	0	113	70	130			
Chlorobenzene	50.1	2.5	50	0	100	70	130			
Ethylbenzene	48.3	1.3	50	0	97	68	130			
m,p-Xylene	51.5	1.3	50	0	103	64	130			
Bromoform	57.9	2.5	50	0	116	64	138			
Styrene	56.2	2.5	50	0	112	69	130			
o-Xylene	52.3	1.3	50	0	105	70	130			
1,1,2,2-Tetrachloroethane	53.1	2.5	50	0	106	65	131			
1,2,3-Trichloropropane	110	10	100	0	110	70	130			
Isopropylbenzene	46.6	2.5	50	0	93	64	138			
Bromobenzene	47.7	2.5	50	0	95	70	130			
n-Propylbenzene	44.9	2.5	50	0	90	66	132			
4-Chlorotoluene	48.2	2.5	50	0	96	70	130			
2-Chlorotoluene	45.4	2.5	50	0	91	70	130			
1,3,5-Trimethylbenzene	43.9	2.5	50	0	88	66	136			
tert-Butylbenzene	44.3	2.5	50	0	89	65	137			
1,2,4-Trimethylbenzene	44.6	2.5	50	0	89	65	137			
sec-Butylbenzene	45.6	2.5	50	0	91	66	134			
1,3-Dichlorobenzene	46.2	2.5	50	0	92	70	130			
1,4-Dichlorobenzene	44.4	2.5	50	0	89	70	130			
4-Isopropyltoluene	44.7	2.5	50	0	89	66	137			
1,2-Dichlorobenzene	43.6	2.5	50	0	87	70	130			
n-Butylbenzene	45	2.5	50	0	90	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	252	15	250	0	101	67	130			
1,2,4-Trichlorobenzene	47.9	10	50	0	96	61	137			
Naphthalene	53.8	10	50	0	108	40	167			
Hexachlorobutadiene	79.9	10	100	0	80	61	130			
1,2,3-Trichlorobenzene	50.5	10	50	0	101	51	144			
Surr: 1,2-Dichloroethane-d4	48.2		50		96	70	130			
Surr: Toluene-d8	48		50		96	70	130			
Surr: 4-Bromofluorobenzene	53.1		50		106	70	130			

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Date: 26-Feb-10

QC Summary Report

Work Order: 10021705

Sample Matrix Spike Type **MS** Test Code: **EPA Method SW8260B**

File ID: **10021910.D** Batch ID: **MS15W0219M** Analysis Date: **02/19/2010 11:57**

Sample ID: **10021802-08AMS** Units : **µg/L** Run ID: **MSD_15_100219A** Prep Date: **02/19/2010 11:57**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	46.8	2.5	50	0	94	13	167			
Chloromethane	41.1	10	50	0	82	28	145			
Vinyl chloride	56.7	2.5	50	0	113	43	134			
Chloroethane	42.1	2.5	50	0	84	39	154			
Bromomethane	34.2	10	50	0	68	19	176			
Trichlorofluoromethane	51.4	2.5	50	0	103	34	160			
1,1-Dichloroethene	52.1	2.5	50	0	104	60	130			
Dichloromethane	51.1	10	50	0	102	68	130			
trans-1,2-Dichloroethene	52.9	2.5	50	0	106	63	130			
Methyl tert-butyl ether (MTBE)	61	1.3	50	0	122	56	141			
1,1-Dichloroethane	49.3	2.5	50	0	99	61	130			
cis-1,2-Dichloroethene	56.1	2.5	50	0	112	70	130			
Bromochloromethane	61.1	2.5	50	0	122	70	130			
Chloroform	48.3	2.5	50	0	97	67	130			
2,2-Dichloropropane	55.8	2.5	50	0	112	30	152			
1,2-Dichloroethane	56	2.5	50	0	112	60	135			
1,1,1-Trichloroethane	54.3	2.5	50	0	109	59	137			
1,1-Dichloropropene	54.2	2.5	50	0	108	63	130			
Carbon tetrachloride	56	2.5	50	0	112	50	147			
Benzene	49.1	1.3	50	0	98	67	130			
Dibromomethane	59.9	2.5	50	0	120	69	133			
1,2-Dichloropropane	52.6	2.5	50	0	105	69	130			
Trichloroethene	52.9	2.5	50	0	106	69	130			
Bromodichloromethane	58.1	2.5	50	0	116	66	134			
cis-1,3-Dichloropropene	52	2.5	50	0	104	63	130			
trans-1,3-Dichloropropene	55.1	2.5	50	0	110	66	131			
1,1,2-Trichloroethane	57.7	2.5	50	0	115	68	130			
Toluene	48	1.3	50	0	96	66	130			
1,3-Dichloropropane	58.6	2.5	50	0	117	70	130			
Dibromochloromethane	58.7	2.5	50	0	117	70	130			
1,2-Dibromoethane (EDB)	124	5	100	0	124	70	130			
Tetrachloroethene	53.1	2.5	50	0	106	61	134			
1,1,1,2-Tetrachloroethane	56.7	2.5	50	0	113	70	130			
Chlorobenzene	49.8	2.5	50	0	99.5	70	130			
Ethylbenzene	47.6	1.3	50	0	95	68	130			
m,p-Xylene	51.3	1.3	50	0	103	64	130			
Bromoform	57.1	2.5	50	0	114	64	138			
Styrene	55.6	2.5	50	0	111	69	130			
o-Xylene	51.3	1.3	50	0	103	70	130			
1,1,2,2-Tetrachloroethane	54.4	2.5	50	0	109	65	131			
1,2,3-Trichloropropane	108	10	100	0	108	70	130			
Isopropylbenzene	48.4	2.5	50	0	97	64	138			
Bromobenzene	49.1	2.5	50	0	98	70	130			
n-Propylbenzene	46.8	2.5	50	0	94	66	132			
4-Chlorotoluene	49.3	2.5	50	0	99	70	130			
2-Chlorotoluene	47.6	2.5	50	0	95	70	130			
1,3,5-Trimethylbenzene	45.8	2.5	50	0	92	66	136			
tert-Butylbenzene	46.2	2.5	50	0	92	65	137			
1,2,4-Trimethylbenzene	46.5	2.5	50	0	93	65	137			
sec-Butylbenzene	47.9	2.5	50	0	96	66	134			
1,3-Dichlorobenzene	48.3	2.5	50	0	97	70	130			
1,4-Dichlorobenzene	46.6	2.5	50	0	93	70	130			
4-Isopropyltoluene	46.9	2.5	50	0	94	66	137			
1,2-Dichlorobenzene	46	2.5	50	0	92	70	130			
n-Butylbenzene	47.3	2.5	50	0	95	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	276	15	250	0	110	67	130			
1,2,4-Trichlorobenzene	53.8	10	50	0	108	61	137			
Naphthalene	62.1	10	50	0	124	40	167			
Hexachlorobutadiene	88.4	10	100	0	88	61	130			
1,2,3-Trichlorobenzene	56.2	10	50	0	112	51	144			
Surr: 1,2-Dichloroethane-d4	47.6		50		95	70	130			
Surr: Toluene-d8	46.6		50		93	70	130			
Surr: 4-Bromofluorobenzene	55		50		110	70	130			

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Date: 26-Feb-10

QC Summary Report

Work Order: 10021705

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **10021909.D** Batch ID: **MS15W0219M** Analysis Date: **02/19/2010 11:34**

Sample ID: **10021705-01AMSD** Units : **µg/L** Run ID: **MSD_15_100219A** Prep Date: **02/19/2010 11:34**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	45	2.5	50	0	90	13	167	46.45	3.2(20)	
Chloromethane	36.3	10	50	0	73	28	145	40.86	11.9(20)	
Vinyl chloride	53.4	2.5	50	0	107	43	134	55.17	3.2(20)	
Chloroethane	41.4	2.5	50	0	83	39	154	41.07	0.8(20)	
Bromomethane	32.4	10	50	0	65	19	176	29.14	10.7(20)	
Trichlorofluoromethane	49	2.5	50	0	98	34	160	50.17	2.3(20)	
1,1-Dichloroethene	49.5	2.5	50	0	99	60	130	51.52	3.9(20)	
Dichloromethane	50.6	10	50	0	101	68	130	50.62	0.1(20)	
trans-1,2-Dichloroethene	51.3	2.5	50	0	103	63	130	53.36	4.0(20)	
Methyl tert-butyl ether (MTBE)	58.9	1.3	50	0	118	56	141	60.15	2.1(20)	
1,1-Dichloroethane	47.8	2.5	50	0	96	61	130	49.48	3.6(20)	
cis-1,2-Dichloroethene	53.1	2.5	50	0	106	70	130	56.19	5.6(20)	
Bromochloromethane	58.3	2.5	50	0	117	70	130	60.22	3.2(20)	
Chloroform	48.2	2.5	50	0.54	95	67	130	48.95	1.5(20)	
2,2-Dichloropropane	54.1	2.5	50	0	108	30	152	55.27	2.1(20)	
1,2-Dichloroethane	55.4	2.5	50	0	111	60	135	57.18	3.3(20)	
1,1,1-Trichloroethane	53.3	2.5	50	0	107	59	137	54.07	1.5(20)	
1,1-Dichloropropene	52	2.5	50	0	104	63	130	53.6	3.1(20)	
Carbon tetrachloride	54.4	2.5	50	0	109	50	147	55.91	2.7(20)	
Benzene	47.7	1.3	50	0	95	67	130	49.09	2.8(20)	
Dibromomethane	57.7	2.5	50	0	115	69	133	59.06	2.4(20)	
1,2-Dichloropropane	51	2.5	50	0	102	69	130	52.56	3.0(20)	
Trichloroethene	56.3	2.5	50	4.04	105	69	130	57.03	1.3(20)	
Bromodichloromethane	57.5	2.5	50	0	115	66	134	58.64	2.0(20)	
cis-1,3-Dichloropropene	50.8	2.5	50	0	102	63	130	51.53	1.5(20)	
trans-1,3-Dichloropropene	53.8	2.5	50	0	108	66	131	54.42	1.2(20)	
1,1,2-Trichloroethane	55.1	2.5	50	0	110	68	130	56.2	2.0(20)	
Toluene	48.2	1.3	50	0	96	66	130	48.46	0.6(20)	
1,3-Dichloropropane	59.7	2.5	50	0	119	70	130	59.87	0.3(20)	
Dibromochloromethane	58.4	2.5	50	0	117	70	130	58.98	1.1(20)	
1,2-Dibromoethane (EDB)	124	5	100	0	124	70	130	124.8	0.5(20)	
Tetrachloroethene	54.4	2.5	50	1.07	107	61	134	55.25	1.6(20)	
1,1,1,2-Tetrachloroethane	56.4	2.5	50	0	113	70	130	56.28	0.1(20)	
Chlorobenzene	49.6	2.5	50	0	99	70	130	50.13	1.1(20)	
Ethylbenzene	47.6	1.3	50	0	95	68	130	48.25	1.4(20)	
m,p-Xylene	51.7	1.3	50	0	103	64	130	51.47	0.5(20)	
Bromoform	57.2	2.5	50	0	114	64	138	57.91	1.2(20)	
Styrene	55.6	2.5	50	0	111	69	130	56.23	1.1(20)	
o-Xylene	52	1.3	50	0	104	70	130	52.26	0.5(20)	
1,1,2,2-Tetrachloroethane	54.4	2.5	50	0	109	65	131	53.07	2.6(20)	
1,2,3-Trichloropropane	109	10	100	0	109	70	130	110.4	1.4(20)	
Isopropylbenzene	47.4	2.5	50	0	95	64	138	46.6	1.6(20)	
Bromobenzene	48.2	2.5	50	0	96	70	130	47.65	1.2(20)	
n-Propylbenzene	45.3	2.5	50	0	91	66	132	44.85	1.0(20)	
4-Chlorotoluene	48.6	2.5	50	0	97	70	130	48.16	1.0(20)	
2-Chlorotoluene	46.8	2.5	50	0	94	70	130	45.41	3.1(20)	
1,3,5-Trimethylbenzene	44.8	2.5	50	0	90	66	136	43.88	2.1(20)	
tert-Butylbenzene	45.4	2.5	50	0	91	65	137	44.31	2.3(20)	
1,2,4-Trimethylbenzene	45.7	2.5	50	0	91	65	137	44.57	2.4(20)	
sec-Butylbenzene	47	2.5	50	0	94	66	134	45.64	2.9(20)	
1,3-Dichlorobenzene	47.3	2.5	50	0	95	70	130	46.23	2.2(20)	
1,4-Dichlorobenzene	45.3	2.5	50	0	91	70	130	44.4	2.1(20)	
4-Isopropyltoluene	45.7	2.5	50	0	91	66	137	44.71	2.2(20)	
1,2-Dichlorobenzene	45.4	2.5	50	0	91	70	130	43.58	4.1(20)	
n-Butylbenzene	45.7	2.5	50	0	91	60	142	44.99	1.5(20)	
1,2-Dibromo-3-chloropropane (DBCP)	265	15	250	0	106	67	130	252.1	5.0(20)	
1,2,4-Trichlorobenzene	51.9	10	50	0	104	61	137	47.92	8.0(20)	
Naphthalene	59.8	10	50	0	120	40	167	53.75	10.6(20)	
Hexachlorobutadiene	85	10	100	0	85	61	130	79.89	6.2(20)	
1,2,3-Trichlorobenzene	54.8	10	50	0	110	51	144	50.49	8.2(20)	
Surr: 1,2-Dichloroethane-d4	46.6		50		93	70	130			
Surr: Toluene-d8	47.9		50		96	70	130			
Surr: 4-Bromofluorobenzene	53		50		106	70	130			

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Date: 26-Feb-10

QC Summary Report

Work Order: 10021705

Sample Matrix Spike Duplicate Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **10021911.D** Batch ID: **MS15W0219M** Analysis Date: **02/19/2010 12:19**

Sample ID: **10021802-08AMSD** Units : **µg/L** Run ID: **MSD_15_100219A** Prep Date: **02/19/2010 12:19**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	45.3	2.5	50	0	91	13	167	46.75	3.1(20)	
Chloromethane	41.1	10	50	0	82	28	145	41.09	0.0(20)	
Vinyl chloride	56.4	2.5	50	0	113	43	134	56.66	0.5(20)	
Chloroethane	42.7	2.5	50	0	85	39	154	42.13	1.3(20)	
Bromomethane	34.3	10	50	0	69	19	176	34.17	0.5(20)	
Trichlorofluoromethane	50	2.5	50	0	100	34	160	51.43	2.8(20)	
1,1-Dichloroethene	51.4	2.5	50	0	103	60	130	52.05	1.3(20)	
Dichloromethane	50.7	10	50	0	101	68	130	51.05	0.7(20)	
trans-1,2-Dichloroethene	52.4	2.5	50	0	105	63	130	52.87	1.0(20)	
Methyl tert-butyl ether (MTBE)	61.8	1.3	50	0	124	56	141	61.01	1.3(20)	
1,1-Dichloroethane	48.6	2.5	50	0	97	61	130	49.25	1.3(20)	
cis-1,2-Dichloroethene	55.9	2.5	50	0	112	70	130	56.07	0.4(20)	
Bromochloromethane	57.9	2.5	50	0	116	70	130	61.06	5.4(20)	
Chloroform	47.9	2.5	50	0	96	67	130	48.34	1.0(20)	
2,2-Dichloropropane	54.2	2.5	50	0	108	30	152	55.79	3.0(20)	
1,2-Dichloroethane	56.5	2.5	50	0	113	60	135	55.96	1.0(20)	
1,1,1-Trichloroethane	53.2	2.5	50	0	106	59	137	54.31	2.0(20)	
1,1-Dichloropropene	52.8	2.5	50	0	106	63	130	54.16	2.6(20)	
Carbon tetrachloride	55.2	2.5	50	0	110	50	147	55.99	1.5(20)	
Benzene	48.5	1.3	50	0	97	67	130	49.12	1.2(20)	
Dibromomethane	59.8	2.5	50	0	120	69	133	59.93	0.2(20)	
1,2-Dichloropropane	52.7	2.5	50	0	105	69	130	52.56	0.3(20)	
Trichloroethene	52.5	2.5	50	0	105	69	130	52.91	0.8(20)	
Bromodichloromethane	58.2	2.5	50	0	116	66	134	58.14	0.1(20)	
cis-1,3-Dichloropropene	51.4	2.5	50	0	103	63	130	52.01	1.1(20)	
trans-1,3-Dichloropropene	54	2.5	50	0	108	66	131	55.13	2.1(20)	
1,1,2-Trichloroethane	56.9	2.5	50	0	114	68	130	57.71	1.4(20)	
Toluene	47.9	1.3	50	0	96	66	130	47.96	0.2(20)	
1,3-Dichloropropane	59.4	2.5	50	0	119	70	130	58.61	1.4(20)	
Dibromochloromethane	58.6	2.5	50	0	117	70	130	58.65	0.1(20)	
1,2-Dibromoethane (EDB)	124	5	100	0	124	70	130	124	0.1(20)	
Tetrachloroethene	53.3	2.5	50	0	107	61	134	53.11	0.3(20)	
1,1,1,2-Tetrachloroethane	55.7	2.5	50	0	111	70	130	56.66	1.6(20)	
Chlorobenzene	49.2	2.5	50	0	98	70	130	49.76	1.2(20)	
Ethylbenzene	47.3	1.3	50	0	95	68	130	47.58	0.5(20)	
m,p-Xylene	50.4	1.3	50	0	101	64	130	51.33	1.9(20)	
Bromoform	57.7	2.5	50	0	115	64	138	57.1	1.0(20)	
Styrene	56.1	2.5	50	0	112	69	130	55.55	1.0(20)	
o-Xylene	51.3	1.3	50	0	103	70	130	51.33	0.0(20)	
1,1,2,2-Tetrachloroethane	54.5	2.5	50	0	109	65	131	54.37	0.2(20)	
1,2,3-Trichloropropane	109	10	100	0	109	70	130	108.4	0.5(20)	
Isopropylbenzene	48.2	2.5	50	0	96	64	138	48.43	0.6(20)	
Bromobenzene	49.1	2.5	50	0	98	70	130	49.1	0.0(20)	
n-Propylbenzene	46.3	2.5	50	0	93	66	132	46.76	1.0(20)	
4-Chlorotoluene	49.1	2.5	50	0	98	70	130	49.25	0.3(20)	
2-Chlorotoluene	47.3	2.5	50	0	95	70	130	47.56	0.6(20)	
1,3,5-Trimethylbenzene	45.2	2.5	50	0	90	66	136	45.82	1.3(20)	
tert-Butylbenzene	46.2	2.5	50	0	92	65	137	46.21	0.1(20)	
1,2,4-Trimethylbenzene	46.2	2.5	50	0	92	65	137	46.51	0.6(20)	
sec-Butylbenzene	47.4	2.5	50	0	95	66	134	47.86	1.0(20)	
1,3-Dichlorobenzene	48.2	2.5	50	0	96	70	130	48.31	0.3(20)	
1,4-Dichlorobenzene	46	2.5	50	0	92	70	130	46.64	1.4(20)	
4-Isopropyltoluene	46.5	2.5	50	0	93	66	137	46.89	0.9(20)	
1,2-Dichlorobenzene	46.3	2.5	50	0	93	70	130	46.01	0.6(20)	
n-Butylbenzene	46.8	2.5	50	0	94	60	142	47.3	1.1(20)	
1,2-Dibromo-3-chloropropane (DBCP)	277	15	250	0	111	67	130	276.2	0.1(20)	
1,2,4-Trichlorobenzene	53.8	10	50	0	108	61	137	53.77	0.1(20)	
Naphthalene	61.7	10	50	0	123	40	167	62.05	0.5(20)	
Hexachlorobutadiene	86.9	10	100	0	87	61	130	88.43	1.8(20)	
1,2,3-Trichlorobenzene	56.3	10	50	0	113	51	144	56.15	0.3(20)	
Surr: 1,2-Dichloroethane-d4	46.7		50		93	70	130			
Surr: Toluene-d8	47.4		50		95	70	130			
Surr: 4-Bromofluorobenzene	55.3		50		111	70	130			

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *26-Feb-10*

QC Summary Report

Work Order: 10021705

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMIS10021705

Report Due By : 5:00 PM On : 03-Mar-2010

Client:
Battelle Memorial Institute
3990 Old Town Ave
Suite C-205
San Diego, CA 92110

Report Attention	Phone Number	EMail Address
David Conner	(818) 393-2808 x	connerd@battelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org
Betsy Cutie	(614) 424-4899 x	cutiee@batelle.org

EDD Required : **Yes**

Sampled by : David Loera

PO : 218013

Client's COC # : 024224, 24128 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	17-Feb-2010	**17-Feb-2010**

QC Level : DS4 = DOD QC Required : Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0_W	314_W	METALS_DW	VOC_TIC_W	VOC_W				Sample Remarks
BMI10021705-01A	MW-6	AQ	02/15/10 14:40	10	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				MS/MSD
BMI10021705-02A	MW-13	AQ	02/16/10 12:50	5	0	10	NO2, NO3, SO4, PO4, Cl	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021705-03A	MW-24-4	AQ	02/16/10 08:06	2	0	10			Cr						MS/MSD
BMI10021705-04A	MW-24-3	AQ	02/16/10 08:30	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021705-05A	MW-24-2	AQ	02/16/10 08:53	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021705-06A	MW-24-1	AQ	02/16/10 09:32	5	0	10	NO2, NO3, SO4, PO4, Cl	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021705-07A	DUPE-5-1Q10	AQ	02/16/10 00:00	5	0	10	NO2, NO3, SO4, PO4, Cl	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021705-08A	EB-11-02/16/10	AQ	02/16/10 09:25	5	0	10		Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI10021705-09A	TB-11-02/16/10	AQ	02/16/10 00:00	1	0	10				VOC by 524 Criteria	VOC by 524 Criteria				Reno Trip Blank 8/25/09

Comments: Security seals intact. Frozen ice. Temp Blank #8485 received @ 4°C. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	2-17-10 1108

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:

Name Jerry Tompkins
Address 505 King Ave.
City, State, Zip Columbus, OH 4329
Phone Number 614-424-4849 Fax 614-424-3667

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State?
AZ ___ CA X NV ___ WA ___
ID ___ OR ___ OTHER ___

024224
Page # 1 of 1

Client Name David Conner
Address
City, State, Zip
P.O. # 218013
Job # 6005862
EMail Address Connerd@battelle.org
Phone # 619-726-7311
Fax # 614-458-6641
Report Attention David Conner

Required QC Level? I II (III) IV
(EDD) EDF? YES X NO ___
Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by David Loera / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	Analyses Required: VOC's 524.2	Total Cr 200.8	Cl04 - 314	Cl, SO4, NO3, NO2, PO4's 300				REMARKS
1440	2/15/10	AQ	BMI10021705-01	MW-6	~~5~~ 3d		5	X	X	X					
1440	2/15/10	AQ	-01	MW-6-MS/MSD	~~5~~ 3d		5	X	X	X					MS/MSD
1250	2/16/10	AQ	-02	MW-13			5	X	X	X	X				
		AQ		DUPE-6-1010			5	X	X	X	X				

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		Ben Headington	Battelle	2-16-10	1340
Received by		MARCO MENDOZA	INSIGHT	2/16/10	1340
Relinquished by		MARCO MENDOZA	INSIGHT	2/16/10	1400
Received by		Anthony Stark	ALPHA	2/16/10	1400
Relinquished by		Anthony Stark	ALPHA	2/16/10	1415
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	2-17-10	1108

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Billing Information:
Name GERALD TOMPKINS / BATTELLE
Address 505 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number _____ Fax _____

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21
Sparks, Nevada 89431-5778
Phone (775) 355-1044
Fax (775) 355-0406

Samples Collected From Which State? AZ ___ CA X NV ___ WA ___ ID ___ OR ___ OTHER ___

24128

Page # 1 of 1

Client Name: BATTELLE / DAVID CONNER
Address: 3990 OLD TOWN AVE, C-205
City, State, Zip: SAN DIEGO, CA 92110
P.O. # 218013
Job # G005862
EMail Address
Phone # (619) 726-7311
Fax #

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # ___

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TPH-G (200.8)	ClO4 - (314.0) <1?, SO4, NO3, NO2	Poly-3 (300.0)	REMARKS
806	2/16/10	AQ	-03	MW-24-4	Normal		P/2		X			MS/MSD
830			-04	MW-24-3			V/P 5	X	X	X		
853			-05	MW-24-2				X	X	X		
932			-06	MW-24-1				X	X	X	X	
—			-07	DUPE-5-1010				X	X	X	X	DUPLICATE
925			-08	EB-11-02/16/10				X	X	X		EQUIP. BLANK
—			-09	TB-11-02/16/10			V/1	X				TRIP BLANK

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by	MARCO MENDOZA	INSIGHT ECC	2/16/10	1400
Received by	Anthony Stark	ALPHA	2/16/10	1400
Relinquished by	Anthony Stark	ALPHA	2/16/10	1415
Received by Elizabeth Adcox	Elizabeth Adcox	Alpha	2-17-10	1108
Relinquished by				
Received by				

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air **: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *03-Mar-10*

David Conner
Battelle Memorial Institute
3990 Old Town Ave Suite C-205
San Diego, CA 92110
(818) 393-2808

CASE NARRATIVE

Job: G005862/JPL Groundwater Monitoring
Work Order: BMI10021802 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
10021802-01A	MW-8	Aqueous
10021802-02A	MW-10	Aqueous
10021802-03A	MW-26-2	Aqueous
10021802-04A	MW-26-1	Aqueous
10021802-05A	MW-25-5	Aqueous
10021802-06A	MW-25-4	Aqueous
10021802-07A	MW-25-3	Aqueous
10021802-08A	MW-25-2	Aqueous
10021802-09A	MW-25-1	Aqueous
10021802-10A	EB-12-2/17/10	Aqueous
10021802-11A	TB-12-2/17/10	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
10021802-01A	EPA Method 314.0	Perchlorate
10021802-02A	EPA Method 314.0	Perchlorate
10021802-04A	EPA Method 314.0	Perchlorate
10021802-06A	EPA Method 314.0	Perchlorate
10021802-07A	EPA Method 314.0	Perchlorate
10021802-08A	EPA Method 314.0	Perchlorate
10021802-09A	EPA Method 314.0	Perchlorate

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/18/10

Job: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0

	Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-8**					
Lab ID : BMI10021802-01A	Chloride	43	0.50 mg/L	02/18/10 11:16	02/18/10 13:05
Date Sampled 02/17/10 12:08	Nitrite (NO2) - N	ND	0.25 mg/L	02/18/10 11:16	02/18/10 13:05
	Nitrate (NO3) - N	3.0	0.25 mg/L	02/18/10 11:16	02/18/10 13:05
	Phosphate, ortho - P	ND	0.50 mg/L	02/18/10 11:16	02/18/10 13:05
	Sulfate (SO4)	69	0.50 mg/L	02/18/10 11:16	02/18/10 13:05

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/3/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/18/10

Job: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-8**				
Lab ID : BMI10021802-01A Perchlorate	194	20.0 µg/L	02/18/10 13:37	02/22/10 21:21
Date Sampled 02/17/10 12:08				
Client ID: **MW-10**				
Lab ID : BMI10021802-02A Perchlorate	2.52	1.00 µg/L	02/18/10 13:37	02/22/10 21:39
Date Sampled 02/17/10 14:20				
Client ID: **MW-26-2**				
Lab ID : BMI10021802-03A Perchlorate	ND	1.00 µg/L	02/18/10 13:37	02/22/10 21:57
Date Sampled 02/17/10 11:37				
Client ID: **MW-26-1**				
Lab ID : BMI10021802-04A Perchlorate	2.25	1.00 µg/L	02/18/10 13:37	02/22/10 22:16
Date Sampled 02/17/10 12:03				
Client ID: **MW-25-5**				
Lab ID : BMI10021802-05A Perchlorate	ND	1.00 µg/L	02/18/10 13:37	02/24/10 14:40
Date Sampled 02/17/10 08:38				
Client ID: **MW-25-4**				
Lab ID : BMI10021802-06A Perchlorate	7.32	1.00 µg/L	02/18/10 13:37	02/22/10 22:53
Date Sampled 02/17/10 09:05				
Client ID: **MW-25-3**				
Lab ID : BMI10021802-07A Perchlorate	9.77	1.00 µg/L	02/18/10 13:37	02/22/10 23:11
Date Sampled 02/17/10 09:30				
Client ID: **MW-25-2**				
Lab ID : BMI10021802-08A Perchlorate	13.7	1.00 µg/L	02/18/10 13:37	02/22/10 23:29
Date Sampled 02/17/10 10:05				
Client ID: **MW-25-1**				
Lab ID : BMI10021802-09A Perchlorate	10.0	1.00 µg/L	02/18/10 13:37	02/22/10 23:48
Date Sampled 02/17/10 10:32				
Client ID: **EB-12-2/17/10**				
Lab ID : BMI10021802-10A Perchlorate	ND	1.00 µg/L	02/18/10 13:37	02/23/10 00:06
Date Sampled 02/17/10 10:23				

Alpha Analytical, Inc.

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ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/3/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 02/18/10

Job: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: **MW-8**				
Lab ID : BMI10021802-01A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 17:08
Date Sampled 02/17/10 12:08				
Client ID: **MW-10**				
Lab ID : BMI10021802-02A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 17:29
Date Sampled 02/17/10 14:20				
Client ID: **MW-26-2**				
Lab ID : BMI10021802-03A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 17:35
Date Sampled 02/17/10 11:37				
Client ID: **MW-26-1**				
Lab ID : BMI10021802-04A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 17:41
Date Sampled 02/17/10 12:03				
Client ID: **MW-25-5**				
Lab ID : BMI10021802-05A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 17:46
Date Sampled 02/17/10 08:38				
Client ID: **MW-25-4**				
Lab ID : BMI10021802-06A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 17:52
Date Sampled 02/17/10 09:05				
Client ID: **MW-25-3**				
Lab ID : BMI10021802-07A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 17:58
Date Sampled 02/17/10 09:30				
Client ID: **MW-25-2**				
Lab ID : BMI10021802-08A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 18:03
Date Sampled 02/17/10 10:05				
Client ID: **MW-25-1**				
Lab ID : BMI10021802-09A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 18:09
Date Sampled 02/17/10 10:32				
Client ID: **EB-12-2/17/10**				
Lab ID : BMI10021802-10A Chromium (Cr)	ND	0.0050 mg/L	02/18/10 13:15	02/19/10 18:14
Date Sampled 02/17/10 10:23				

Alpha Analytical, Inc.

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ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/3/10

Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Extracted	Date Analyzed
Client ID :	**MW-8**					
Lab ID :	BMI10021802-01A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 16:46	02/19/10 16:46
Date Received :	02/18/10					
Date Sampled :	02/17/10 12:08					
Client ID :	**MW-10**					
Lab ID :	BMI10021802-02A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 17:08	02/19/10 17:08
Date Received :	02/18/10					
Date Sampled :	02/17/10 14:20					
Client ID :	**MW-26-2**					
Lab ID :	BMI10021802-03A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 17:30	02/19/10 17:30
Date Received :	02/18/10					
Date Sampled :	02/17/10 11:37					
Client ID :	**MW-26-1**					
Lab ID :	BMI10021802-04A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 17:53	02/19/10 17:53
Date Received :	02/18/10					
Date Sampled :	02/17/10 12:03					
Client ID :	**MW-25-5**					
Lab ID :	BMI10021802-05A	Sulfur dioxide	15	2.0 µg/L	02/19/10 18:15	02/19/10 18:15
Date Received :	02/18/10					
Date Sampled :	02/17/10 08:38					
Client ID :	**MW-25-4**					
Lab ID :	BMI10021802-06A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 18:37	02/19/10 18:37
Date Received :	02/18/10					
Date Sampled :	02/17/10 09:05					
Client ID :	**MW-25-3**					
Lab ID :	BMI10021802-07A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 18:59	02/19/10 18:59
Date Received :	02/18/10					
Date Sampled :	02/17/10 09:30					
Client ID :	**MW-25-2**					
Lab ID :	BMI10021802-08A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 19:22	02/19/10 19:22
Date Received :	02/18/10					
Date Sampled :	02/17/10 10:05					
Client ID :	**MW-25-1**					
Lab ID :	BMI10021802-09A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 19:44	02/19/10 19:44
Date Received :	02/18/10					
Date Sampled :	02/17/10 10:32					

Alpha Analytical, Inc.

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Client ID :	**EB-12-2/17/10**					
Lab ID :	BMI10021802-10A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 14:10	02/19/10 14:10
Date Received :	02/18/10					
Date Sampled :	02/17/10 10:23					
Client ID :	**TB-12-2/17/10**					
Lab ID :	BMI10021802-11A	* * * None Found * * *	ND	2.0 µg/L	02/19/10 13:48	02/19/10 13:48
Date Received :	02/18/10					
Date Sampled :	02/17/10 00:00					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

Alpha certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

3/3/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-01A
Client I.D. Number: MW-8

Sampled: 02/17/10 12:08
Received: 02/18/10
Extracted: 02/19/10 16:46
Analyzed: 02/19/10 16:46

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	0.89		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	1.5		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	1.4		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	0.81		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-02A
Client I.D. Number: MW-10

Sampled: 02/17/10 14:20
Received: 02/18/10
Extracted: 02/19/10 17:08
Analyzed: 02/19/10 17:08

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.58		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	5.1		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	95	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	1.0		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-03A
Client I.D. Number: MW-26-2

Sampled: 02/17/10 11:37
Received: 02/18/10
Extracted: 02/19/10 17:30
Analyzed: 02/19/10 17:30

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-04A
Client I.D. Number: MW-26-1

Sampled: 02/17/10 12:03
Received: 02/18/10
Extracted: 02/19/10 17:53
Analyzed: 02/19/10 17:53

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	0.71		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-05A
Client I.D. Number: MW-25-5

Sampled: 02/17/10 08:38
Received: 02/18/10
Extracted: 02/19/10 18:15
Analyzed: 02/19/10 18:15

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

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3/3/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-06A
Client I.D. Number: MW-25-4

Sampled: 02/17/10 09:05
Received: 02/18/10
Extracted: 02/19/10 18:37
Analyzed: 02/19/10 18:37

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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3/3/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-07A
Client I.D. Number: MW-25-3

Sampled: 02/17/10 09:30
Received: 02/18/10
Extracted: 02/19/10 18:59
Analyzed: 02/19/10 18:59

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.51		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	2.4		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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3/3/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-08A
Client I.D. Number: MW-25-2

Sampled: 02/17/10 10:05
Received: 02/18/10
Extracted: 02/19/10 19:22
Analyzed: 02/19/10 19:22

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

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3/3/10
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-09A
Client I.D. Number: MW-25-1

Sampled: 02/17/10 10:32
Received: 02/18/10
Extracted: 02/19/10 19:44
Analyzed: 02/19/10 19:44

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.60		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	3.1		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / Carson, CA • (310) 803-7761 / info@alpha-analytical.com

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3/3/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-10A
Client I.D. Number: EB-12-2/17/10

Sampled: 02/17/10 10:23
Received: 02/18/10
Extracted: 02/19/10 14:10
Analyzed: 02/19/10 14:10

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

Q = One or more quality control criteria failed.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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3/3/10
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
3990 Old Town Ave
San Diego, CA 92110
Job: G005862/JPL Groundwater Monitoring

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641

Alpha Analytical Number: BMI10021802-11A
Client I.D. Number: TB-12-2/17/10

Sampled: 02/17/10 00:00
Received: 02/18/10
Extracted: 02/19/10 13:48
Analyzed: 02/19/10 13:48

Volatile Organics by GC/MS
EPA Method SW8260B

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND		0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	Q	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Data flags are DOD specified with criteria that may differ from EPA or inhouse statistical criteria.

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3/3/10
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

VOC Sample Preservation Report

Work Order: BMI10021802 **Job:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
10021802-01A	MW-8	Aqueous	2
10021802-02A	MW-10	Aqueous	2
10021802-03A	MW-26-2	Aqueous	2
10021802-04A	MW-26-1	Aqueous	2
10021802-05A	MW-25-5	Aqueous	2
10021802-06A	MW-25-4	Aqueous	2
10021802-07A	MW-25-3	Aqueous	2
10021802-08A	MW-25-2	Aqueous	2
10021802-09A	MW-25-1	Aqueous	2
10021802-10A	EB-12-2/17/10	Aqueous	2
10021802-11A	TB-12-2/17/10	Aqueous	2

3/3/10

Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *03-Mar-10*

QC Summary Report

Work Order: 10021802

Method Blank

Type: **MBLK** Test Code: **EPA Method 300.0**

File ID: **20** Batch ID: **23625** Analysis Date: **02/18/2010 12:10**

Sample ID: **MB-23625** Units : **mg/L** Run ID: **IC_1_100218A** Prep Date: **02/18/2010 11:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	ND	0.5								
Nitrite (NO2) - N	ND	0.25								
Nitrate (NO3) - N	ND	0.25								
Phosphate, ortho - P	ND	0.5								
Sulfate (SO4)	ND	0.5								

Laboratory Fortified Blank

Type: **LFB** Test Code: **EPA Method 300.0**

File ID: **21** Batch ID: **23625** Analysis Date: **02/18/2010 12:28**

Sample ID: **LFB-23625** Units : **mg/L** Run ID: **IC_1_100218A** Prep Date: **02/18/2010 11:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	52.7	0.5	50		105	90	110			
Nitrite (NO2) - N	1.21	0.25	1.25		97	90	110			
Nitrate (NO3) - N	1.27	0.25	1.25		102	90	110			
Phosphate, ortho - P	1.04	0.5	1.25		83	90	110			L50
Sulfate (SO4)	106	0.5	100		106	90	110			

Sample Matrix Spike

Type: **LFM** Test Code: **EPA Method 300.0**

File ID: **24** Batch ID: **23625** Analysis Date: **02/18/2010 13:24**

Sample ID: **10021802-01ALFM** Units : **mg/L** Run ID: **IC_1_100218A** Prep Date: **02/18/2010 11:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	81	0.5	50	43.4	75	80	120			M2
Nitrite (NO2) - N	1.16	0.25	1.25	0	93	80	120			
Nitrate (NO3) - N	3.71	0.25	1.25	2.954	61	80	120			M2
Phosphate, ortho - P	1.14	0.5	1.25	0	91	80	120			
Sulfate (SO4)	144	0.5	100	68.71	75	80	120			M2

Sample Matrix Spike Duplicate

Type: **LFMD** Test Code: **EPA Method 300.0**

File ID: **25** Batch ID: **23625** Analysis Date: **02/18/2010 13:42**

Sample ID: **10021802-01ALFMD** Units : **mg/L** Run ID: **IC_1_100218A** Prep Date: **02/18/2010 11:16**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chloride	81.4	0.5	50	43.4	76	80	120	81.03	0.4(10)	M2
Nitrite (NO2) - N	1.21	0.25	1.25	0	97	80	120	1.161	4.3(10)	
Nitrate (NO3) - N	3.6	0.25	1.25	2.954	52	80	120	3.713	3.1(10)	M2
Phosphate, ortho - P	1.34	0.5	1.25	0	107	80	120	1.139	16.0(10)	R5
Sulfate (SO4)	144	0.5	100	68.71	76	80	120	143.9	0.3(10)	M2

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag.

L50 = Analyte recovery was below acceptance limits for the LCS, but was acceptable in the MS/MSD.

M2 = Matrix spike recovery was low, the method control sample recovery was acceptable.

R5 = MS/MSD RPD exceeded the laboratory control limit. Recovery met acceptance criteria.