ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS (SUMMARY SHEETS)

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



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

Date: 03-Feb-09

David Conner Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 (619) 574-4827

CASE NARRATIVE

Project:	G005862/JPL Gro	undwater Monitoring		
Vork Order:	BMI09012751		Cooler Temp:	4 °C
Alpha's	Sample ID	Client's Sample ID	Matrix	
09012	2751-01A	MW-14-5	Aqueous	
09012	2751-02A	MW-14-4	Aqueous	
09012	2751-03A	MW-14-3	Aqueous	
09012	2751-04A	MW-14-2	Aqueous	
09012	2751-05A	MW-14-1	Aqueous	
09012	2751-06A	EB-02-01/26/09	Aqueous	
09012	2751-07A	TB-02-01/26/09	Aqueous	
09012	2751-08A	MW-21-5	Aqueous	
09012	2751-09A	MW-21-4	Aqueous	
09012	2751-10A	MW-21-3	Aqueous	
09012	2751-11A	MW-21-2	Aqueous	
09012	2751-12A	MW-21-1	Aqueous	
09012	2751-13A	DUPE-01-1Q09	Aqueous	
09012	2751-14A	EB-01-1/23/09	Aqueous	
09012	2751-15A	TB-01-1/23/09	Aqueous	
		Manually Integrat	ed Analytes	
<u>Alpha's Sa</u>	mple ID	Test Reference		Analyte
090127	51-02A	EPA Method 314.0		Perchlorate
090127	51-03A	EPA Method 314.0		Perchlorate
090127	51-04A	EPA Method 314.0		Perchlorate
090127	51-05A	EPA Method 314.0		Perchlorate
090127	51-08A	EPA Method 314.0		Perchlorate
090127	51-09A	EPA Method 314.0		Perchlorate
090127	51-10A	EPA Method 314.0		Perchlorate
090127	51-11A	EPA Method 314.0		Perchlorate
090127	51-12A	EPA Method 314.0		Perchlorate
090127	51-13A	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/Chainof-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.

Kandy Saulur Dalter Airidner Roger Scholl

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 / info@alpha-analytical.com 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.



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201

 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

 Date Received : 01/27/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography

EPA Method 314.0

	Parameter	Concentration	Reporting Limit	Date Date Sampled Analyzed
Client ID : MW-14-5 Lab ID : BMI0901275	1-01A Perchlorate	ND	1.00 µg/L	01/26/09 01/28/09
Client ID : MW-14-4 Lab ID : BMI0901275	1-02A Perchlorate	3.05	1.00 μg/L	01/26/09 01/28/09
Client ID : MW-14-3 Lab ID : BMI0901275	1-03A Perchlorate	5.03	1.00 µg/L	01/26/09 01/28/09
	1-04A Perchlorate	3.32	1.00 µg/L	01/26/09 01/28/09
Client ID : MW-14-1 Lab ID : BMI0901275	1-05A Perchlorate	2.90	1.00 µg/L	01/26/09 01/28/09
Client ID : EB-02-01/26 / Lab ID : BMI0901275	09 1-06A Perchlorate	ND	1.00 µg/L	01/26/09 01/28/09
Client ID : MW-21-5 Lab ID : BMI0901275	1-08A Perchlorate	3.15	1.00 µg/L	01/23/09 01/28/09
Client ID : MW-21-4 Lab ID : BMI0901275	1-09A Perchlorate	2.24	1.00 µg/L	01/23/09 01/28/09
Client ID : MW-21-3 Lab ID : BMI0901275	I-10A Perchlorate	2.97	1.00 µg/L	01/23/09 01/28/09
Client ID : MW-21-2 Lab ID : BMI09012751	-11A Perchlorate	2.53	1.00 µg/L	01/23/09 01/28/09
Client ID : MW-21-1 Lab ID : BMI09012751	-12A Perchlorate	2.72	1.00 µg/L	01/23/09 01/28/09
Client ID : DUPE-01-1Q Lab ID : BMI09012751	09 -13A Perchlorate	3.04	1.00 µg/L	01/23/09 01/28/09
Client ID : EB-01-1/23/0 Lab ID : BMI09012751	9 -14A Perchlorate	ND	1.00 μg/L	01/23/09 01/28/09



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ND = Not Detected

Walter Arihm

Roger Scholl Kandy Stanlow Dalter Hinchman, Quality Assurance Officer Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / info@alpha-analytical.com 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.

2/9/09 **Report Date**



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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

David Conner Attn: Phone: (619) 574-4827 Fax: (614) 458-6641 Date Received : 01/27/09

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS EPA Method 200.8

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : MW-14-3 Lab ID : BMI09012751-03A	Chromium (Cr)	ND	0.0050 mg/L	01/26/09	02/03/09
Client ID : MW-14-2 Lab ID : BMI09012751-04A	Chromium (Cr)	ND	0.0050 mg/L	01/26/09	02/03/09
Client ID : MW-14-1 Lab ID : BMI09012751-05A	Chromium (Cr)	ND	0.0050 mg/L	01/26/09	02/04/09
Client ID : EB-02-01/26/09 Lab ID : BMI09012751-06A	Chromium (Cr)	ND	0.0050 mg/L	01/26/09	02/03/09
Client ID : MW-21-5 Lab ID : BMI09012751-08A	Chromium (Cr)	ND	0.0050 mg/L	01/23/09	02/03/09
Client ID : MW-21-4 Lab ID : BMI09012751-09A	Chromium (Cr)	ND	0.0050 mg/L	01/23/09	02/03/09
Client ID : MW-21-3 Lab ID : BM109012751-10A	Chromium (Cr)	ND	0.0050 mg/L	01/23/09	02/03/09
Client ID : MW-21-2 Lab ID : BMI09012751-11A	Chromium (Cr)	ND	0.0050 mg/L	01/23/09	02/03/09
Client ID : MW-21-1 Lab ID : BMI09012751-12A	Chromium (Cr)	ND	0.0050 mg/L	01/23/09	02/03/09
Client ID : DUPE-01-1Q09 Lab ID : BMI09012751-13A	Chromium (Cr)	ND	0.0050 mg/L	01/23/09	02/03/09
Client ID : EB-01-1/23/09 Lab ID : BMI09012751-14A	Chromium (Cr)	ND	0.0050 mg/L	01/23/09	02/03/09

ND = Not Detected

Roger Scholl

Kandy

Walter A

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 / info@alpha-analytical.com 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.

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ANALYTICAL REPORT

Battelle Memorial InstituteAttn:David Conner505 King AvenuePhone: (619) 574-4827Columbus, OH 43201Fax: (614) 458-6641Job#:G005862/JPL Groundwater Monitoring

Tentatively Identified Compounds - Volatile Organics by GC/MS

				Estimated			
		Parameter	Estimated	Reporting	Date	Date	Date
			Concentration	Limit	Received	Sampled	Analyzed
Client ID : Lab ID :	MW-14-5 BMI09012751-01A	Sulfur dioxide	13	2.0 μg/L	01/27/09	01/26/09	02/02/09
Client ID : Lab ID :	MW-14-4 BM109012751-02A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/26/09	02/02/09
Client ID : Lab ID :	MW-14-3 BMI09012751-03A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/26/09	02/02/09
Client ID : Lab ID :	MW-14-2 BMI09012751-04A	* * * None Found * * *	ND	2.0 µg/L	01/27/09	01/26/09	02/02/09
Client ID : Lab ID :	MW-14-1 BMI09012751-05A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/26/09	02/02/09
Client ID : Lab ID :	EB-02-01/26/09 BMI09012751-06A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/26/09	02/02/09
Client ID : Lab ID :	TB-02-01/26/09 BMI09012751-07A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/26/09	02/02/09
Client ID : Lab ID :	MW-21-5 BMI09012751-08A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/23/09	02/02/09
Client ID : Lab ID :	MW-21-4 BMI09012751-09A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/23/09	02/02/09
Client ID : Lab ID :	MW-21-3 BMI09012751-10A	* * * None Found * * *	ND	2 .0 μg/L	01/27/09	01/23/09	02/02/09
Client ID : Lab ID :	MW-21-2 BMI09012751-11A	* * * None Found * * *	ND	2 .0 μg/L	01/27/09	01/23/09	02/02/09
Client ID : Lab ID :	MW-21-1 BMI09012751-12A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/23/09	02/02/09
Client ID : Lab ID :	DUPE-01-1Q09 BMI09012751-13A	* * * None Found * * *	ND	2.0 µg/L	01/27/09	01/23/09	02/02/09
Client ID : Lab ID :	EB-01-1/23/09 BMI09012751-14A	2-Methyl-1-propene Tertiary Butyl Alcohol (TBA)	5.5 59	2.0 μg/L 2.0 μg/L	01/27/09 01/27/09	01/23/09 01/23/09	02/02/09 02/02/09
Client ID : Lab ID :	T B-01-1/23/09 BMI09012751-15A	* * * None Found * * *	ND	2.0 μg/L	01/27/09	01/23/09	02/02/09



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Note: Analysis conducted using EPA Method 524.2 criteria. ND = Not Detected

Dalter Acrilmon Roger Scholl Kandy Santur Dalter Arrihm Roger L. Scholl, Ph. D., Laboratory Director · · Randy Gardner, Laboratory Manager · · Walter Hinchman, Quality Assurance Officer

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Report Date Page 1 of 1



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012751-01A Client I.D. Number: MW-14-5	Sampled: 01/26/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	
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 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 μg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L μg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	isopropyibenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	,	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/∟ µg/L
13		ND	10	µg/L	48	4-Chlorotoluene	ND ND	0.50	μg/L μg/L
14		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/∟ µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND 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 (DBCF		2.5	µg/∟ 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	103	(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			, 30	(10-130)	JOINEU
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

Kandy Sandmar

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

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

2/9/09

Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201	Phone: Fax:	David Conner (619) 574-4827 (614) 458-6641
Job#: G005862/JPL Groundwater Monitoring		
Alpha Analytical Number: BMI09012751-02A Client I.D. Number: MW-14-4	Sampl	ed: 01/26/09
Chone 1.D. Tunitor. IVI VV = 14-4	Receiv	red: 01/27/09

Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1.2-Tetrachloroethane	ND	0.50	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	1.0.
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	r-9
4	Chloroethane	ND	0.50	µg/L	39	m.p-Xvlene	ND	0.50	1. 2
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	- O -
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	10
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	1.0
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	: ND	1.0	10
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	
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	
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND 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		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 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 (DBCF		0.50	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND ND	2.5	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 ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	1.0	µg/L
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8		(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	00	Sun: 4-bromonuorobenzene	97	(70-130)	%REC
33	Dibromochloromethane	ND	0.50	μg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Santur

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

2/9/09

Report Date

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.



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012751-03A Client I.D. Number: MW-14-3

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/26/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	10
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND		
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	1.0
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-Xvlene	ND	0.50	1.0
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	0.50	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	1.0	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	40	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene		0.50	µg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene		0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L µg/L	53	sec-Butylbenzene	ND ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1.3-Dichlorobenzene		0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1.4-Dichlorobenzene	ND 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 (DBCF		0.50	µg/L
25	Trichloroethene	1.6	0.50	µg/L	60	1,2.4-Trichlorobenzene	ND ND	2.5	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND 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	+	1.0	µg/L
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 97	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L	00	Sun. 4-Diomonuorobenzene	97	(70-130)	%REC
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					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Dandmer

Dalter Aridman

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 / info@alpha-analytical.com

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2/9/09 **Report Date**



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012751-04A Client I.D. Number: MW-14-2	Sampled: 01/26/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	e estas estas	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	1.0.
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	1-3
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	1 Q
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	- 0
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	10
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	10
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	F-Q
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	0.50	1.0
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	1.0	- U -
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	
12	,	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	10
13	= = = = = = = = = = = = = = = = = = = =	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50 0.50	10
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND		F-07 -
15	Bromochloromethane	ND	0.50	µg/L	50	1.3.5-Trimethylbenzene	ND	0.50 0.50	10-
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	F 3 -
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND		10.
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	P-3
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 0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND		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 (DBCF		0.50 2.5	µg/L
25	Trichloroethene	8.2	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND		µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND 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	1.0	µg/L
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	00	ount + Diomondorobenzene	90	(70-130)	%REC
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

Kandy Sandmer

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

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

2/9/09

Report Date

Page 1 of 1



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012751-05A Client I.D. Number: MW-14-1

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/26/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	.imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1.2-Tetrachloroethane	ND	0.50	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	10-
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	10
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	1.0
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	1.0
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	μg/L μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µq/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 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 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 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	
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBC)		2.5	µg/L
25	Trichloroethene	5.1	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND ND	2.5	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	^I ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	µg/L %REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC %REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	
32	1,3-Dichloropropane	ND	0.50	µg/L			50	(70-130)	%REC
33	Dibromochloromethane	ND 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

Rogen Scholl

Kandy Danlmer

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

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

2/9/09 **Report Date**



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012751-06A Client I.D. Number: EB-02-01/26/09

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/26/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND		
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50 0.50	, 0
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	10
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND		- <i>o</i> -
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50 0.50	1.5
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	1.0
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	1.0
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND		µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50 0.50	1.5
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 µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-isopropyltoluene	ND	0.50	µg/L µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	μg/L μg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCF		2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L µg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	. –
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 µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	µg/∟ %REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC %REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC %REC
32	1,3-Dichloropropane	ND	0.50	µg/L			00	(70-130)	MINEC
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

Kandy Daulner

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2/9/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012751-07A Client I.D. Number: TB-02-01/26/09

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/26/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	.imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1.2-Tetrachloroethane	ND		
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50 0.50	1.0
3	Vinyl chloride	. ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	1. 2
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	1
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	10
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND		
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	1.0
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	: ND	0.50	
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	0.50	10.1
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	1.0	1.0 -
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND ND	0.50	- U -
12	1,1-Dichloroethane	' ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	1.0.
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		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	-	ND	0.50	µg/L
25	Trichloroethene	ND	0.50	μg/L μg/L	59 60	1,2-Dibromo-3-chloropropane (DBCF	/	2.5	µg/L
26	Bromodichloromethane	ND	0.50	µg/L µg/L	61	1,2,4-Trichlorobenzene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Naphthalene Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50				ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
30	1,1,2-Trichloroethane	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					
			0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Rogen Scholl

Kandy Sandmer

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

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

2/9/09

Report Date



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 505 King Avenue Columbus, OH 43201	Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641		
Alpha Analytical Number: BMI09012751-08A	Sampled: 01/23/09		
Client I.D. Number: MW-21-5	Received: 01/27/09		
	Analyzed: 02/02/09		

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	.imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND		
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50 0.50	1.2.
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND		15
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	P. Q
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Stvrene	ND	0.50	10
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	10
8	Dichloromethane	ND	1.0	µg/L	43	,	ND	0.50	1.0
9	Freon-113	ND	0.50	µg/L	44		ND	0.50 1.0	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND		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	= = = = = = = (=. ()	ND	10	µg/L	48	4-Chlorotoluene	ND 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	3.7	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 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-Isopropyitoluene	i ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND 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 (DBCI		0.50	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.5	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene		1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene		1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1.2-Dichloroethane-d4	ND	1.0	µg/L
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	00	Sun: 4-Bromonuorobenzene	99	(70-130)	%REC
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L µg/L					
35	Tetrachloroethene	1.9	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Dantmer

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

2/9/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012751-09A Client I.D. Number: MW-21-4	Sampled: 01/23/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	.imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	.36	1,1,1,2-Tetrachloroethane	i ND	0.50	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	1.0
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	F 9 -
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	F-0
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	10-
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	r.a
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xvlene	ND	0.50	1.0
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	
9	Freon-113	ND	0.50	µg/L	44		ND	1.0	10
10	trans-1,2-Dichloroethene	ND	0.50	µg/Ł	45	Isopropylbenzene	ND	0.50	1. 0
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	•••
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13		ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14		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	5.8	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-Isopropyitoluene	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 (DBCF			µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.5	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	1.0	µg/L
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L	00	oun: + Diomoniaorobenizerie	95	(70-130)	%REC
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					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Sandmer

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

2/9/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012751-10A Client I.D. Number: MW-21-3

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/23/09 Received: 01/27/09

Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	.imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1.2-Tetrachloroethane	ND	0.50	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	P. Q
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	10-
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND ND	0.50	
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xvlene	ND	0.50	1.0
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	10
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	, 0
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		µg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	10
14	cis-1,2-Dichloroethene	1.1	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	2.5	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 0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND ND		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 (DBCI		0.50	µg/L
25	Trichloroethene	1.5	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.5	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		1.0	µg/L
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	00	Guit. 4-bromonuoropenzene	99	(70-130)	%REC
33	Dibromochloromethane	ND	0.50	µg/L µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L µg/L					
35	Tetrachloroethene	6.8	0.50	μg/L μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Rogen Scholl

Kandy Dantner

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2/9/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012751-11A Client I.D. Number: MW-21-2	Sampled: 01/23/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

_	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND		
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 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-Xvlene	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		ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	1.1	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	1.3	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	μg/L μg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	μg/L 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/∟ µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCF		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	• •
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)	µg/L %REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	(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			. 01	(10-130)	MAEU
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	6.6	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Sandmer

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2/9/09 **Report Date**



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012751-12A Client I.D. Number: MW-21-1

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/23/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration Reporting Limit			Compound	Concentration	Reporting L	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	r. 3
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	r 0 -
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND		10-
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	- 0 -
7	1,1-Dichloroethene	ND	0.50	µg/L	42	,	ND	0.50	, 0
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	10
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	0.50	ιψ
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	1.0 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	0.66	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 (DBCF		2.5	µg/L 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	101	(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			50	(70-130)	76REU
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

Rogen Scholl

Kandy Dardmer

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

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

2/9/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012751-13A Client I.D. Number: DUPE-01-1Q09	Sampled: 01/23/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	odifluoromethane ND 0.50 µg/L nethane ND 1.0 µg/L		ua/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	
2	Chloromethane	ND	1.0		37	Chlorobenzene	ND	0.50	10
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	1.0
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-Xvlene	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	, , , ,	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	= = = = = = (=, (=, .)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14		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	0.57	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 (DBCI		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 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	103	(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				(10-100)	/0INLU
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

Kandy Sandmer

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



Report Date

Page 1 of 1



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012751-14A Client I.D. Number: EB-01-1/23/09

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/23/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

,	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1.2-Tetrachloroethane	ND	0.50	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	1.0
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	10
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	r 3
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	, 0
7	1,1-Dichloroethene	ND	0.50	µg/L	42	,	ND	0.50	
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	10
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/Ł	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	i ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCF		2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.5	µg/L
26	Bromodichloromethane	ND 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)	µg/L %REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	• • •	
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L	00	Sam - Bromondorobenzene	90	(70-130)	%REC
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

Rogen Scholl

Kandy Sandmer

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

2/9/09 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. **Report Date**



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012751-15A Client I.D. Number: TB-01-1/23/09	Sampled: 01/23/09 Received: 01/27/09 Analyzed: 02/02/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	10
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	. 0
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	- 3 -
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND ND	0.50	10-
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	1- 9
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 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	
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1.4-Dichlorobenzene	ND	0.50	µg/L 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	
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 (DBCI		2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L μg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	
	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)	µg/L %REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC %REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	. ,	
32	1,3-Dichloropropane	ND	0.50	µg/L			100	(70-130)	%REC
	Dibromochloromethane	ND	0.50	µg/L					
	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

Kandy Santur

Dalter Arihm

2/9/09 **Report Date**

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 / info@alpha-analytical.com 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.



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VOC Sample Preservation Report

Work Order: BMI09012751

Project: G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09012751-01A	MW-14-5	Aqueous	2
09012751-02A	MW-14-4	Aqueous	2
09012751-03A	MW-14-3	Aqueous	2
09012751-04A	MW-14-2	Aqueous	2
09012751-05A	MW-14-1	Aqueous	2
09012751-06A	EB-02-01/26/09	Aqueous	2
09012751-07A	TB-02-01/26/09	Aqueous	2
09012751-08A	MW-21-5	Aqueous	2
09012751-09A	MW-21-4	Aqueous	2
09012751-10A	MW-21-3	Aqueous	2
09012751-11A	MW-21-2	Aqueous	2
09012751-12A	MW-21-1	Aqueous	2
09012751-13A	DUPE-01-1009	Aqueous	2
09012751-14A	EB-01-1/23/09	Aqueous	2
09012751-15A	TB-01-1/23/09	Aqueous	2



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Date: 03-Feb-09	QC Summary Report										Work Order: 09012751		
Method Blank File ID: 14		Туре	MBL		est Code: El atch ID: 214		hod 314.0		s Date:	01/28/2009 15:09			
Sample ID: MB-21403	Units : µg/L		Ru	n ID: IC	_3_0901284	4		Prep Da	ite:	01/28/2009			
Analyte	Result	PQL	:	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) R	PDRef	/al %RPD(Limit)	Qua		
Perchlorate	ND		1										
Laboratory Fortified Blank		Туре	LFB	Te	est Code: El	PA Met	hod 314.0						
File ID: 15				Ba	atch ID: 214	03		Analysis	s Date:	01/28/2009 15:28			
Sample ID: LFB-21403	Units : µg/L		Ru	n ID: IC	_3_0901284	4		Prep Da	ite:	01/28/2009			
Analyte	Result	PQL	:	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) R	PDRef	/al %RPD(Limit)	Qua		
Perchlorate	23.9		2	25		96	85	115		# 2			
Sample Matrix Spike		Туре	MS	Τe	est Code: El	PA Met	hod 314.0		_				
File ID: 19				Ba	atch ID: 214	03		Analysis	Date:	01/28/2009 16:41			
Sample ID: 09012751-02AMS	Units : µg/L		Ru	n ID: IC	_3_0901284	4		Prep Da	ite:	01/28/2009			
Analyte	Result	PQL	:	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) R	PDRef\	/al %RPD(Limit)	Qua		
Perchlorate	26.8		2	25	3.054	95	80	120					
Sample Matrix Spike Duplicate		Туре	MSD	Τe	est Code: El	PA Met	hod 314.0						
File ID: 20				Ba	atch ID: 214	03		Analysis	Date:	01/28/2009 17:00			
Sample ID: 09012751-02AMSD	Units : µg/L		Ru	n ID: IC	_3_0901284	4		Prep Da	te:	01/28/2009			
Analyte	Result	PQL	:	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) R	PDRef\	/al %RPD(Limit)	Qua		
Perchlorate	27.7		2	25	3.054	99	80	120	26.82	2 3.2(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: 06-Feb-09	A Numbery Report									er:
Method Blank File ID: 020209.B\MB.D\		Туре М		est Code: EF atch ID: 2143		hod 200.8	Analysis D	ate:	02/03/2009 14:40	
Sample ID: MB-21435	Units : mg/L			P/MS_09020			Prep Date:		02/03/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefV	al %RPD(Limit)	Qual
Chromium (Cr)	ND	0.005	5							
Laboratory Control Spike		Туре L		est Code: EF		hod 200.8				
File ID: 020209.B\L1.D\			Ba	atch ID: 2143	35K		,		02/03/2009 14:46	
Sample ID: LCS-21435	Units : mg/L		Run ID: IC	P/MS_09020)3A		Prep Date:	: (02/03/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefV	al %RPD(Limit)	Qual
Chromium (Cr)	0.0523	0.005	5 0.05		105	80	120			
Sample Matrix Spike		Type N	MS Te	est Code: EF	PA Met	hod 200.8				
File ID: 020209.B\MS.D\			Ba	atch ID: 2143	85K		Analysis D	ate:	02/03/2009 15:09	
Sample ID: 09012751-03AMS	Units : mg/L		Run ID: IC	P/MS_09020)3A		Prep Date:	: (02/03/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPD	RefV	al %RPD(Limit)	Qual
Chromium (Cr)	0.0526	0.005	5 0.05	0	105	80	120			
Sample Matrix Spike Duplicate		Type N	ASD Te	est Code: EF	PA Met	hod 200.8				
File ID: 020209.B\MSD.D\			Ba	atch ID: 2143	35K	,	Analysis D	ate:	02/03/2009 15:14	
Sample ID: 09012751-03AMSD	Units : mg/L		Run ID: IC	P/MS_09020)3A		Prep Date:	: (02/03/2009	
Analyte	Result	PQL		_		LCL(ME)	UCL(ME) RPD	RefV	al %RPD(Limit)	Qual
Chromium (Cr)	0.0509	0.005	5 0.05	0	102	80	120 0.	.0526	1 3.4(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.



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Method Blank File ID: 09020206.D Sample ID: MBLH Analyte Dichlorodifluorometha Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane Trichlorofluoromethane Freon-113 trans-1,2-Dichloroethene Dichloromethane Freon-113 trans-1,2-Dichloroethene 2-Butanone (MEK) cis-1,2-Dichloroethene Bromochloromethane (MEK) cis-1,2-Dichloroethene Bromochloromethane 1,1-Dichloroethene 1,2-Dichloroethene 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane Trichloroethene Bromodichloromethare 1,3-Dichloropropet trans-1,3-D	ne ene r (MTBE)	Units : µg/L Result ND ND ND ND ND ND ND ND ND ND ND ND ND	PQL 0.5 1 0.5 0.5 1 0.5 0.5 1 0.5	Batch II Run ID: MSD_1	D: MS15W020 5_090202B		Analysis Date: Prep Date: UCL(ME) RPDRef	02/02/2009 10:20 02/02/2009 Val %RPD(Limit)	Qui
File ID: 09020206.D Sample ID: MBLM Analyte Dichlorodifluorometha Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane Trichlorofluoromethane Freon-113 trans-1,2-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane 1,1-Dichloroethane 2,2-Dichloroethane 1,2-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane Trichloroethane 1,2-Dichloropropane trichloroethane 1,2-Dichloropropane Trichloroethane 1,2-Dichloropropane Trichloroethane 1,2-Dichloropropane Trichloroethane 1,3-Dichloropropane Toluene 1,3-Dichloropropane Dibromochloromethare 1,2-Dibromoethane (E Tetrachloroethene 1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	ane ne ene r (MTBE)	Result ND ND ND ND ND ND ND ND ND ND ND	PQL 0.5 1 0.5 0.5 1 0.5 0.5 1 0.5	Batch II Run ID: MSD_1	D: MS15W020 5_090202B		Prep Date:	02/02/2009	
Analyte Dichlorodifluorometha Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane Trichlorofluoromethane Freon-113 trans-1,2-Dichloroethene Preon-113 trans-1,2-Dichloroethene 2-Butanone (MEK) cis-1,2-Dichloroethene Bromochloromethane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane Trichloroethane 1,2-Dichloroptopane Sromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroptopane Tichloroethane 1,2-Dichloroptopane Dibromchloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroptopane Tichloroethane 1,2-Dibronoethane (E Tetrachloroethene 1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	ane ne ene r (MTBE)	Result ND ND ND ND ND ND ND ND ND ND ND	PQL 0.5 1 0.5 0.5 1 0.5 0.5 1 0.5			LCL(ME)	•		Qu
Dichlorodifluorometha Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane Trichlorofluoromethane Freon-113 trans-1,2-Dichloroethene Dichloromethane Freon-113 trans-1,2-Dichloroethene 2-Butanone (MEK) cis-1,2-Dichloroethene Bromochloromethane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane Trichloroethane 1,2-Dichloroptopane Sromodichloromethare 1,2-Dichloroptopane trans-1,3-Dichloroptopane Tichloroethane 1,2-Dichloroptopane Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloroptopane Trichloroethane Sromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroptopane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	ne ene r (MTBE)	Result ND ND ND ND ND ND ND ND ND ND ND	PQL 0.5 1 0.5 0.5 1 0.5 0.5 1 0.5			LCL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Qu
Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane Trichlorofluoromethane Freon-113 trans-1,2-Dichloroethane Attanane (MEK) cis-1,2-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane Chloroform 2,2-Dichloroptopane 1,2-Dichloroptopane 1,1-Trichloroethane 1,1-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane Trichloroethane 1,2-Dichloroptopane Trichloroethane Stromodichloromethare 4-Methyl-2-pentanone cis-1,3-Dichloroptopane Toluene 1,3-Dichloroptopane Dibromochloromethare 1,2-Dichloroptopane Toluene 1,3-Dichloroptopane Dibromochloromethare 1,2-Dibromoethane Carbon tetrachloroptopane trans-1,3-Dichloroptopane Dibromochloromethare 1,2-Dibromoethane Carbon tetrachloroethane Toluene 1,2-Dibromoethane Carbonethane Carbonethane Dibromochloromethare 1,2-Dibromoethane Carbonethane Chlorobenzene Ethylbenzene Bromoform	ne ene r (MTBE)	ND ND ND ND ND ND ND ND ND	0.5 1 0.5 0.5 1 0.5 0.5 1 0.5						
Chloromethane Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane Trichlorofluoromethane Freon-113 trans-1,2-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane Trichloroethane 1,2-Dichloroptopane Trichloroethane 8enzene Dibromomethane 1,2-Dichloroptopane Trichloroethane 1,3-Dichloroptopane trans-1,3-Dichloroptop 1,1,2-Trichloroethane 1,3-Dichloroptopane Dibromochloromethare 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	ne ene r (MTBE)	ND ND ND ND ND ND ND ND	1 0.5 0.5 1 0.5 0.5 1 0.5						
Vinyl chloride Chloroethane Bromomethane Trichlorofluoromethane Jichloromethane Freon-113 trans-1,2-Dichloroethem Methyl tert-butyl ether 1,1-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane Bromochloromethane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptopane Trichloroethane 1,2-Dichloroptopane Trichloroethane 1,2-Dichloroptopane trichloroethane 1,2-Dichloroptopane trichloroethane 1,3-Dichloroptopane trans-1,3-Dichloroptop trans-1,3-Dichloroptopane Toluene 1,3-Dichloroptopane Dibromochloromethare 1,2-Dibromoethane (E Tetrachloroethene thylbenzene Ethylbenzene m,p-Xylene Bromoform	ene r (MTBE)	ND ND ND ND ND ND ND	0.5 0.5 1 0.5 0.5 1 0.5						
Bromomethane Trichlorofluoromethane Trichlorofluoromethane Dichloromethane Freon-113 trans-1,2-Dichloroethe Methyl tert-butyl ether 1,1-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethene Bromochloromethane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane Trichloroethane 1,2-Dichloropropane Trichloroethane Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroprop trans-1,3-Dichloroprop 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	ene r (MTBE)	ND ND ND ND ND ND	1 0.5 0.5 1 0.5						
Trichlorofluoromethan 1,1-Dichloroethene Dichloromethane Freon-113 trans-1,2-Dichloroethene Authyl tert-butyl ether 1,1-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethene Bromochloromethane 1,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropane 1,1-Trichloroethane 1,2-Dichloropropane 1,2-Dichloropropane Trichloroethene Bromodichloromethare 1,2-Dichloropropane trichloroethene Bromodichloromethare 1,3-Dichloropropa trans-1,3-Dichloroprop 1,1,2-Trichloroethane 1,2-Dibromoethane 1,2-Dibromoethare 1,3-Dichloropropane Tichloroethene Bromochloromethare 1,2-Dibromoe	ene r (MTBE)	ND ND ND ND ND	0.5 0.5 1 0.5						
1,1-Dichloroethene Dichloromethane Freon-113 trans-1,2-Dichloroethen Methyl tert-butyl ether 1,1-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane Chloroform 2,2-Dichloropthane 1,2-Dichloropthane 1,1-Trichloroethane 1,1-Trichloroethane 1,1-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane 1,2-Dichloropthane trans-1,3-Dichloropthane 1,3-Dichloropthane 1,3-Dichloropthane Dibromochloromethar 1,2-Dibromoethane 1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	ene r (MTBE)	ND ND ND ND	0.5 1 0.5						
Dichloromethane Freon-113 trans-1,2-Dichloroethe Methyl tert-butyl ether 1,1-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane Chloroform 2,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropthane 1,1-Trichloroethane 1,1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,2-Dibromoethane 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	r (MTBE)	ND ND ND	1 0.5						
Freon-113 trans-1,2-Dichloroethe Methyl tert-butyl ether 1,1-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane Chloroform 2,2-Dichloropropane 1,2-Dichloropropane 1,2-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloropropet trans-1,3-Dichloropropet trans-1,3-Dichloropropet trans-1,3-Dichloropropet trans-1,3-Dichloropropet trans-1,3-Dichloropropet trans-1,2-Dichl	r (MTBE)	ND ND	0.5						
trans-1,2-Dichloroethe Methyl tert-butyl ether 1,1-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane Chloroform 2,2-Dichloroptopane 1,2-Dichloroptopane 1,2-Dichloroptoethane 1,1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloroptopane Trichloroethene Bromodichloroptopane cis-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,3-Dichloroproper trans-1,2-Dichloroptopane Dibromochloromethare 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	r (MTBE)	ND							
1,1-Dichloroethane 2-Butanone (MEK) cis-1,2-Dichloroethane Bromochloromethane Chloroform 2,2-Dichloroptropane 1,2-Dichloroethane 1,1-Trichloroethane 1,1-Dichloroptropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloroptropane Trichloroethene Bromodichloromethare 4-Methyl-2-pentanone cis-1,3-Dichloroptropet trans-1,3-Dichloroptropet trans-1,3-Dichloroptropet 1,1,2-Trichloroethane 1,3-Dichloroptropane Dibromochloromethare 1,2-Dibromoethane (E Tetrachloroethene 1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	. ,		0.5						
2-Butanone (MEK) cis-1,2-Dichloroethane Bromochloromethane Chloroform 2,2-Dichloroptropane 1,2-Dichloroethane 1,1-Trichloroethane 1,1-Dichloroptropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloroptropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroptropet trans-1,3-Dichloroptropet trans-1,3-Dichloroptropet 1,3-Dichloroptropet and 1,2-Dichloroptropet trans-1,3-Dichloroptropet trans-1,3-Dichloroptropet trans-1,3-Dichloroptropet trans-1,3-Dichloroptropet 1,1,2-Trichloroethane Cluene 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	e		0.5						
cis-1,2-Dichloroethene Bromochloromethane Chloroform 2,2-Dichloroptopane 1,2-Dichloroethane 1,1-Trichloroethane 1,1-Dichloroptopene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloroptopane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroptopet trans-1,3-Dichloroptopet trans-1,3-Dichloroptopet 1,3-Dichloroptopane Dibromochloromethare 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	e	ND	0.5						
Bromochloromethane Chloroform 2,2-Dichloropropane 1,2-Dichloropropane 1,1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloropropei trans-1,3-Dichloropropei trans-1,3-Dichloropropei trans-1,3-Dichloropropei trans-1,3-Dichloropropei 1,1,2-Trichloroethane Ciberne 1,3-Dichloropropane Dibromochloromethare 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	e	ND	10						
Chloroform 2,2-Dichloropropane 1,2-Dichloropropane 1,1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroprope trans-1,3-Dichloroprope trans-1,3-Dichloroprop 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
2,2-Dichloropropane 1,2-Dichloropropane 1,1-Trichloroethane 1,1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroprope trans-1,3-Dichloroprope trans-1,3-Dichloroprope 1,1,2-Trichloroethane Dibromochloromethane 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND ND	0.5						
1,2-Dichloroethane 1,1,1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroprope trans-1,3-Dichloroprope 1,1,2-Trichloroethane Dibromochloromethane 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND ND	0.5 0.5						
1,1,1-Trichloroethane 1,1-Dichloropropene Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroprope trans-1,3-Dichloroprope trans-1,3-Dichloropropane Dibromochloromethane 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Carbon tetrachloride Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroprope trans-1,3-Dichloroprope 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Benzene Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroprope trans-1,3-Dichloroprope trans-1,3-Dichloropropane Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Dibromomethane 1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloropropertrans-1,3-Dichloropropertrans-1,3-Dichloropropertrans-1,3-Dichloropropane 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,2-Tetrachloroett Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
1,2-Dichloropropane Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroproper trans-1,3-Dichloroproper 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Trichloroethene Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloroproper trans-1,3-Dichloroproper 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethare 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Bromodichloromethar 4-Methyl-2-pentanone cis-1,3-Dichloropropel trans-1,3-Dichloropropel 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND ND	0.5 0.5						
4-Methyl-2-pentanone cis-1,3-Dichloroprope trans-1,3-Dichloroprop 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	ne	ND	0.5						
trans-1,3-Dichloroprog 1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethan 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	2.5						
1,1,2-Trichloroethane Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Toluene 1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
1,3-Dichloropropane Dibromochloromethar 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Dibromochloromethan 1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
1,2-Dibromoethane (E Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform	ne	ND ND	0.5 0.5						
Tetrachloroethene 1,1,1,2-Tetrachloroeth Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Chlorobenzene Ethylbenzene m,p-Xylene Bromoform		ND	0.5						
Ethylbenzene m,p-Xylene Bromoform	nane	ND	0.5						
m,p-Xylene Bromoform		ND	0.5						
Bromoform		ND	0.5						
		ND	0.5						
		ND ND	0.5 0.5						
o-Xylene		ND	0.5						
1,1,2,2-Tetrachloroeth	nane	ND	0.5						
1,2,3-Trichloropropan	e	ND	1						
Isopropylbenzene		ND	0.5						
Bromobenzene		ND	0.5						
n-Propylbenzene 4-Chlorotoluene		ND ND	0.5						
2-Chlorotoluene		ND	0.5 0.5						
1,3,5-Trimethylbenzei	ne	ND	0.5						
tert-Butylbenzene		ND	0.5						
1,2,4-Trimethylbenzer	ne	ND	0.5						
sec-Butylbenzene		ND	0.5						
1,3-Dichlorobenzene		ND	0.5						
1,4-Dichlorobenzene 4-Isopropyltoluene		ND	0.5						
1,2-Dichlorobenzene		ND ND	0.5 0.5						
n-Butylbenzene		ND	0.5						
1,2-Dibromo-3-chloro	propane (DBCP)	ND	2.5						
1,2,4-Trichlorobenzer		ND	1						
Naphthalene		ND	1						
Hexachlorobutadiene		ND	1						
1,2,3-Trichlorobenzer Surr: 1,2-Dichloroetha		ND	1	40	~~	70	130		
Surr: 1,2-Dichloroetha Surr: Toluene-d8	ne	9.89		10 10	99	70	130		



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Date: 06-Feb-09	(QC Sumn	nary	Report			Work Ord 0901275	
Surr: 4-Bromofluorobenzene	9.92		10	99	70	130		
Laboratory Control Spike File ID: 09020204.D Sample ID: LCS MS15W0202M	Lipito :	Type LCS	Batc	Code: h ID: MS15W020	2M	Analysis Da Prep Date:	ite: 02/02/2009 09:20 02/02/2009	
Analyte	Units : µg/L Result			_15_090202B	LCL(ME)		RefVal %RPD(Limit)	Qual
Dichlorodifluoromethane	8.04	<u>1 QL 5pi</u>	10	80	70	130		
Chloromethane	8.63	2	10	86	70	130		
Vinyl chloride	9.95	1	10	100	70	130		
Chloroethane Bromomethane	8.65	1	10	87	70	130		
Trichlorofluoromethane	8.44 10	2 1	10 10	84 100	70 70	130 130		
1,1-Dichloroethene	10.1	1	10	101	70	130		
Dichloromethane	9.76	2	10	98	70	130		
trans-1,2-Dichloroethene	10.5	1	10	105	70	130		
Methyl tert-butyl ether (MTBE) 1,1-Dichloroethane	10.3 10.3	0.5 1	10 10	103 103	62 70	136 130		
cis-1,2-Dichloroethene	10.6	1	10	106	70	130		
Bromochloromethane	10.8	1	10	108	70	130		
Chloroform	9.55	1	10	96	70	130		
2,2-Dichloropropane 1,2-Dichloroethane	8.77 10.1	1	10 10	88 101	70 70	130 130		
1,1,1-Trichloroethane	9.99	1	10	99.9	70	130		
1,1-Dichloropropene	10.7	1	10	107	70	130		
Carbon tetrachloride	9.39	1	10	94	70	130		
Benzene Dibromomethane	9.78	0.5	10	98	70 70	130		
1,2-Dichloropropane	10.8 10.3	1	10 10	108 103	70 70	130 130		
Trichloroethene	10.7	1	10	100	70	130		
Bromodichloromethane	10.3	1	10	103	70	130		
cis-1,3-Dichloropropene	10.6	1	10	106	70	130		
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	10.6 9.88	1 1	10 10	106 99	70 70	130 130		
Toluene	9.65	0.5	10	97	70	130		
1,3-Dichloropropane	9.6	1	10	96	70	130		
Dibromochloromethane	10	1	10	100	70	130		
1,2-Dibromoethane (EDB) Tetrachloroethene	19.3 9.9	2 1	20 10	96 99	70 70	130 130		
1,1,1,2-Tetrachloroethane	9.54	1	10	99 95	70	130		
Chlorobenzene	9.45	1	10	95	70	130		
Ethylbenzene	9.63	0.5	10	96	70	130		
m,p-Xylene Bromoform	9.82	0.5 1	10	98	70 70	130 130		
Styrene	9.17 9.72	1	10 10	92 97	70	130		
o-Xylene	9.53	0.5	10	95	70	130		
1,1,2,2-Tetrachloroethane	8.76	1	10	88	70	130		
1,2,3-Trichloropropane	17.8	2	20	89	70	130		
lsopropylbenzene Bromobenzene	9.68 9.47	1 1	10 10	97 95	70 70	130 130		
n-Propylbenzene	9.78	1	10	98	70	130		
4-Chlorotoluene	9.82	1	10	98	70	130		
2-Chlorotoluene	9.63	1	10	96	70 70	130		
1,3,5-Trimethylbenzene tert-Butylbenzene	9.42 9.17	1	10 10	94 92	70 70	130 130		
1,2,4-Trimethylbenzene	9.68	1	10	97	70	130		
sec-Butylbenzene	9.23	1	10	92	70	130		
1,3-Dichlorobenzene	9.42	1	10	94	70	130		
1,4-Dichlorobenzene 4-Isopropyltoluene	9.08 9.45	1 1	10 10	91 95	70 70	130 130		
1,2-Dichlorobenzene	9.12	1	10	91	70	130		
n-Butylbenzene	9.6	1	10	96	70	130		
1,2-Dibromo-3-chloropropane (DBCP)	45.6	3	50	91	70	130		
1,2,4-Trichlorobenzene Naphthalene	10.1 9.39	2 2	10	101 94	70 70	130 130		
Hexachlorobutadiene	9.39 17.7	2	10 20	94 89	70	130		
1,2,3-Trichlorobenzene	10.3	2	10	103	70	130		
Surr: 1,2-Dichloroethane-d4	9.41		10	94	70	130		
Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	10		10	100	70 70	130		
	9.79		10	98	70	130		



Alpha Analytical, Inc.

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Date: 06-Feb-09 QC Summary R								Work Ord 0901275		
Sample Matrix Spike		Type MS		est Code:						
File ID: 09020207.D				atch ID: MS1		02M	•	te: 02/02/2009 10:42		
Sample ID: 09012740-04AMS	Units : µg/L	F	Run ID: M	SD_15_0902	202 B		Prep Date:	02/02/2009		
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDR	efVal %RPD(Limit)	Qua	
Dichlorodifluoromethane	46.1	2.5	50	0	92	13	167			
Chloromethane	42.9	10	50	0	86	28	145			
Vinyl chloride	49.6	2.5	50	0	99	43	134			
Chloroethane	41.5	2.5	50	0	83	39	154			
Bromomethane	47.5	10	50	0	95	19	176			
Trichlorofluoromethane	47.2	2.5	50	0	94	34	160			
1,1-Dichloroethene Dichloromethane	45	2.5	50	0	90	60 60	130			
trans-1,2-Dichloroethene	45.6 47.8	10 2.5	50 50	0 0	91 96	68 63	130 130			
Methyl tert-butyl ether (MTBE)	47.8	1.3	50 50	0	90 96	56	141			
1,1-Dichloroethane	48.1	2.5	50	0	96	61	130			
cis-1,2-Dichloroethene	49.6	2.5	50	Ő	99	70	130			
Bromochloromethane	51.6	2.5	50	Ő	103	70	130			
Chloroform	44.7	2.5	50	0	89	67	130			
2,2-Dichloropropane	42.7	2.5	50	0	85	30	152			
1,2-Dichloroethane	47.4	2.5	50	0	95	60	135			
1,1,1-Trichloroethane	46.5	2.5	50	0	93	59	137			
1,1-Dichloropropene	48.2	2.5	50	0	96	63	130			
Carbon tetrachloride Benzene	43.9	2.5	50	0	88	50 67	147			
Dibromomethane	45.1 50.4	1.3 2.5	50 50	0	90 101	67 69	130 133			
1,2-Dichloropropane	48.4	2.5 2.5	50 50	0	97	69	130			
Trichloroethene	47.7	2.5	50	0	95	69	130			
Bromodichloromethane	48.8	2.5	50	0 0	98	66	134			
cis-1,3-Dichloropropene	49.4	2.5	50	Ō	99	63	130			
trans-1,3-Dichloropropene	48.7	2.5	50	0	97	66	131			
1,1,2-Trichloroethane	46.2	2.5	50	0	92	68	130			
Toluene	43.8	1.3	50	0	88	66	130			
1,3-Dichloropropane	43.9	2.5	50	0	88	70	130			
Dibromochloromethane	46.4	2.5	50	0	93	70	130			
1,2-Dibromoethane (EDB) Tetrachloroethene	89.7 43.9	10	100 50	0	90 88	70 61	130 134			
1,1,1,2-Tetrachloroethane	43.9	2.5 2.5	50 50	0	00 89	70	130			
Chlorobenzene	44.4	2.5	50	0	89	70	130			
Ethylbenzene	44.6	1.3	50	0.51	88	68	130			
m,p-Xylene	44.9	1.3	50	0	90	64	130			
Bromoform	43.1	2.5	50	0	86	64	138			
Styrene	45.9	2.5	50	0	92	69	130			
o-Xylene	44.7	1.3	50	0	89	70	130			
1,1,2,2-Tetrachloroethane	41.4	2.5	50	0	83	65	131			
1,2,3-Trichloropropane Isopropylbenzene	82.3	10	100	0	82	70	130			
Bromobenzene	45.8 46	2.5 2.5	50 50	0.52 0	91 92	64 70	138 130			
n-Propylbenzene	40	2.5 2.5	50 50	0	92 91	66	132			
4-Chlorotoluene	47.4	2.5	50	0	95	70	130			
2-Chlorotoluene	47	2.5	50	õ	94	70	130			
1,3,5-Trimethylbenzene	45.3	2.5	50	Ó	91	66	136			
tert-Butylbenzene	43.8	2.5	50	0	88	65	137			
1,2,4-Trimethylbenzene	46.1	2.5	50	0	92	65	137			
sec-Butylbenzene	44.2	2.5	50	0	88	66	134			
1,3-Dichlorobenzene	45.8	2.5	50	0	92	70	130			
1,4-Dichlorobenzene	43.6	2.5	50	0	87	70	130			
4-Isopropyltoluene 1,2-Dichlorobenzene	45.2 44	2.5 2.5	50 50	0	90 88	66 70	137 130			
n-Butylbenzene	44 46.2	2.5 2.5	50 50	0	92	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	221	15	250	0	89	67	130			
1,2,4-Trichlorobenzene	50.9	10	50	0	102	61	137			
Naphthalene	55.9	10	50	10.17	91	40	167			
Hexachlorobutadiene	87.2	10	100	0	87	61	130			
1,2,3-Trichlorobenzene	50.3	10	50	0	101	51	144			
Surr: 1,2-Dichloroethane-d4	47.6		50		95	70	130			
Surr: Toluene-d8	50		50		100	70	130			
Surr: 4-Bromofluorobenzene	50		50		100	70	130			



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Dample Matrix Splice Duplicate Type M90 Tot (Colver) Analysis Date: 0.2022/00 911:04 Sample ID: 09012740-04AMSD Units: ppL Epsk/bit Splice Dice: 0.2022/00 911:04 Columbre Dice: Columbre Dice:<	Date: _06-Feb-09	(QC Si	ummary	Report	L V				Work Orde 09012751	
Sample ID: 69012740-04AMSD Value Fund ID: MSD ID: Status 1.1-10-10000000000000000000			Туре М			5W020)2M	Analys	sis Date: 0	2/02/2009 11:04	
Analysim Result POL Spikerival SkEED LCL/WEI UCL/WEI PCDReVal %R2POLIMB() Out Unitaronalization 441 2.5 60 84 13 147 46.07 3.7(20) Unitaronalization 442 2.5 60 0 84 13 147 46.07 3.7(20) Unitaronalization 42.1 2.5 60 0 84 39 154 41.5 1.4(20) Emmomethane 42.1 2.5 60 0 84 39 154 41.5 1.4(20) Emmomethane 42.1 2.5 60 0 82 06 130 44.183 1.120 Labelitocalibrane 44.8 1.3 0 98 66 133 48.06 0.2(20) Labelitocalibrane 49.2 2.5 60 98 67 130 49.66 0.8(20) Labelitocalibrane 49.2 2.5 60 96 61 133 44.17 1.10	Sample ID: 09012740-04AMSD	Units : ua/L						-			
Dicktornelhane 44.4 2.5 60 0 89 13 467 40.7 37.020 Viny chorde 46.5 2.5 50 0 93 43 134 46.5 42.0 56 0.0 93 43 134 46.5 1.420 Chicroshane 42.1 2.5 50 0 94 47.5 0.4200 Trichforduromethane 42.1 2.5 50 0 84 39 77.5 0.4200 Linkidromethane 42.1 2.5 50 0 84 130 47.63 1.9200 Methy tart-survival share 46.8 2.5 50 0 98 61 130 48.68 0.8200 Inicitionethane 48.2 2.5 50 0 98 63 141 7.88 0.8200 Inicitionethane 42.2 2.5 50 0 98 67 130 45.63 0.8200 Inicinicitionethane	·						LCL(ME)	•			Qual
Chicomethane 42,1 10 50 0 84 28 145 42,9 18,200 Viny chinoine 42,1 2,5 50 0 84 39 154 42,10 1,4200 Erronmethane 47,7 10 50 0 91 34 100 42,10 34,200 Erronmethane 46,1 2,5 50 0 92 68 130 45,40 1,120 Linking contention 46,8 1,3 50 0 98 56 11 30 48,55 0,200 Linking contention 43 2,5 50 0 98 70 130 48,55 0,820 Linking contention 44 2,5 50 0 98 70 30 44,73 16,203 Linking contention 42,2 2,5 50 0 93 63 130 44,73 3,503 Linking contentention 43,2 50 <t< td=""><td>Dichlorodifluoromethane</td><td>44.4</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>• •</td><td></td></t<>	Dichlorodifluoromethane	44.4								• •	
Chlorodname 42.1 2.5 50 0 84 39 164 41.5 1.4(20) Trichlorodnomethane 42.4 2.5 50 0 91 34 160 44.5 3.62(2) Liblionomethane 42.3 2.5 50 0 92 88 130 44.55 1.12(2) Dichloromethane 44.1 15 50 0 96 64 141 47.62 2.12(2) Li-Lichloromethane 48.8 1.5 50 0 98 70 130 48.66 0.2(2) Li-Lichloromethane 51.9 2.5 50 0 88 67 130 44.73 1.6(20) 2.2-Dichloromethane 42.2 50 0 88 67 130 44.74 1.6(20) 2.2-Dichloromethane 42.6 2.5 50 0 96 63 132 47.43 1.6(20) 2.2-Dichloromethane 42.6 2.5 50	Chloromethane										
Bromomethane 47,7 10 50 0 91 34 47,5 0 0.202 1.1-Lichloroshtene 42,9 2,5 50 0 91 34 160 47,16 3.9(20) Linabilloroshtene 46,1 10 50 0 92 68 130 45,52 1.1(20) Linabilloroshtene 46,3 2,5 50 0 98 53 141 47,83 1.9(20) Linabilloroshtene 42 2,3 50 0 98 53 130 46,4 0.8(20) Chiorotom 44 2,5 50 0 83 30 54,43 1.6(20) 2.2-Olchiorospiane 41,7 2,5 50 0 90 59 137 46,52 2,8(20) 1.2-Olchiorospiane 48,2 2,5 50 0 93 34 14,33 1,3(20) 1.2-Olchiorospiane 48,2 50 0 93 63											
Trichioroducomethane 45.4 2.5 50 0 91 34 100 47.16 3.9(20) Dichioromethane 46.1 10 50 0 22 68 130 47.52 1(103) Methy iterb-triviether 46.9 2.5 50 0 86 66 130 47.68 2.020) Methy iterb-triviether 48.2 2.5 50 0 86 66 130 46.65 0.202) cat-7.2-Dichorostinene 44.2 2.5 50 0 86 61 130 46.53 0.420) 2.2-Dichorostinene 44.2 2.5 50 0 83 31 45.52 2.820) 1.1-Tichiorostinene 45.2 2.5 50 0 83 63 130 44.81 3.520) 2.2-Dichorostinene 45.5 2.5 50 0 86 63 130 44.52 2.820) 1.1-Dichiorostinene 45.5 2.5											
1.1-Dickloroethene 42.9 2.5 50 0 66 60 130 44.95 4.7(2) Linkoroethene 46.9 2.5 50 0 94 63 130 45.2 1.1(2) Mathy Istr-Survival bate (MTEE) 48.8 1.3 50 0 96 61 130 44.06 0.2(2) 0:a-1.2.Dickloroethene 48.2 2.5 50 0 96 61 130 44.06 0.2(2) Dickloroethene 44.2 2.5 50 0 86 61 130 44.71 1.8(2) 2.2.Dickloroethene 44.2 2.5 50 0 83 83 137 44.71 1.8(2) 1.1-Dickloroethene 46.6 2.5 50 0 83 83 130 45.1 1.7(2) 1.1-Dickloroethene 46.4 2.5 50 0 87 69 133 5.7(2) 1.1-Dickloroethene 46.3 2.5 5											
Dickhoromethane 46,1 10 50 0 22 68 130 44.52 1.1(20) Methy lark-Lyc) ether (MTEE) 48.8 1.3 50 0 86 66 11 47.86 2.0(20) dist-Lochioroethene 49.2 2.5 50 0 86 70 130 44.60 0.2(20) Chioroethene 49.2 2.5 50 0 86 70 130 45.63 0.4(20) Chioroethene 44.2.4 2.5 50 0 86 67 130 44.73 1.6(20) 2.20Chioroethane 48.2 2.5 50 0 86 67 130 44.61 33(20) 1.20Chioroethane 48.2 2.5 50 0 83 63 130 44.81 33(20) 1.1-Trichioroethane 45.2 2.5 50 0 83 63 130 44.73 1.4(20) 1.2-Dichioroethane 45.3 2.5 <td></td>											
Methy lath-Luryl eth-Luryl eth-Lu	Dichloromethane										
1.1:Dicklorosethane 48 2.5 50 0 96 61 130 48.06 0.2(20) Bromachioromethane 51.9 2.5 50 0 140 70 130 51.33 0.4(20) Chloroform 44 2.5 50 0 83 30 152 42.71 2.5(20) 1.1.1.Techkorosethane 45.2 2.5 50 0 83 30 152 42.71 2.5(20) 1.1.1.Techkorosethane 45.2 2.5 50 0 85 50 137 46.52 2.6(20) 1.1.1.Dichkorosethane 42.5 2.5 50 0 85 50 147 43.91 3.5(20) Carbon tetrachloride 42.5 2.5 50 0 80 71 30 48.43 3.2(20) Dibromorethane 46.4 2.5 50 0 83 65 133 64.73 3.12(20) Dibromorethane 46.8 2.5 50 0 80 68 134 48.43 0.4(20) <tr< td=""><td></td><td>46.9</td><td>2.5</td><td></td><td>0</td><td>94</td><td></td><td>130</td><td></td><td></td><td></td></tr<>		46.9	2.5		0	94		130			
obs-12-bichloroethene 49.2 2.5 50 0 98 70 130 49.66 0.8(20) Chloroform 44 2.5 50 0 88 67 130 44.73 1.6(20) 2.2-Dichloropropane 44.7 2.5 50 0 95 60 60 42.71 2.5(20) 1.1-Dichloropropane 45.2 2.5 50 0 95 63 47.43 1.7(20) 1.1-Dichloropropane 46.6 2.5 50 0 89 67 130 45.11 1.8(20) Dibromomethane 51 2.5 50 0 97 69 130 48.43 0.4(20) 1.2-Dichloropropane 46.8 2.5 50 0 97 68 130 48.43 0.4(20) 1.2-Dichloropropane 46.8 2.5 50 98 66 130 43.79 2.2(0) Dichloropropane 46.8 2.5 50 98											
Bromochloromethane 51.9 2.5 50 0 0.4 70 51.83 0.4(20) 2.2-Dichloropropane 41.7 2.5 50 0 83 30 152 42.71 2.5(20) 1.2-Dichloropropene 45.2 2.5 50 0 96 59 133 46.52 2.8(20) 1.1-Dichloropropene 45.6 2.5 50 0 85 50 147 43.91 3.3(20) Carbon tetrachloride 42.5 2.5 50 0 85 50 147 43.91 3.3(20) Derxonce 44.4 1.5 50 0 102 69 133 64.31 1.1(20) Dibromorchinomethane 45.3 2.5 50 0 99 63 130 44.42 1.1(20) Carbon tetrachloromethane 45.8 2.5 50 0 92 68 130 45.72 2.1(20) Tricholorophypene 45.8 2.5											
Chlorodrm 44 2.5 50 0 88 67 130 44.73 1.5(2) 1.2-Dichloropena 41.7 2.5 50 0 96 60 135 47.43 1.7(2) 1.1-Tichloropena 45.2 2.5 50 0 90 59 137 45.52 2.8(20) Carlson tetrachoide 42.5 2.5 50 0 85 50 147 43.91 3.3(20) Diaron tetrachoide 42.5 50 0 97 69 133 45.43 0.4(20) 1/2-Dichloropropane 48.3 2.5 50 0 98 63 130 44.43 2.2(20) 1/2-Tichloropropane 48.9 2.5 50 0 92 68 130 44.73 2.2(20) 1/2-Tichloropropane 49.9 2.5 50 0 92 68 130 44.23 3.2(20) 1/1-2-Tichloropropane 43.8 1.3 50					-						
2.2.Dichlaropropane 41.7 2.5 50 0 83 30 152 42.7.1 2.5(20) 1.1.1-Tachlaropropane 45.2 2.5 50 0 90 59 137 46.52 2.6(20) 1.1.1-Dichlaropropane 42.5 2.5 50 0 85 50 137 45.11 3.5(20) Carbon letrachloride 42.5 2.5 50 0 80 67 130 45.11 1.5(20) Dibromonichlaroe 46.4 2.5 50 0 97 69 130 44.83 0.4(20) L2-Dichlaropropane 48.3 2.5 50 0 98 66 134 48.79 2.8(20) Dioromochinoroptane 48.9 2.5 50 0 98 66 130 44.42 1.1(20) Lans-1.3-Dichloroptoptane 43.8 2.5 50 0 97 66 131 48.73 3.2(20) Dibromochinoroptane 43.8 2.5 50 0 96 70 130 44.42 3.2(20											
1,1-Trichiorophane 45,2 2,5 50 90 90 93 93 137 44,52 2,8(20) Carbon letrachloride 42,5 2,5 50 0 85 50 147 43,91 3,3(20) Denzene 44,4 1.3 50 0 89 67 130 45,11 16(20) Dibromomethane 51 2,5 50 0 97 69 130 44,43 0.4(20) Trichioroethane 48,8 2,5 50 0 98 66 134 44,79 0.0(20) cla-1,3-Dichioropropene 48,9 2,5 50 0 98,7 68 130 44,52 0.0(20) 1,12-Trichioroethane 45,9 2,5 50 0 98,7 68 13 46,22 0.7(20) 1,12-Trichioroethane 45,9 2,5 50 0 98,7 70 130 44,42 3.2(20) 1,3-Dichioropropane 45,3 2,5 50 0 91 70 130 44,37 18(20) </td <td>2,2-Dichloropropane</td> <td></td>	2,2-Dichloropropane										
1,1-Dichloropropene 48.6 2.5 50 0 93 63 130 48.19 3.5(20) Benzene 44.4 1.3 50 0 85 50 174 43.91 3.3(20) Benzene 44.4 1.3 50 0 89 71 130 45.11 1.6(20) 1,2-Dichlorophopane 48.3 2.5 50 0 97 69 130 44.43 0.4(20) Trichloroethene 48.8 2.5 50 0 98 63 130 44.42 0.1(20) Ean-J.Dichloropropene 48.9 2.5 50 0 98 63 130 44.22 0.7(20) Toluene 45.8 1.3 50 0 98 63 130 45.22 0.7(20) Toluene 45.8 1.3 50 0 96 130 45.22 0.7(20) Toluene 45.3 2.5 50 0 96 130 46.42 3.2(20) Dibromochloromethane 45.3 2.5	,	48.2	2.5	50	0	96					
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255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778 (775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: 06-Feb-09

QC Summary Report

Work Order: 09012751

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 :			Page:	2 of 2
Battelle	CHAIN-OF-G	HAIN-OF-CUSIODY RECORD	CA	
505 King Avenue Columbus, OH 43201	Alpha 255 Glendale Avenue	Alpha Analytical, Inc. 255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778	WorkOrder: BM109012751 Report Due By: 5:00 PM On: 10-Feb-09	-Feb-09
Client	Report Attention Phone Numbe	- -		
Battelle Memorial Institute	David Conner (619) 574-4827	74-4827 x connerd@battelle.org		
505 King Avenue	Betsy Cutie (614) 424-4899	24-4899 x cutice@batelle.org	EDD Required : Yes	
Columbus, OH 43201	Shane Walton (614) 42	(614) 424-4117 x waltons@battelle.org	Sampled by : Client	
PO: 218013			Cooler Temp Samples Received	Date Printed
Client's COC #: 24142, 24143	Job : G005862/JPL Groundwater Monitoring	hitoring	4 °C 27-Jan-09	27-Jan-09
QC Level : S4 = Final Rpt, MBLK, I	Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates	Surrogates		
			1 Tests	- - - - - - -
Sample ID Sample ID	Matrix Date Alpha Sub TAT		Sample	Sample Remarks
BMI09012751-11A MW-21-2	AQ 01/23/09 5 0 10 09:48	0 Perchlorate Cr VOC by 524 VOC by 524 Criteria Criteria		
BMI09012751-12A MW-21-1	AQ 01/23/09 5 0 10 10:25	O Perchlorate Cr VOC by 524 VOC by 524 Criteria Criteria		
BMI09012751-13A DUPE-01-1Q09	AQ 01/23/09 5 0 10 00:00	0 Perchlorate Cr VOC by 524 VOC by 524 Criteria Criteria	Duplicate. S off sampli	Duplicate. Sample ID taken off sampling containers.
BMI09012751-14A EB-01-1/23/09	AQ 01/23/09 5 0 10 10:10	0 Perchlorate Cr VOC by 524 VOC by 524 Criteria Criteria	Equipment B as EB-01 in per sampli	Equipment Blank. Logged in as EB-01 instead of EB-1, per sampling containers.
BMI09012751-15A TB-01-1/23/09	AQ 01/23/09 1 0 10 00:00 1	0 VOC by 524 VOC by 524 Criteria Criteria	Reno TB, 1// bubble >6mr TB-01 inste samplinç	Reno TB, 1/6/09 rec'd w/ air bubble >6mm. Logged in as TB-01 instead of TB-1, per sampling containers.
Logged in by:	Signature MMM ASN	Kuer) V (ANXU)	Julian Kula VI (JUN) Alpha Analytical, Inc. 1/27/07 1	Date/Time
NOTE: Samples are discarded 60 The report for the analysis of the above sa Matrix Type : AQ(Aqueous) AR(Air) SC	NOTE: Samples are discarded 60 days after results are reported unless other arrangem. The report for the analysis of the above samples is applicable only to those samples received by Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other)	er arrangements are made. Hazardous sample s received by the laboratory with this COC. The OT(Other) Bottle Type: L-Liter V-Voa	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	c OT-Other

				•
Billing Information: Name GETATE TOMPKINS	Alpha 255 Gler	Alpha Analytical, Inc. Az	AZCA X VVWA Page #	24142
s <u>505 KING</u> ate, Zip Columitys	Sparks, Phone (nalvses Beguired	
Phone Number Fax				
Client Name DAULY CAN VEIL	P.O.# 218013	10 298500-9 # 40r		Required QC Level?
IV J	EMail Address			" (III) IV
s CN	Phone # 6/9-726-73()	Fax #		YES NO
Date Matrix* Sample	ň	of		
<u>a</u>	Sample Description	TAT Field "See below / 9	9 01 / / / REM.	REMARKS
0859 1/260 AQ FANEDGIO12751 01	MW-14-5	X A	×	
		X A	X QC LEVEL	H B
		J X X	×	
1042 -04	Mw-14-2		×	
-95	MW-14-1	XX	×	
0 D-	67-02-01/26/09	XX	X Eanpuert	TBLANK
	TB-02-01/26/09	1 ×	TRIP GLANK	۲۴ ۱۴
ADDITIONAL INSTRUCTIONS:				
Signature ,	Print Name	Company	ny Date	Time
Relinguiphedby	CHASE BROGDON	INSIGIT IS	LEECT 01/26/09	1360
Received by Use ' With an area	Man 1) UUMXXX	HIPMOL	CO1271	10035
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	ste OT - Other AR - Air ** I re reported unless other arrangements are ma	**: L-Liter V-Voa S-Soil Jar O-Orbo e made. Hazardous samples will be returned to cl	 T-Tedlar B-Brass P-Plastic lient or disposed of at client expense. The repor 	OT-Other rt 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.	les received by the laboratory with this coc.	he liability of the laboratory is limited to the a	amount paid for the report.	

nformation:	Alpha 255 Gienn	₽ . ?	Samples Collected From Which State? AZCA YNVWAPag IDOROTHERPag	Which State? 24143 WA Page # of
Address <u>5 C KINC AVE</u> City, State, Zip <u>Co LUMI3u5</u> OH 43 Zo I Phone Number Fax	Phone (7) Fax (775	Sparks, Nevada 03451-5770 Phone (775) 355-1044 Fax (775) 355-0406	Analyses Required	ed
UD CONNER	5013	2925009 # gor	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Required QC Level?
Ľ l	EMail Address		-60	/ / II (III) IV
XEGO, CA 921/0	- 726- 7311	Fax #		EDD / EDF? YES NO
Sampled by	Report Attention	Total and type of		Global ID #
Sampled Sampled Below Lab ID Number (Use Only)	Sample Description	TAT Filed ** See below		REMARKS
812 /2/ A & BMEDAO12751 -08	MW-21-5	× J	×	
	MW-21-4	- -	×	
-10	MW-21-3	×	××	
9-11 - 11	MW-21-2	×	XX	
1025 -12	MW-21-1	×	X	
<u>c</u> 1-	DUDE1909		×	DUPICATE
10/0 - IA	EB-1-1/2269	e X	×	EQUIP. BLANK
-	TB-1-1/23/25			TICIP BLANK
			-	
ADDITIONAL INSTRUCTIONS.				
Signature	Print Name		Company	Date 075 Time
T T	- CAKE BUGDO	1 INSULA	LOGO L	1/23/09 \$1300
Relinquested by	Taug John MAN	QHA H	Ma	1/27/07/02
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	e OT - Other AR - Air **: L-Liter	Liter V-Voa S-Soil Jar	O-Orbo T-Tedlar B-Brass	ss P-Plastic OT-Other

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.



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

Date: 03-Feb-09 David Conner Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 (619) 574-4827

CASE NARRATIVE

oject:	G005862/JPL Gro	undwater Monitoring		
ork Order:	BMI09012803		Cooler Temp:	4 °C
Alpha's	Sample ID	Client's Sample ID	Matrix	
09012	2803-01A	MW-19-5	Aqueous	
09012	2803-02A	MW-19-4	Aqueous	
09012	2803-03A	MW-19-3	Aqueous	
09012	2803-04A	MW-19-2	Aqueous	
09012	2803-05A	MW-19-1	Aqueous	
09012	2803-06A	EB-03-1/27/09	Aqueous	
09012	2803-07A	TB-03-1/27/09	Aqueous	
	· · · · · · · · · · · · · · · · · · ·	Manually Integrat	ed Analytes	на н
<u>Alpha's Sa</u>	mple ID	<u>Test Reference</u>		Analyte
090128	03-01A	EPA Method 314.0		Perchlorate
0901280	03-02A	EPA Method 314.0		Perchlorate
090128	03-03A	EPA Method 314.0		Perchlorate
090128	03-04A	EPA Method 314.0		Perchlorate
090128	03-05A	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/Chainof-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.

Walter Acrim Kandy Saulun Roger Scholl

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 / info@alpha-analytical.com 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.



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

 Date Received : 01/28/09

Job#: G005862/JPL Groundwater Monitoring

			Perchlorate by Ion Chromatography EPA Method 314.0		
		Parameter	Concentration	Reporting Limit	Date Date Sampled Analyzed
Client ID : Lab ID :	MW-19-5 BMI09012803-01A	Perchlorate	2.62	1.00 µg/L	01/27/09 01/28/09
Client ID : Lab ID : Client ID :	MW-19-4 BMI09012803-02A MW-19-3	Perchlorate	2.78	1.00 μg/L	01/27/09 01/28/09
Lab ID :	BMI09012803-03A	Perchlorate	2.90	1.00 µg/L	01/27/09 01/28/09
Lab ID :	MW-19-2 BMI09012803-04A	Perchlorate	5.16	1.00 µg/L	01/27/09 01/28/09
Client ID : Lab ID :	MW-19-1 BMI09012803-05A	Perchlorate	5.32	1.00 µg/L	01/27/09 01/28/09
Client ID : Lab ID :	EB-03-1/27/09 BMI09012803-06A	Perchlorate	ND	1.00 µg/L	01/27/09 01/28/09

ND = Not Detected

Roger Scholl

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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 / info@alpha-analytical.com 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.

2/10/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute	Attn:	David Conner
505 King Avenue	Phone	: (619) 574-4827
Columbus, OH 43201	Fax:	(614) 458-6641
Job#: G005862/JPL Groundwater Monitoring		

Tentatively Identified Compounds - Volatile Organics by GC/MS

	* *** * * * * * * * * * * * * * * * *	Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID : Lab ID :	MW-19-5 BMI09012803-01A	* * * None Found * * *	ND	2.0 µg/L	01/28/09	01/27/09	02/03/09
Client ID : Lab ID :	MW-19-4 BMI09012803-02A	* * * None Found * * *	ND	2.0 µg/L	01/28/09	01/27/09	02/03/09
Client ID : Lab ID :	MW-19-3 BM109012803-03A	* * * None Found * * *	ND	2.0 µg/L	01/28/09	01/27/09	02/03/09
Client ID : Lab ID :	MW-19-2 BMI09012803-04A	* * * None Found * * *	ND	2.0 µg/L	01/28/09	01/27/09	02/03/09
Client ID : Lab ID :	MW-19-1 BMI09012803-05A	* * * None Found * * *	ND	2.0 µg/L	01/28/09	01/27/09	02/03/09
Client ID : Lab ID :	EB-03-1/27/09 BM109012803-06A	*** None Found ***	ND	2.0 µg/L	01/28/09	01/27/09	02/03/09
Client ID : Lab ID :	TB-03-1/27/09 BMI09012803-07A	*** None Found ***	ND	2.0 µg/L	01/28/09	01/27/09	02/03/09

Note: Analysis conducted using EPA Method 524.2 criteria. ND = Not Detected

Roger Scholl Kandy Danlmer

Walter 4

2/10/09 Report Date Page 1 of 1

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 / info@alpha-analytical.com

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.



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012803-01A Client I.D. Number: MW-19-5

David Conner Attn: Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/27/09 Received: 01/28/09 Analyzed: 02/03/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
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	ug/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 (DBC	P) 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	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(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					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

ulmer. Kandyt 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 / info@alpha-analytical.com

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.

lter Arihm Do

2/10/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012803-02A Client I.D. Number: MW-19-4 Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641

Sampled: 01/27/09 Received: 01/28/09 Analyzed: 02/03/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
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 (DBC	P) 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	102	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(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					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kanda Santner

Walter Arihm

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 / info@alpha-analytical.com

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Report Date Page 1 of 1



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012803-03A Client I.D. Number: MW-19-3
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

Sampled: 01/27/09 Received: 01/28/09

Analyzed: 02/03/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	Chioroethane	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	ug/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 (DBC	P) 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	102	(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	Tetrachioroethene	0.52	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kanda Sandmer

Walter Airihm

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 / info@alpha-analytical.com

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Report Date



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 Attn: David Conner 505 King Avenue Phone: (619) 574-4827 Columbus, OH 43201 (614) 458-6641 Fax: Job#: G005862/JPL Groundwater Monitoring Alpha Analytical Number: BMI09012803-04A Sampled: 01/27/09 Client I.D. Number: MW-19-2 Received: 01/28/09 Analyzed: 02/03/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
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	0.55	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 (DBC	P) ND	2.5	µg/L
25	Trichloroethene	2.0	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	103	(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	96	(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	0.69	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Dantmer

Walter Acrim

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 / info@alpha-analytical.com

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Report Date



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** David Conner Attn: 505 King Avenue (619) 574-4827 Phone: Columbus, OH 43201 (614) 458-6641 Fax: Job#: G005862/JPL Groundwater Monitoring Alpha Analytical Number: BMI09012803-05A Sampled: 01/27/09 Client I.D. Number: MW-19-1 Received: 01/28/09 Analyzed: 02/03/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
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-Isopropyitoluene	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 (DBC	P) 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	103	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(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

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 / info@alpha-analytical.com

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Report Date Page 1 of 1



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012803-06A Client I.D. Number: EB-03-1/27/09
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

Sampled: 01/27/09 Received: 01/28/09

Analyzed: 02/03/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	ug/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 (DBC	P) 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	102	(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	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Santur

Walter Hirihum

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 / info@alpha-analytical.com

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.



Report Date



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

ANALY	YTICAL REPORT
Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012803-07A Client I.D. Number: TB-03-1/27/09	Sampled: 01/27/09 Received: 01/28/09 Analyzed: 02/03/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
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	Chiorobenzene	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 (DBC	P) 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	104	(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	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	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kan

Walter #

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2/10/09

Report Date

Page 1 of 1



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: BMI09012803

Project: G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09012803-01A	MW-19-5	Aqueous	2
09012803-02A	MW-19-4	Aqueous	2
09012803-03A	MW-19-3	Aqueous	2
09012803-04A	MW-19-2	Aqueous	2
09012803-05A	MW-19-1	Aqueous	2
09012803-06A	EB-03-1/27/09	Aqueous	2
09012803-07A	TB-03-1/27/09	Aqueous	2



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

Date: 03-Feb-09		QC Summary Report									Work Orde 09012803	
Method Blanl File ID: 14	k		Туре	MB		est Code: El atch ID: 214		thod 314.0		sis Date:	01/28/2009 15:09	
Sample ID:	MB-21403	Units : µg/L		R	un ID: IC	_3_090128/	4		Prep D	Date:	01/28/2009	
Analyte		Result	PQL		SpkVal	 SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qua
Perchlorate		ND		1								
Laboratory F	ortified Blank		Туре	LFE	s Te	est Code: E	PA Met	thod 314.0				
File ID: 15					Ba	atch ID: 214	03		Analys	sis Date:	01/28/2009 15:28	
Sample ID:	LFB-21403	Units : µg/L		R	un ID: IC _	_3_090128/	4		Prep D	Date:	01/28/2009	
Analyte		Result	PQL		SpkVal	SpkRefVal	%REC	CLCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qua
Perchlorate		23.9		2	25		96	85	115			
Sample Matri	ix Spike		Туре	MS	Te	est Code: E	PA Met	thod 314.0				
File ID: 19					Ba	atch ID: 214	03		Analys	sis Date:	01/28/2009 16:41	
Sample ID:	09012751-02AMS	Units : µg/L		R	un ID: IC _	_3_090128/	4		Prep D	Date:	01/28/2009	
Analyte		Result	PQL		SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qua
Perchlorate		26.8		2	25	3.054	95	80	120			
Sample Matri	ix Spike Duplicate		Туре	MS	D Te	est Code: E	PA Met	thod 314.0				
File ID: 20					Ba	atch ID: 214	03		Analys	sis Date:	01/28/2009 17:00	
Sample ID:	09012751-02AMSD	Units : µg/L		R	un ID: IC	_3_090128/	4		Prep D	Date:	01/28/2009	
Analyte		Result	PQL					LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qua
Perchlorate		27.7		2	25	3.054	99	80	120	26.8		

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.



Method Blank Type MBLK Test Code:	Order: 12803
File ID: 09020306.D Batch ID: M515W0203M Units : µg/L Ran ID: M515W0203A Prep Date: 02/03/2009 Analyte Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD(Lim Dichlorodfluoromethane ND 0.5 Chloromethane ND 1 Vinyl chloride ND 0.5 Bromomethane ND 0.5 Trichlorofluoromethane ND 0.5 Bromomethane ND 0.5 Trichlorofluoromethane ND 0.5 1.1-Dichkoroethane ND 0.5 2.2-Dichkoroethane ND 0.5 2.2-Dichkoroethane ND 0.5 2.2-Dichkoroethane ND 0.5 2.2-Dichkoroethane ND 0.5 1.1-Dichkoroethane	
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1,2-Dibromoethane (EDB)ND1TetrachloroetheneND0.51,1,1,2-TetrachloroethaneND0.5	
TetrachloroetheneND0.51,1,1,2-TetrachloroethaneND0.5	
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	
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	
1,3-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 10.2 10 102 70 130	
Surr: Toluene-d8 10.3 10 103 70 130	



Date: 09-Feb-09	(QC Su	mmary	Report			Work Ord 0901280	
Surr: 4-Bromofluorobenzene	9.75		10	98	70	130		
Laboratory Control Spike		Type LC	S Te	st Code:		·		
File ID: 09020304.D			Bat	ch ID: MS15W020)3M	Analysis Date	: 02/03/2009 09:13	
Sample ID: LCS MS15W0203M	Units : µg/L	F	Run ID: MS	D_15_090203A		Prep Date:	02/03/2009	
Analyte	Result	PQL			LCL(ME)	UCL(ME) RPDRe	fVal %RPD(Limit)	Qua
Dichlorodifluoromethane	7.99	1	10	80	70	130		
Chloromethane	8.11	2	10	81	70	130		
Vinyl chloride	9.5	1	10	95	70	130		
Chloroethane	8.46	1	10	85	70	130		
Bromomethane	7.99	2	10	80	70	130		
Trichlorofluoromethane 1,1-Dichloroethene	10.5	1	10	105	70 70	130		
Dichloromethane	10.4 9.69	1 2	10 10	104 97	70 70	130 130		
trans-1,2-Dichloroethene	10.4	1	10	104	70	130		
Methyl tert-butyl ether (MTBE)	10.1	0.5	10	101	62	136		
1,1-Dichloroethane	10.4	1	10	104	70	130		
cis-1,2-Dichloroethene	10.7	1	10	107	70	130		
Bromochloromethane	10.9	1	10	109	70	130		
Chloroform	9.63	1	10	96	70	130		
2,2-Dichloropropane 1,2-Dichloroethane	8.73	1	10	87	70	130		
1,1.1-Trichloroethane	10.1 10.3	1	10 10	101 103	70 70	130 130		
1,1-Dichloropropene	10.5	1	10	103	70	130		
Carbon tetrachloride	9.71	1	10	97	70	130		
Benzene	9.63	0.5	10	96	70	130		
Dibromomethane	10.6	1	10	106	70	130		
1,2-Dichloropropane	10	1	10	100	70	130		
Trichloroethene	10.7	1	10	107	70	130		
Bromodichloromethane cis-1,3-Dichloropropene	10.3	1	10	103	70 70	130		
trans-1,3-Dichloropropene	10.4 10.3	1	10 10	104 103	70 70	130 130		
1,1,2-Trichloroethane	9.65	1	10	97	70	130		
Toluene	9.97	0.5	10	99.7	70	130		
1,3-Dichloropropane	9.55	1	10	96	70	130		
Dibromochloromethane	10.4	1	10	104	70	130		
1,2-Dibromoethane (EDB)	19.9	2	20	99.6	70	130		
Tetrachloroethene 1,1,1,2-Tetrachloroethane	10.5	1	10	105	70	130		
Chlorobenzene	9.81 9.72	1 1	10 10	98 97	70 70	130 130		
Ethylbenzene	9.88	0.5	10	99	70	130		
m,p-Xylene	10.2	0.5	10	102	70	130		
Bromoform	9.42	1	10	94	70	130		
Styrene	9.89	1	10	99	70	130		
o-Xylene	9.84	0.5	10	98	70	130		
1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	9.32	1	10	93	70	130		
Isopropylbenzene	18.5 9.87	2 1	20 10	93 99	70 70	130 130		
Bromobenzene	9.64	1	10	96 96	70	130		
n-Propylbenzene	10	1	10	100	70	130		
4-Chlorotoluene	10.1	1	10	101	70	130		
2-Chlorotoluene	10.1	1	10	101	70	130		
1,3,5-Trimethylbenzene	9.66	1	10	97	70	130		
tert-Butylbenzene 1.2.4-Trimethylbenzene	9.49	1	10	95	70	130		
sec-Butylbenzene	9.86 9.48	1	10 10	99 95	70 70	130 130		
1,3-Dichlorobenzene	9.66	1	10	95 97	70	130		
1,4-Dichlorobenzene	9.26	1	10	93	70	130		
4-Isopropyltoluene	9.68	1	10	97	70	130		
1,2-Dichlorobenzene	9.23	1	10	92	70	130		
n-Butylbenzene	9.78	1	10	98	70	130		
1,2-Dibromo-3-chloropropane (DBCP)	44.7	3	50	89	70	130		
1,2,4-Trichlorobenzene Naphthalene	10.2 8.87	2 2	10 10	102 89	70 70	130 130		
Hexachlorobutadiene	18.6	2	20	93	70	130		
1,2,3-Trichlorobenzene	10.3	2	10	103	70	130		
Surr: 1,2-Dichloroethane-d4	9.29	-	10	93	70	130		
Surr: Toluene-d8 Surr: 4-Bromofluorobenzene	10.3 10.1		10 10	103 101	70 70	130 130		



File D: 00020307.0 Batch D: MS15W02030 Analysic Disc: 2023/2009 10:35 Analysic Result POL SpkVal	Date: 09-Feb-09	(QC Su	mmar	y Repor	t			Work Ord 09012803	
Sample ID: 0002240-02AMS Units: uput Result PDL Skytul Skytel/U % HEE LCL(ME) UCL(ME REPREVID % REPDL/mit) Current Component of the company of the co	Sample Matrix Spike		Type MS	Б Т	est Code:					
Analyse Result POL SpkVait Spk	File ID: 09020307.D			B	atch ID: MS1	5W020	03M	Analysis Date	: 02/03/2009 10:35	
Deletioratiupomethane 412 2.5 60 62 13 67 Oklonomethane 38.9 10 55 0 74 28 145 Vinvi choide 44.8 2.5 50 0 90 43 134 Choomethane 47.7 25 50 0 82 19 176 Trichbordingomethane 44.1 2.5 50 0 83 63 130 Deletoromethane 44.7 10 50 0 83 63 130 Deletoromethane 44.1 2.5 50 0 86 61 130 Deletoromethane 42.1 2.5 50 0 86 71 130 Deletoromethane 42.1 2.5 50 0 84 61 130 Deletoromethane 42.1 2.5 50 0 82 51 137 Li-Deletoromethane 42.7 2.5 50	Sample ID: 09020240-02AMS	Units : µg/L	F	Run ID: M	SD_15_0902	203A		Prep Date:	02/03/2009	
Deletioratiupomethane 412 2.5 60 62 13 67 Oklonomethane 38.9 10 55 0 74 28 145 Vinvi choide 44.8 2.5 50 0 90 43 134 Choomethane 47.7 25 50 0 82 19 176 Trichbordingomethane 44.1 2.5 50 0 83 63 130 Deletoromethane 44.7 10 50 0 83 63 130 Deletoromethane 44.1 2.5 50 0 86 61 130 Deletoromethane 42.1 2.5 50 0 86 71 130 Deletoromethane 42.1 2.5 50 0 84 61 130 Deletoromethane 42.1 2.5 50 0 82 51 137 Li-Deletoromethane 42.7 2.5 50	Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDRet	Val %RPD(Limit)	Qua
Chloranettane 23, 2 10 50 0 74 28 145 Chloranettane 44, 2, 5 60 0 74 39 154 Bromonsthane 44, 1 2, 5 60 0 84 134 Chloranethane 46, 7 2, 5 80 0 83 34 160 Tridhoranethane 44, 1 2, 5 00 0 88 60 130 Tridhoranethane 44, 1 2, 5 00 0 84 60 130 Tridhoranethane 44, 1 2, 5 00 0 84 60 130 Tridhoranethane 44, 1 2, 5 00 0 84 60 130 Tridhoranethane 44, 1 2, 5 00 0 84 60 130 Tridhoranethane 44, 2, 5 00 0 84 60 130 Tridhoranethane 44, 2, 5 00 0 84 60 130 Tridhoranethane 44, 2, 5 00 0 84 70 130 Bromoditoranethane 40, 2, 2, 5 00 0 80 71 30 Bromoditoranethane 40, 2, 2, 5 00 0 80 71 30 Bromoditoranethane 40, 2, 2, 5 00 0 80 80 110 2, 2, Dichoranethane 40, 2, 2, 5 00 0 82 69 130 Tridhoranethane 40, 7 2, 5 00 0 82 69 130 Tridhoranethane 40, 7 2, 5 00 0 80 87 130 Tridhoranethane 40, 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 2, 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 2, 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 7 2, 5 00 0 85 86 130 Tridhoranethane 40, 7 7 2, 5 00 0 85 86 130 Tridhoranethane 41, 7 2, 5 00 0 85 86 130 Tridhoranethane 41, 7 2, 5 00 0 85 86 130 Tridhoranethane 41, 7 2, 5 00 0 85 86 130 Tridhoranethane 41, 2, 5 00 0 86 86	Dichlorodifluoromethane	41.2								
Viryl choled 44,8 2,5 50 0 0 43 14 Bornomethane 41,1 10 50 0 82 19 176 Trohlordioramethane 41,1 10 50 0 83 34 160 Trohlordioramethane 44,1 2,5 50 0 88 60 130 Distromethane 44,1 2,5 50 0 88 63 130 Distromethane 46,2 2,5 50 0 88 67 130 Distromethane 48,1 2,5 50 0 88 67 130 Chorodom 44 2,5 50 0 88 67 130 Chorodom 44 2,5 50 0 82 137 14 1,1-Dishorodomethane 47,1 2,5 50 0 82 137 14 1,1-Dishorodomethane 47,7 2,5 50 0 82 130 130 1,2-Dishoroponet 43,7 2,5										
Bramanethane 41.1 10 50 0 82 19 178 Trachkorduczensthane 44.1 2,5 50 0 83 34 160 Trachkorduczensthane 44.1 2,5 50 0 84 65 131 trans.1.2.Dichicroethane 46.2 2,5 50 0 92 63 130 trans.1.2.Dichicroethane 46.2 2,5 50 0 92 61 130 circla.2.Dichoroethane 46.2 2,5 50 0 82 61 130 circla.2.Dichoroethane 46.2 2,5 50 0 80 70 130 Bramachicromethane 50.7 2,5 50 0 82 85 131 T.2.Dichoroethane 46.2 2,5 50 0 82 85 132 T.2.Dichoroethane 46.2 2,5 50 0 82 85 133 T.2.Dichoroethane 46.2 2,5 50 0 82 85 133 T.2.Dichoroethane 46.2 2,5 50 0 82 85 133 T.2.Dichoroethane 46.2 5,5 50 0 82 85 133 T.2.Dichoroethane 46.2 5,5 50 0 82 85 133 T.2.Dichoroethane 47,7 2,5 50 0 87 67 130 Dicomonthane 47,7 2,5 50 0 82 85 133 T.2.Dichoroethane 47,7 2,5 50 0 82 88 130 T.2.Dichoroethane 47,7 2,5 50 0 85 68 134 dicit.3.Dichoroethane 47,7 2,5 50 0 85 68 134 dicit.3.Dichoroethane 43,7 13 50 0 87 67 130 Dicomonthane 43,7 2,5 50 0 85 68 133 T.2.Dichoroethane 43,7 2,5 50 0 87 70 130 Dicomonthane 43,7 2,5 50 0 86 64 134 Dicomonthane 43,7 2,5 50 0 88 68 130 T.2.Dichoroethane 43,7 2,5 50 0 88 68 130 T.2.Dichoroethane 43,7 2,5 50 0 88 64 133 Dicomonthane 43,7 2,5 50 0 88 64 133 Dicomonthane 43,7 2,5 50 0 88 64 133 Dicomonthane 44,7 2,5 50 0 88 64 133 Dicomonthane 44,7 2,5 50 0 86 64 138 Dicomonthane 44,7 2,5 50 0 87 70 130 T.1.2.Trichoroethane 44,7 2,5 50 0 86 64 138 Dicomonthane 44,7 2,5 50 0 87 70 130 T.2.Dichoroethane 44,7 2,5 50 0 86 64 138 Dicomonthane 44,7 2,5 50 0 86 64 138 Dicomonthane 44,8 2,5 50 0 86 64 138	Vinyl chloride									
The North Control of		37.8	2.5	50	0	76	39	154		
1.1-Dickhorenthene 44.1 2.5 5.0 9.89 6.0 130 trans.1-2-Dickhorenthene 46 2.5 5.0 0 92 6.3 130 trans.1-2-Dickhorenthene 46.2 2.5 5.0 0 92 6.3 130 dickhi ter-Lowy term 46.2 2.5 5.0 0 96 7.0 130 Bromochioromethane 40.2 2.5 5.0 0 88 6.7 130 2.2-Dichorothene 40.2 2.5 5.0 0 84 135 2.2-Dichorothene 4.1 2.5 5.0 0 84 135 2.2-Dichorothene 4.1 2.5 5.0 0 84 135 2.2-Dichorothene 4.3 1.3 5.0 0 87 67 130 Dichorothene 4.7 2.5 5.0 0 85 68 130 1.1-Dichoropopane 4.3 1.3 5.0 0 85 68 130 1.2-Dichoropopane 4.7 2.5 5.0										
Dichtorgethane 44.7 100 50 0 89 68 130 Methy terb-ulyi ether (MTBE) 46.9 1.3 50 94 56 130 Methy terb-ulyi ether (MTBE) 46.9 1.3 50 94 56 130 Cis 1.2-Dichtorgethene 48.1 2.5 50 0 96 70 130 Eromachtormethane 47.1 2.5 50 0 88 67 130 Chloroform 44.8 2.5 50 0 94 60 135 1.2-Dichtorgethane 47.7 2.5 50 0 92 63 130 Cabton elracitivitide 43.7 2.5 50 0 92 63 130 Trichtorgethane 47.6 2.5 50 0 95 69 130 Trichtorgethane 47.7 2.5 50 93 63 130 Trichtorgethane 47.7 2.5 50	· · · · · · · · · · · · · · · · · · ·									
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1.3,5-Trimethylbenzene43.32.55008766136tert-Butylbenzene42.42.550085651371,2,4-Trimethylbenzene44.42.55008965137sec-Butylbenzene42.12.550084661341,3-Dichlorobenzene44.82.550090701301,4-Dichlorobenzene432.550086701301,4-Dichlorobenzene43.12.550086701301,2-Dichlorobenzene43.12.55008670130n-Butylbenzene43.82.55008670130n-Butylbenzene43.82.550084671301,2-Dichlorobenzene46.41050093611371,2,4-Trichlorobenzene46.4105008140167Hexachlorobutadiene84.710100085611301,2,3-Trichlorobenzene45.7105093701301,2,3-Trichlorobenzene45.7105093701301,2,3-Trichlorobenzene45.7105093701301,2,2-Dichloroethane-d446.4509370130Surr: Toluene-d850.95010270130										
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4-Isopropyltoluene 43.5 2.5 50 0 87 66 137 1,2-Dichlorobenzene 43.1 2.5 50 0 86 70 130 n-Butylbenzene 43.8 2.5 50 0 88 60 142 1,2-Dibromo-3-chloropropane (DBCP) 209 15 250 0 84 67 130 1,2,4-Trichlorobenzene 46.4 10 50 0 93 61 137 Naphthalene 40.7 10 50 0 81 40 167 Hexachlorobutadiene 84.7 10 100 0 85 61 130 1,2,3-Trichlorobenzene 45.7 10 50 91 51 144 Surr: 1,2-Dichloroethane-d4 46.4 50 93 70 130 Surr: Toluene-d8 50.9 50 102 70 130			2.5							
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Surr: Toluene-d8 50.9 50 102 70 130			10		0			144		
Suit. 4-bromoliuorobenzene 50.5 50 101 /0 130										
		50.5		50		101	70	130		



Date: 09-Feb-09	(QC Si	ummary	/ Report					Work Orde 09012803	
Sample Matrix Spike Duplicate		Туре М	I SD Te	st Code:						
File ID: 09020308.D			Ba	tch ID: MS15	5W020)3M	Analysi	s Date: 02	2/03/2009 10:57	
Sample ID: 09020240-02AMSD	Units : µg/L		Run ID: MS	D_15_09020)3A		Prep Da	ate: 02	/03/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal %	6REC	LCL(ME)	UCL(ME) R	PDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	42.6	2.5		0	85	13	167	41.21	3.4(20)	
Chloromethane	39.6	10		0	79	28	145	36.93	6.9(20)	
Vinyl chloride Chloroethane	45.6 40.6	2.5 2.5		0	91 81	43 39	134 154	44.79 37.78	1.9(20) 7.1(20)	
Bromomethane	46.1	2.5		0	92	3 9 19	176	41.12	11.3(20)	
Trichlorofluoromethane	48.4	2.5		õ	97	34	160	46.69	3.6(20)	
1,1-Dichloroethene	44.9	2.5		0	90	60	130	44.11	1.7(20)	
Dichloromethane	45.5	10		0	91	68	130	44.65	1.9(20)	
trans-1,2-Dichloroethene Methyl tert-butyl ether (MTBE)	47.7	2.5		0	95 96	63 56	130 141	45.95 46.86	3.7(20)	
1,1-Dichloroethane	48 47.5	1.3 2.5		0 0	96 95	56 61	130	46.00	2.4(20) 2.7(20)	
cis-1,2-Dichloroethene	49	2.5		0	98	70	130	48.13	1.8(20)	
Bromochloromethane	51.6	2.5		Ō	103	70	130	50.67	1.9(20)	
Chloroform	44.6	2.5		0	89	67	130	44.01	1.3(20)	
2,2-Dichloropropane	41.9	2.5		0	84	30	152	40.21	4.2(20)	
1,2-Dichloroethane 1,1,1-Trichloroethane	48.1	2.5		0 0	96 94	60 59	135 137	47.12 45.77	2.0(20) 2.6(20)	
1,1-Dichloropropene	47 47.2	2.5 2.5		0	94 94	59 63	137	45.97	2.6(20)	
Carbon tetrachloride	45.3	2.5		0	91	50	147	43.71	3.5(20)	
Benzene	44.3	1.3		Ō	89	67	130	43.25	2.4(20)	
Dibromomethane	51.7	2.5		0	103	69	133	49.7	4.0(20)	
1,2-Dichloropropane	47.1	2.5		0	94	69	130	45.75	2.8(20)	
Trichloroethene	47.9	2.5		0	96 00	69 66	130	47.6 47.7	0.5(20)	
Bromodichloromethane cis-1,3-Dichloropropene	49.2 47.3	2.5 2.5		0 0	98 95	66 63	134 130	47.7 46.65	3.1(20) 1.5(20)	
trans-1,3-Dichloropropene	48.9	2.5		0	98	66	131	47.34	3.3(20)	
1,1,2-Trichloroethane	46	2.5		õ	92	68	130	44.71	2.9(20)	
Toluene	43.6	1.3	50	0	87	66	130	43.2	1.0(20)	
1,3-Dichloropropane	45	2.5		0	90	70	130	43.68	3.1(20)	
Dibromochloromethane	47.4	2.5		0	95	70	130	47.28 91.02	0.3(20)	
1,2-Dibromoethane (EDB) Tetrachloroethene	90.9 45.6	10 2.5		0 0	91 91	70 61	130 134	91.02 44.12	0.1(20) 3.3(20)	
1,1,1,2-Tetrachloroethane	44.9	2.5		0	90	70	130	43.98	2.1(20)	
Chlorobenzene	43.8	2.5		Õ	88	70	130	43.62	0.3(20)	
Ethylbenzene	43.9	1.3		0	88	68	130	43.42	1.0(20)	
m,p-Xylene	45	1.3		0	90	64	130	44.26	1.8(20)	
Bromoform Styrene	43.8	2.5		0	88	64	138 130	43.05 44.89	1.7(20)	
o-Xylene	45.4 44.8	2.5 1.3		0	91 90	69 70	130	44.89	1.0(20) 1.1(20)	
1,1,2,2-Tetrachloroethane	41.9	2.5		0	84	65	131	42.58	1.7(20)	
1,2,3-Trichloropropane	85.1	10		Ō	85	70	130	84.93	0.2(20)	
lsopropylbenzene	45.5	2.5		0	91	64	138	43.64	4.2(20)	
Bromobenzene	45.6	2.5		0	91	70	130	45.08	1.2(20)	
n-Propylbenzene 4-Chlorotoluene	45.9	2.5		0	92 96	66 70	132 130	44.07 46.11	4.1(20) 4.2(20)	
2-Chlorotoluene	48.1 46.4	2.5 2.5		0 0	90 93	70	130	45.14	2.8(20)	
1,3,5-Trimethylbenzene	44.9	2.5		0	90	66	136	43.29	3.7(20)	
tert-Butylbenzene	44.2	2.5		0	88	65	137	42.44	4.0(20)	
1,2,4-Trimethylbenzene	46.4	2.5		0	93	65	137	44.44	4.2(20)	
sec-Butylbenzene	44.7	2.5		0	89	66	134	42.14	5.8(20)	
1,3-Dichlorobenzene 1,4-Dichlorobenzene	46 44.7	2.5 2.5		0 0	92 89	70 70	130 130	44.79 42.97	2.6(20) 3.8(20)	
4-Isopropyltoluene	45.5	2.5		0	91	66	130	43.45	4.5(20)	
1,2-Dichlorobenzene	45.2	2.5		0	90	70	130	43.1	4.8(20)	
n-Butylbenzene	46.4	2.5	50	Ō	93	60	142	43.84	5.6(20)	
1,2-Dibromo-3-chloropropane (DBCP)	225	15		0	90	67	130	209.1	7.4(20)	
1,2,4-Trichlorobenzene	51.5	10		0	103	61	137	46.42	10.5(20)	
Naphthalene Hexachlorobutadiene	43.6 92.9	10 10		0 0	87 93	40 61	167 130	40.7 84.65	7.0(20) 9.2(20)	
1,2,3-Trichlorobenzene	92.9 51.6	10		0	93 103	51	130	45.7	12.1(20)	
Surr: 1,2-Dichloroethane-d4	46.6	.0	50	Ū	93	70	130			
Surr: Toluene-d8	50.1		50		100	70	130			
Surr: 4-Bromofluorobenzene	49.8		50		99.6	70	130			



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

Date: 09-Feb-09

QC Summary Report

Work Order: 09012803

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 : Battelle			CH/	AN	-OF	-CU	STO	DY F	CHAIN-OF-CUSTODY RECORD	D CA Page: 1 of 1
505 King Avenue					Alpł	1a An	alytic	Alpha Analytical, Inc.	, ,	WorkOrder · BMI09012803
Columbus, OH 43201	01			255 Gler T	ndale Ave EL: (775)	nue, Suite 355-104-	> 21 Spari 4 FAX: ('	ndale Avenue, Suite 21 Sparks, Nevada 894 TEL: (775) 355-1044 FAX: (775) 355-0406	255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778 TEL: (775) 355-1044 FAX: (775) 355-0406	Report Due By : 5:00 PM On : 11-Feb-2009
Client:			Report Attention	tion	Phor	Phone Number	ě	EMail Address	ddress	
Battelle Memorial Institute	nstitute		David Conner	,	(619)	(619) 574-4827	7 x	connerd@	connerd@battelle.org	
505 King Avenue			Betsy Cutie		(614)	(614) 424-4899	9 x	cutiee@batelle.org	telle.org	EDD Required : Yes
Columbus, OH 43201	01		Shane Walton	1	(614)	(614) 424-4117	7 x	waltons@l	waltons@battelle.org	Sampled by : Client
PO: 218013		ſ								Cooler Temp Samples Received Date Printed
Client's COC #: 24140		Job :	G005862/JPL Groundwater Monitoring	- Grour	ndwater N	Nonitorin	G			4 °C 28-Jan-2009 28-Jan-2009
QC Level: S4	= Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates	al/Cor	nCal data, LC	S, MS/	MSD Wit	h Surrog	ates			
									Requ	Requested Tests
Alpha (Sample ID S	Client Sample ID	Matri	Collection Matrix Date	No. of Alpha	No. of Bottles Alpha Sub	TAT	314_W	VOC_TIC_	VOC_W	Sample Remarks
BMI09012803-01A	MW-19-5	Ą	01/27/09 08:30	4	0	10	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09012803-02A	MW-19-4	ą	01/27/09 08:57	4	0	10	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09012803-03A	MW-19-3	QA	01/27/09 09:15	4	0	10	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09012803-04A	MW-19-2	ð	01/27/09 09:34	4	0	10	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09012803-05A	MW-19-1	Ą	01/27/09 10:21	4	0	10	Perchlorate	Perchlorate VOC by 524 VOC by 524 Criteria Criteria	VOC by 524 Criteria	
BM109012803-06A E	EB-03-1/27/09	ð	01/27/09 09:54	4	0	10	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09012803-07A	TB-03-1/27/09	ð	01/27/09 00:00	د	0	10		VOC by 524 Criteria	VOC by 524 Criteria	Reno Trip Blank 9/30/08

Comments: No security seals. Frozen ice. Temp Blank #7280 rec'd @ 4°. Level IV QC. Perchlorate RL of 1.0 ug/L. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

Signature Company 1-28-59 1043 Date/Time

Logged in by: <u>Cenplath</u> Aller Print Name Elizabeth Adcox Alpha Analytical, Inc.

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other)

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.

Bottle Type: 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.

Billing Information:	Alpha Analytical, Inc.	CA V NV	24
2 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Sparks, Nevada 89431-5778 Phone (775) 355-1044		
Fax	Fax (775) 355-0406	Analyses Required	ed
Client Name P.O. # 218	2982000 # apr [1801]		Required QC Level?
OLD TOLIN ANS. (- ZOS EMail Add		1 2	/ / = = = IV
CA 9	9~726-731/ Fax#		EDD / EDF? YES NO
Date Matrix Sampled by Report Atte	Tot		Giobal ID #
d S	Sample Description TAT Field "See below	below / Y A J / / /	REMARKS
630 1/2% AQ BMT09012803.01 MW-19	-5-	××	
	- ~	××	
		×	
MW-19	- 2	×	
MW-19		×	
A .	1/27/09 4	×	Earlipment BLANK
-07778-03-	1/27/09 20/12/1	×	HRIP BLANK
ADDITIONAL INSTRUCTIONS:			
Signature	Print Name	Company	Date
	HASE ROOM IN	SUGAT EECT	
Relinquished by	puth Haleux	Ulpha	1-28-07 10-13
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.	Other AR - Air **: L-Liter V-Voa S-So sss other arrangements are made. Hazardous samples with laboratory with this coc. The liability of the laboratory	-Soil Jar O-Orbo T-Tedlar B-Brass s will be returned to client or disposed of at client to atory is limited to the amount paid for the report.	s P-Plastic OT-Other expense. The report for the analysis
		l in initial and an annual barre is a substitution of the second s	



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

Date: 09-Feb-09

David Conner Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 (619) 574-4827

CASE NARRATIVE

roject: Vork Order:	G005862/JPL Gro BMI09012942	undwater Monitoring	Cooler Temp: 4 °C	
	Sample ID	Client's Sample ID	Matrix	
09012	2942-01A	MW-17-4	Aqueous	
	2942-02A	MW-17-3	Aqueous	
09012	2942-03A	MW-17-2	Aqueous	
09012	2942-04A	MW-18-5	Aqueous	
09012	2942-05A	MW-18-4	Aqueous	
09012	2942-06A	MW-18-3	Aqueous	
09012	2942-07A	MW-18-2	Aqueous	
09012	2942-08A	EB-04-01/28/09	Aqueous	
09012	2942-09A	TB-04-01/28/09	Aqueous	
	······································	Manually Integrat	ed Analytes	
<u>Alpha's Sa</u>	mple ID	Test Reference	Analyte	
0901294	42-02A	EPA Method 314.0	Perchlorate	
0901294	42-03A	EPA Method 314.0	Perchlorate	
0901294	42-05A	EPA Method 314.0	Perchlorate	
0901294	42-06A	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/Chainof-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.

Roger Scholl

Walter Acrim Kandy Sandmer

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 / info@alpha-analytical.com 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.



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 505 King Avenue Columbus, OH 43201
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

 Date Received : 01/29/09

Job#: G005862/JPL Groundwater Monitoring

	Perchlorate by Ion Chromatography EPA Method 314.0									
		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed				
Client ID :					01/20/00	01/00/00				
Lab ID :	BMI09012942-01A	Perchlorate	ND	1.00 µg/L	01/28/09	01/29/09				
Client ID : Lab ID :	MW-17-3 BMI09012942-02A	Perchlorate	13.9	1.00 µg/L	01/28/09	01/29/09				
Client ID :	MW-17-2									
Lab ID :	BMI09012942-03A	Perchlorate	4.70	1.00 µg/L	01/28/09	01/29/09				
Client ID :		N 11			01/08/00	01/20/00				
Lab ID :	BMI09012942-04A	Perchlorate	ND	1.00 µg/L	01/28/09	01/29/09				
Client ID : Lab ID :	MW-18-4 BMI09012942-05A	Perchlorate	41.4	1.00 µg/L	01/28/09	01/29/09				
Client ID :	MW-18-3									
Lab ID :	BMI09012942-06A	Perchlorate	45.3	1.00 µg/L	01/28/09	01/29/09				
Client ID :	MW-18-2									
Lab ID :	BMI09012942-07A	Perchlorate	ND	1.00 µg/L	01/28/09	01/29/09				
Client ID : Lab ID :	EB-04-01/28/09 BMI09012942-08A	Perchlorate	ND	1.00 µg/L	01/28/09	01/29/09				
····· ··· ·										

ND = Not Detected

Roger Scholl

Kandy Saulner

Walter Hiridmon

2/11/09 Report Date

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 / info@alpha-analytical.com 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.



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
505 King Avenue
Columbus, OH 43201

 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

 Date Received : 01/29/09

Job#: G005862/JPL Groundwater Monitoring

			s by ICPMS Aethod 200.8			
		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : Lab ID :	MW-17-4 BMI09012942-01A	Chromium (Cr)	ND	0.0050 mg/L	01/28/09	02/03/09
Client ID : Lab ID :	MW-17-3 BMI09012942-02A	Chromium (Cr)	ND	0.0050 mg/L	01/28/09	02/03/09
Client ID : Lab ID :	MW-17-2 BMI09012942-03A	Chromium (Cr)	ND	0.0050 mg/L	01/28/09	02/03/09
Client ID : Lab ID : Client ID :	MW-18-4 BMI09012942-05A	Chromium (Cr)	ND	0.0050 mg/L	01/28/09	02/03/09
Lab ID :	MW-18-3 BMI09012942-06A	Chromium (Cr)	ND	0.0050 mg/L	01/28/09	02/03/09
Client ID : Lab ID :	MW-18-2 BMI09012942-07A	Chromium (Cr)	ND	0.0050 mg/L	01/28/09	02/03/09
Client ID : Lab ID :	EB-04-01/28/09 BMI09012942-08A	Chromium (Cr)	ND	0.0050 mg/L	01/28/09	02/03/09

ND = Not Detected

Roger Scholl

Kandy Sandman

Dalter Acrilmon

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 / info@alpha-analytical.com 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.

[] 2/11/09 **Report Date**



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ANALYTICAL REPORT

Battelle Memorial Institute	Attn:	David Conner
505 King Avenue	Phone:	(619) 574-4827
Columbus, OH 43201	Fax:	(614) 458-6641
Job#: G005862/JPL Groundwater Monitoring		

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID : Lab ID :	MW-17-4 BMI09012942-01A	*** None Found ***	ND	2.0 μg/L	01/29/09	01/28/09	02/04/09
Client ID : Lab ID :	MW-17-3 BMI09012942-02A	*** None Found ***	ND	2.0 μg/L	01/29/09	01/28/09	02/04/09
Client ID : Lab ID :	MW-17-2 BMI09012942-03A	*** None Found ***	ND	2.0 µg/L	01/29/09	01/28/09	02/04/09
Client ID : Lab ID :	MW-18-5 BMI09012942-04A	Sulfur dioxide	20	2.0 μg/L	01/29/09	01/28/09	02/04/09
Client ID : Lab ID :	MW-18-4 BMI09012942-05A	Sulfur dioxide	13	2.0 μg/L	01/29/09	01/28/09	02/04/09
Client ID : Lab ID :	MW-18-3 BMI09012942-06A	Sulfur dioxide	6.4	2.0 μg/L	01/29/09	01/28/09	02/04/09
Client ID : Lab ID :	MW-18-2 BMI09012942-07A	*** None Found ***	ND	2.0 μg/L	01/29/09	01/28/09	02/04/09
Client ID : Lab ID :	EB-04-01/28/09 BMI09012942-08A	*** None Found ***	ND	2.0 μg/L	01/29/09	01/28/09	02/04/09
Client ID : Lab ID :	TB-04-01/28/09 BM109012942-09A	*** None Found ***	ND	2.0 μg/L	01/29/09	01/28/09	02/04/09

Note: Analysis conducted using EPA Method 524.2 criteria. ND = Not Detected

Roger Scholl

Kandy Dandn

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2/11/09

Report Date

Page 1 of 1

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 / info@alpha-analytical.com 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.



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 David Conner Attn: 505 King Avenue Phone: (619) 574-4827 Columbus, OH 43201 (614) 458-6641 Fax: Job#: G005862/JPL Groundwater Monitoring Alpha Analytical Number: BMI09012942-01A Sampled: 01/28/09 Client I.D. Number: MW-17-4 Received: 01/29/09 Analyzed: 02/04/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	Ethvibenzene	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	Isopropyibenzene	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-isopropyitoluene	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 (DBC	P) ND	2.5	µg/L
25	Trichloroethene	0.67	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	104	(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	95	(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

Rogen Scholl

Kandy Sandner

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

Walter Acrilmon

2/11/09

Report Date

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



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012942-02A Client I.D. Number: MW-17-3	Sampled: 01/28/09 Received: 01/29/09 Analyzed: 02/04/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	0.53	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	0.89	0.50	µg/L	56	4-Isopropyitoluene	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 (DBC		2.5	µg/L
25	Trichloroethene	0.71	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	105	(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	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	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Sandmer

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

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

2/11/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641
Alpha Analytical Number: BMI09012942-03A Client I.D. Number: MW-17-2	Sampled: 01/28/09 Received: 01/29/09 Analyzed: 02/04/09

Volatile Organics by GC/MS

_	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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 (DBC	P) 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	104	(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	96	(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	0.70	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Rogen Scholl

Kandy Sandmer

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

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

2/11/09

Report Date



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** Attn: David Conner 505 King Avenue (619) 574-4827 Phone: Columbus, OH 43201 (614) 458-6641 Fax: Job#: G005862/JPL Groundwater Monitoring Alpha Analytical Number: BMI09012942-04A Sampled: 01/28/09 Client I.D. Number: MW-18-5 Received: 01/29/09 Analyzed: 02/04/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration Reporting L		imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	¹ 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		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	Isopropyibenzene	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 (DBC	P) 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	105	(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	96	(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

Kandy Saulner

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

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

2/11/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641							
Alpha Analytical Number: BMI09012942-05A Client I.D. Number: MW-18-4	Sampled: 01/28/09 Received: 01/29/09 Analyzed: 02/04/09							

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	2.4	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	14	0.50	µg/L	56	4-isopropyitoluene	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 (DBC	P) ND	2.5	µg/L
25	Trichloroethene	1.5	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	102	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	95	(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

Rogen Scholl

Kandy Sandmer

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

2/11/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012942-06A Client I.D. Number: MW-18-3
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

Sampled: 01/28/09 Received: 01/29/09

Analyzed: 02/04/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	2.3	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	20	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 (DBC	P) ND	2.5	µg/L
25	Trichloroethene	1.5	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	μ g/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	104	(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	97	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L	- •		3	. ,	
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

Kandy Saulmer

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

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Walter Arilmon

2/11/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641							
Alpha Analytical Number: BMI09012942-07A Client I.D. Number: MW-18-2	Sampled: 01/28/09 Received: 01/29/09 Analyzed: 02/04/09							

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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 (DBC	P) 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	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(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

Kandy Sandman

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

16 2/11/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring	Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641								
Alpha Analytical Number: BMI09012942-08A Client I.D. Number: EB-04-01/28/09	Sampled: 01/28/09 Received: 01/29/09 Analyzed: 02/04/09								

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	NĎ	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-Xvlene	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	ug/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
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18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butvibenzene	ND	0.50	µg/L
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21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyitoluene	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 (DBC	P) 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	102	(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					

Note: Analysis conducted using EPA Method 524.2 criteria.

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2/11/09

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09012942-09A Client I.D. Number: TB-04-01/28/09

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/28/09 Received: 01/29/09

Analyzed: 02/04/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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-Xvlene	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-Propyibenzene	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 (DBC	P) 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	102	(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					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Sandmar

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

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

2/11/09

Report Date



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: BMI09012942

Project: G005862/JPL Groundwater Monitoring

 Alpha's Sample ID	Client's Sample ID	Matrix	рН	
09012942-01A	MW-17-4	Aqueous	2	
09012942-02A	MW-17-3	Aqueous	2	
09012942-03A	MW-17-2	Aqueous	2	
09012942-04A	MW-18-5	Aqueous	2	
09012942-05A	MW-18-4	Aqueous	2	
09012942-06A	MW-18-3	Aqueous	2	
09012942-07A	MW-18-2	Aqueous	2	
09012942-08A	EB-04-01/28/09	Aqueous	2	
09012942-09A	TB-04-01/28/09	Aqueous	2	

2/11/09 Report Date



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Date: 09-Feb-09	QC Summary Report										Work Order: 09012942		
Method Blank File ID: 14		Туре	MBLI	• • •	est Code: El atch ID: 214		hod 314.0	Analysis		01/29/2009 14:28			
Sample ID: MB-21411	Units : µg/L				_3_0901294			Prep Da		01/29/2009	_		
nalyte	Result	PQL		SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) R	PDRef	/al %RPD(Limit)	Qua		
Perchlorate	ND		1										
Laboratory Fortified Blank		Туре	LFB	Te	est Code: El	PA Met	hod 314.0						
ile ID: 15				Ba	atch ID: 214	11				01/29/2009 14:46			
Sample ID: LFB-21411	Units : µg/L			-	_3_090129A			Prep Da		01/29/2009			
Analyte	Result	PQL	5	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) R	PDRef\	/al %RPD(Limit)	Qua		
Perchlorate	23.1		2	25		93	85	115	-				
Sample Matrix Spike		Туре	LFM	Te	est Code: El	PA Met	hod 314.0						
File ID: 26				Ba	atch ID: 214	11		Analysis	s Date:	01/29/2009 18:09			
Sample ID: 09012942-03ALFM	Units : µg/L		Rur	n ID: IC _	_3_0901294	۱.		Prep Da	ate:	01/29/2009			
nalyte	Result	PQL	S	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) R	PDRef\	/al %RPD(Limit)	Qua		
Perchlorate	27.9		2	25	4.703	93	80	120					
Sample Matrix Spike Duplicate		Туре	LFM) Te	est Code: El	PA Met	hod 314.0						
File ID: 27				Ba	atch ID: 214	11		Analysis	s Date:	01/29/2009 18:27			
Sample ID: 09012942-03ALFMD	Units : µg/L		Rur	1 ID: IC_	_3_0901294	۱		Prep Da	ate:	01/29/2009			
Analyte	Result	PQL	5	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) R	PDRef	/al %RPD(Limit)	Qua		
Perchlorate	28.6		2	25	4.703	96	80	120	27.9	1 2.5(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: 09-Feb-09	QC Summary Report								Work Order: 09012942		
Method Blank File ID: 020209.B\MB.D\		Туре 🛚	Ва	st Code: EP tch ID: 2143	5K	hod 200.8	Analysis I		02/03/2009 14:40		
Sample ID: MB-21435 Analyte	Units : mg/L Result	PQL		P/ MS_09020 SpkRefVal ^o		LCL(ME)	Prep Date UCL(ME) RP		2/03/2009 al %RPD(Limit)	Qual	
Chromium (Cr)	ND	0.005	5								
Laboratory Control Spike File ID: 020209.B\L1.D\ Sample ID: LCS-21435	Units : mg/L	Туре L	Ва	st Code: EP tch ID: 2143 P/MS 09020	5K	hod 200.8			02/03/2009 14:46 02/03/2009		
Analyte	Result	PQL		_		LCL(ME)			al %RPD(Limit)	Qual	
Chromium (Cr)	0.0523	0.005	-		105	80	120				
Sample Matrix Spike File ID: 020209.B\MS.D\		Туре М		st Code: EP tch ID: 2143		hod 200.8		Date: (02/03/2009 15:09		
Sample ID: 09012751-03AMS	Units : mg/L			P/MS_09020			Prep Date		2/03/2009		
Analyte	Result	PQL	SpkVal	SpkRefVal ⁴	%REC	LCL(ME)	UCL(ME) RP	DRefVa	al %RPD(Limit)	Qual	
Chromium (Cr)	0.0526	0.005	5 0.05	0	105	80	120				
Sample Matrix Spike Duplicate File ID: 020209.B\MSD.D\		Туре 🛚		st Code: EP tch ID: 2143		hod 200.8		Date: (02/03/2009 15:14		
Sample ID: 09012751-03AMSD	Units : mg/L		Run ID: ICI	P/MS_09020	3 A		Prep Date	e: C	2/03/2009		
Analyte	Result	PQL	SpkVal	SpkRefVal ^v	%REC	LCL(ME)	UCL(ME) RP	DRefVa	al %RPD(Limit)	Qual	
Chromium (Cr)	0.0509	0.005	5 0.05	0	102	80	120 (0.05261	3.4(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.



Date: 09-Feb-09	(09012942	Work Order: 09012942				
Method Blank		Type MBLK					
File ID: 09020406.D			Batch ID: MS15W0204M	Analysis Da	te: 02/04/2009 10:17		
Sample ID: MBLK MS15W0204M	Units : µg/L	Run IE	: MSD_15_090204B	Prep Date:	02/04/2009		
Analyte	Result	PQL Spk	Val SpkRefVal %REC LC	L(ME) UCL(ME) RPDF	RefVal %RPD(Limit)	Qu	
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 Dichloromethane	ND	0.5					
Freon-113	ND ND	1 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 1,2-Dichloroethane	ND ND	0.5 0.5					
1,1,1-Trichloroethane	ND	0.5 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 Bromodichloromethane	ND	0.5					
4-Methyl-2-pentanone (MIBK)	ND ND	0.5 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) Tetrachloroethene	ND ND	1					
1,1,1,2-Tetrachloroethane	ND	0.5 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 1,2,3-Trichloropropane	ND ND	0.5 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 1.2.4-Trimethylbenzene	ND ND	0.5					
sec-Butylbenzene	ND ND	0.5 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 Naphthalene		1					
Hexachlorobutadiene	ND ND	1 1					
1,2,3-Trichlorobenzene	ND	1					
Surr: 1,2-Dichloroethane-d4	10.2	•	10 102	70 130			
Surr: Toluene-d8	10.4		10 104	70 130			



Date: 09-Feb-09	(QC Su	mmar	y Report			Work Ord 09012942	
Surr: 4-Bromofluorobenzene	9.69		10	97	70	130		
Laboratory Control Spike		Type LC	S Te	est Code:				
File ID: 09020404.D			Ba	atch ID: MS15W020)4M	Analysis Date:	02/04/2009 09:10	
Sample ID: LCS MS15W0204M	Units : µg/L	I	Run ID: M	SD_15_090204B		Prep Date:	02/04/2009	
Analyte	Result	PQL			LCL(ME)	UCL(ME) RPDRef	Val %RPD(Limit)	Qua
Dichlorodifluoromethane	7.86	1	10	79	70	130		
Chloromethane	8.02	2	10	80	70	130		
Vinyl chloride	9.56	1	10	96	70	130		
Chloroethane	8.59	1	10	86	70	130		
Bromomethane Trichlorofluoromethane	8.41 10.5	2 1	10 10	84 105	70 70	130 130		
1,1-Dichloroethene	10.3	1	10	103	70	130		
Dichloromethane	9.89	2	10	99	70	130		
trans-1,2-Dichloroethene	10.8	1	10	108	70	130		
Methyl tert-butyl ether (MTBE)	10.2	0.5	10	102	62	136		
1,1-Dichloroethane	10.5	1	10	105	70	130		
cis-1,2-Dichloroethene Bromochloromethane	10.7	1	10	107	70 70	130 130		
Chloroform	11 9.76	1	10 10	110 98	70	130		
2,2-Dichloropropane	8.79	1	10	88	70	130		
1,2-Dichloroethane	10.2	1	10	102	70	130		
1,1,1-Trichloroethane	10.3	1	10	103	70	130		
1,1-Dichloropropene	10.8	1	10	108	70	130		
Carbon tetrachloride Benzene	9.75	1	10	98 97	70 70	130 130		
Dibromomethane	9.72 10.7	0.5 1	10 10	97 107	70	130		
1,2-Dichloropropane	10.2	1	10	107	70	130		
Trichloroethene	10.9	1	10	109	70	130		
Bromodichloromethane	10.5	1	10	105	70	130		
cis-1,3-Dichloropropene	10.6	1	10	106	70	130		
trans-1,3-Dichloropropene	10.7	1	10	107	70	130		
1,1,2-Trichloroethane Toluene	9.83 9.62	1 0.5	10 10	98 96	70 70	130 130		
1,3-Dichloropropane	9.52	0.0	10	95	70	130		
Dibromochloromethane	10.2	1	10	102	70	130		
1,2-Dibromoethane (EDB)	19.4	2	20	97	70	130		
Tetrachloroethene	10.1	1	10	101	70	130		
1,1,1,2-Tetrachloroethane Chlorobenzene	9.66	1	10	97	70	130		
Ethylbenzene	9.51 9.6	1 0.5	10 10	95 96	70 70	130 130		
m,p-Xylene	9.9	0.5	10	99	70	130		
Bromoform	9.21	1	10	92	70	130		
Styrene	9.74	1	10	97	70	130		
o-Xylene	9.62	0.5	10	96	70	130		
1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	8.71	1	10	87	70	130		
Isopropylbenzene	18 9.86	2 1	20 10	90 99	70 70	130 130		
Bromobenzene	9.74	1	10	97	70	130		
n-Propylbenzene	10	1	10	100	70	130		
4-Chlorotoluene	10	1	10	100	70	130		
2-Chlorotoluene	9.91	1	10	99	70	130		
1,3,5-Trimethylbenzene tert-Butylbenzene	9.59	1	10	96	70	130		
1,2,4-Trimethylbenzene	9.44 9.84	1	10 10	94 98	70 70	130 130		
sec-Butylbenzene	9.54	1	10	95	70	130		
1,3-Dichlorobenzene	9.68	1	10	97	70	130		
1,4-Dichlorobenzene	9.25	1	10	93	70	130		
4-Isopropyltoluene	9.74	1	10	97	70	130		
1,2-Dichlorobenzene	9.29	1	10	93	70 70	130		
n-Butylbenzene 1,2-Dibromo-3-chloropropane (DBCP)	9.7 44.3	1	10 50	97 89	70 70	130 130		
1,2,4-Trichlorobenzene	44.3	3	50 10	09 101	70	130		
Naphthalene	8.87	2	10	89	70	130		
Hexachlorobutadiene	18.6	2	20	93	70	130		
1,2,3-Trichlorobenzene	9.99	2	10	99.9	70	130		
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	9.62		10	96	70 70	130		
	10		10	100	70	130		



Alpha Analytical, Inc.

Date: 09-Feb-09	(QC Sur	mmary	Work Order: 09012942					
Sample Matrix Spike		Type MS	Te	est Code:					
File-ID: 09020407.D			Ba	tch ID: MS1	5W020	04M	Analysis Date	e: 02/04/2009 10:39	
Sample ID: 09012942-03AMS	Units : µg/L	R	un ID: MS	SD_15_0902	204B		Prep Date:	02/04/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDRe	efVal %RPD(Limit)	Qua
Dichlorodifluoromethane	42.1	2.5	50	0	84	13	167		
Chloromethane	39.5	10	50	0	79	28	145		
Vinyl chloride	45.6	2.5	50	0	91	43	134		
Chloroethane	41.6	2.5	50	0	83	39	154		
Bromomethane Trichlorofluoromethane	42.2	10	50 50	0	84 96	19 34	176 160		
1,1-Dichloroethene	48.2 44.4	2.5 2.5	50 50	0	90 89	60	130		
Dichloromethane	45	10	50	0	90	68	130		
trans-1,2-Dichloroethene	47.4	2.5	50	0	95	63	130		
Methyl tert-butyl ether (MTBE)	47.2	1.3	50	0	94	56	141		
1,1-Dichloroethane	47.3	2.5	50	0	95	61	130		
cis-1,2-Dichloroethene	48.8	2.5	50	0	98	70	130		
Bromochloromethane	50.9	2.5	50	0	102 90	70 67	130 130		
Chloroform 2,2-Dichloropropane	45 40,4	2.5 2.5	50 50	0	90 81	30	152		
1,2-Dichloroethane	40.4	2.5	50	0	97	60	135		
1,1,1-Trichloroethane	46.3	2.5	50	Õ	93	59	137		
1,1-Dichloropropene	47	2.5	50	0	94	63	130		
Carbon tetrachloride	44.9	2.5	50	0	90	50	147		
Benzene	43.5	1.3	50	0	87	67	130		
Dibromomethane	50.1	2.5	50	0	100	69	133		
1,2-Dichloropropane Trichloroethene	46.4	2.5	50	0 1.2	93 95	69 69	130 130		
Bromodichloromethane	48.9 48.6	2.5 2.5	50 50	1.2	95 97	66	134		
cis-1,3-Dichloropropene	47.6	2.5	50	Ő	95	63	130		
trans-1,3-Dichloropropene	48.5	2.5	50	Õ	97	66	131		
1,1,2-Trichloroethane	45.2	2.5	50	0	90	68	130		
Toluene	43.4	1.3	50	0	87	66	130		
1,3-Dichloropropane	43.9	2.5	50	0	88	70	130		
Dibromochloromethane	47	2.5	50	0	94	70	130		
1,2-Dibromoethane (EDB) Tetrachloroethene	89.7 44.8	10 2.5	100 50	0 0.7	90 88	70 61	130 134		
1,1,1,2-Tetrachloroethane	44.8	2.5 2.5	50 50	0.7	90	70	130		
Chlorobenzene	44.1	2.5	50	0	88	70	130		
Ethylbenzene	43.4	1.3	50	Ő	87	68	130		
m,p-Xylene	44.6	1.3	50	0	89	64	130		
Bromoform	42.2	2.5	50	0	84	64	138		
Styrene	45.4	2.5	50	0	91	69 70	130		
o-Xylene 1,1.2.2-Tetrachloroethane	44.2 41.9	1.3	50	0	88 84	70 65	130 131		
1,2,3-Trichloropropane	83.3	2.5 10	50 100	0	83	70	130		
Isopropylbenzene	44.6	2.5	50	0	89	64	138		
Bromobenzene	45.2	2.5	50	0	90	70	130		
n-Propylbenzene	44.9	2.5	50	0	90	66	132		
4-Chlorotoluene	46.5	2.5	50	0	93	70	130		
2-Chlorotoluene	46.4	2.5	50	0	93	70	130		
1,3,5-Trimethylbenzene	44.4	2.5	50	0	89 86	66 65	136 137		
tert-Butylbenzene 1,2,4-Trimethylbenzene	43 45.2	2.5 2.5	50 50	0	90	65	137		
sec-Butylbenzene	43.2	2.5	50	0	90 86	66	134		
1,3-Dichlorobenzene	45.3	2.5	50	0	91	70	130		
1,4-Dichlorobenzene	43.7	2.5	50	0	87	70	130		
4-Isopropyltoluene	44.2	2.5	50	0	88	66	137		
1,2-Dichlorobenzene	44.2	2.5	50	0	88	70	130		
n-Butylbenzene 1,2-Dibromo-3-chloropropane (DBCP)	44.5	2.5	50 250	0	89 84	60 67	142 130		
1,2,4-Trichlorobenzene	210 47.2	15 10	250 50	0		61	130		
Naphthalene	39	10	50	0		40	167		
Hexachlorobutadiene	85.9	10	100	0		61	130		
1,2,3-Trichlorobenzene	45.6	10	50	0		51	144		
Surr: 1,2-Dichloroethane-d4	47.8		50		96	70	130		
Surr: Toluene-d8	50.9		50		102	70	130		
Surr: 4-Bromofluorobenzene	49.9		50		99.7	70	130		



Sample Matrix Spike Duplicate Type MSD Test Code: File ID: 09020408.D Batch ID: MS15W0204M Analysis Date: 02/04/2009 Sample ID: 09012942-03AMSD Units: µg/L Run ID: MSD_15_090204B Prep Date: 02/04/2009 Analyte Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPDLL Dichlorodifluoromethane 46.3 2.5 50 0 93 13 167 42.08 9.5(2 Chloromethane 42.3 10 50 0 85 28 145 39.47 6.9(2 Chloromethane 43.4 2.5 50 0 97 43 134 45.61 5.9(2 Chloromethane 48.7 2.5 50 0 87 39 154 41.62 4.2(2 Bromomethane 46.8 10 50 0 94 19 176 42.16 10.4(2 Dichloromethane 50.6 2.5 50 0 104 48.17 7.9(2 1.1-Dichloroe	mit) Qua 0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0)
Sample ID:09012942-03AMSDUnits : µg/LRun ID: MSD_15_090204BPrep Date:02/04/2009AnalyteResultPQLSpkValSpkRefVal %REC LCL(ME)UCL(ME) RPDRefVal %RPD(LDichlorodifluoromethane46.32.5500931316742.089.5(2Chloromethane42.310500852814539.476.9(2Vinyi chloride48.42.5500974313445.615.9(2Chloromethane43.42.5500873915441.624.2(2Bromomethane46.810500941917642.1610.4(2Trichlorofluoromethane52.12.55001043416048.177.9(21,1-Dichloroethene46.910500946813044.974.1(2Lirans-1,2-Dichloroethene50.62.55001016313047.376.7(2Methyl tert-butyl ether (MTBE)49.11.3500985614147.243.9(21,1-Dichloroethane53.92.55001006113047.375.9(2Grichloromethane53.92.55001037013048.755.9(2Lichloropethane53.92.5500103713048.822.0(21,1-Trichloropethane53.9	mit) Qua 0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0)
AnalyteResultPQLSpkValSpkVal%RECLCL(ME)UCL(ME)RPDRefVal%RPD(LDichlorodifluoromethane46.32.5500931316742.089.5(2)Chloromethane42.310500852814539.476.9(2)Vinyl chloride48.42.5500974313445.615.9(2)Chloromethane43.42.5500873915441.624.2(2)Bromomethane46.810500941917642.1610.4(2)Trichlorofluoromethane52.12.55001043416048.177.9(2)1.1-Dichloroethene48.72.5500976013044.369.3(2)Dichloromethane46.910500946813044.974.1(2)Larans-1,2-Dichloroethene50.62.55001016313047.376.7(2)Methyl tert-butyl ether (MTBE)49.11.3500985614147.243.9(2)Chloromethane50.12.55001006113047.275.8(2)Cis-1,2-Dichloroethane51.72.55001037013048.755.9(2)Bromochlaromethane51.72.5500946713044.984.8	0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0)
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Chloromethane42.310500852814539.476.92Vinyi chloride48.42.5500974313445.615.92Chloroethane43.42.5500873915441.624.22Bromomethane46.810500941917642.1610.42Trichlorofluoromethane52.12.55001043416048.177.921,1-Dichloroethene48.72.5500946813044.369.32Dichloromethane46.910500946813044.374.12trans-1,2-Dichloroethene50.62.55001016313047.376.72Methyl tert-butyl ether (MTBE)49.11.3500985614147.243.92cis-1,2-Dichloroethene51.72.55001006113047.275.82cis-1,2-Dichloroethene51.72.55001037013048.755.92Bromonchloromethane53.92.55001087013048.755.92Chloroform47.22.5500946713044.984.822,2-Dichloroppane44.22.5500986013548.282.021,1-Dichloroethane	0) 0) 0) 0) 0) 0) 0) 0) 0) 0) 0)
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2,2-Dichloropropane44.22,5500883015240.448.821,2-Dichloroethane49.32,5500996013548.282.021,1,1-Trichloroethane50.12,55001005913746.37.921,1-Dichloropropene512,55001026313047.018.22Carbon tetrachloride48.42,5500975014744.947.42Benzene46.41.3500936713043.526.52Dibromomethane52.12,55001046913350.084.02	
1,2-Dichloroethane49.32.5500996013548.282.0(2)1,1,1-Trichloroethane50.12.55001005913746.37.9(2)1,1-Dichloropropene512.55001026313047.018.2(2)Carbon tetrachloride48.42.5500975014744.947.4(2)Benzene46.41.3500936713043.526.5(2)Dibromomethane52.12.55001046913350.084.0(2)	
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1,1-Dichloropropene512.55001026313047.018.2(2)Carbon tetrachloride48.42.5500975014744.947.4(2)Benzene46.41.3500936713043.526.5(2)Dibromomethane52.12.55001046913350.084.0(2)	
Benzene46.41.3500936713043.526.5(2Dibromomethane52.12.55001046913350.084.0(2	0)
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1,2-Dichloropropane48.92.5500986913046.435.1(2Trichloroethene52.52.5501.21036913048.867.2(2	
Trichloroethene 52.5 2.5 50 1.2 103 69 130 48.86 7.2(2 Bromodichloromethane 50.7 2.5 50 0 101 66 134 48.62 4.3(2	
cis-1,3-Dichloropropene 49.3 2.5 50 0 99 63 130 47.56 3.6(2	
trans-1,3-Dichloropropene 50.6 2.5 50 0 101 66 131 48.46 4.4(2	
1,1,2-Trichloroethane 46.9 2.5 50 0 94 68 130 45.17 3.8(2	
Toluene 45.3 1.3 50 0 91 66 130 43.4 4.3(2	
1,3-Dichloropropane 45.2 2.5 50 0 90 70 130 43.87 3.0(2 Bits and the set of the set o	
Dibromochloromethane 48.8 2.5 50 0 98 70 130 46.98 3.8(2 1,2-Dibromoethane (EDB) 91.2 10 100 0 91 70 130 89.67 1.7(2	
1,2-Dibromoethane (EDB) 91.2 10 100 0 91 70 130 89.67 1.7(2 Tetrachloroethene 48.1 2.5 50 0.7 95 61 134 44.84 7.0(2	
1,1,1,2-Tetrachloroethane 45.5 2.5 50 0 91 70 130 44.79 1.5(2	
Chlorobenzene 45.2 2.5 50 0 90 70 130 44.11 2.5(2	
Ethylbenzene 45.3 1.3 50 0 91 68 130 43.42 4.2(2	0)
m,p-Xylene 46.1 1.3 50 0 92 64 130 44.61 3.2(2	
Bromoform 44.9 2.5 50 0 90 64 138 42.22 6.1(2	
Styrene 46.6 2.5 50 0 93 69 130 45.41 2.6(2 a Video 45.5 1.0 50 0 93 69 130 45.41 2.6(2	
o-Xylene45.51.3500917013044.183.0(21,1,2,2-Tetrachloroethane42.82.5500866513141.872.2(2	
1,2,3-Trichloropropane 84.2 10 100 0 84 70 130 83.3 1.1(2	
isopropylbenzene 47.8 2.5 50 0 96 64 138 44.58 7.0(2	
Bromobenzene 47.4 2.5 50 0 95 70 130 45.18 4.8(2	
n-Propylbenzene 48 2.5 50 0 96 66 132 44.85 6.9(2	
4-Chlorotoluene 49.6 2.5 50 0 99 70 130 46.47 6.5(2	
2-Chlorotoluene 48.6 2.5 50 0 97 70 130 46.38 4.6(2	
1,3,5-Trimethylbenzene46.82.5500946613644.365.4(2)tert-Butylbenzene45.92.5500926513742.996.5(2)	
tert-Butylbenzene 45.9 2.5 50 0 92 65 137 42.99 6.5(2 1,2,4-Trimethylbenzene 48.2 2.5 50 0 96 65 137 45.24 6.3(2	
sec-Butylbenzene 46.2 2.5 50 0 90 66 134 42.86 7.5(2	
1,3-Dichlorobenzene 47.6 2.5 50 0 95 70 130 45.27 4.9(2	
1,4-Dichlorobenzene 46 2.5 50 0 92 70 130 43.72 5.1(2	0)
4-Isopropyltoluene 47.3 2.5 50 0 95 66 137 44.21 6.8(2	
1,2-Dichlorobenzene 46 2.5 50 0 92 70 130 44.23 3.9(2	
n-Butylbenzene 47.9 2.5 50 0 96 60 142 44.5 7.3(2	
1,2-Dibromo-3-chloropropane (DBCP)2201525008867130210.34.6(2)1,2,4-Trichlorobenzene52.9105001066113747.2111.4(2)	
1,2,4-Trichlorobenzene 52.9 10 50 0 106 61 137 47.21 11.4(2) Naphthalene 43.6 10 50 0 87 40 167 39.01 11.1(2)	
Hexachlorobutadiene 96.7 10 100 0 97 61 130 85.93 11.8(2	
1,2,3-Trichlorobenzene 53.9 10 50 0 108 51 144 45.63 16.7(
Surr: 1,2-Dichloroethane-d4 47.6 50 95 70 130	
Surr: Toluene-d8 49.4 50 99 70 130	
Surr: 4-Bromofluorobenzene 49.7 50 99 70 130	



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

QC Summary Report

Work Order: 09012942

09-Feb-09 Comments:

Date:

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.

Battelle 505 King Avenue	ţ		Alpha Analytical, Inc.		Alpl	ia Ai	Alpha Analytical, Inc	al, In	c.		WorkOrder : BM109012942	109012942
Columbus, OH 43201	13201			255 Glen TI	255 Glendale Avenue, Suite 21 TFI · (775) 355-1044	nue, Suit 355-104	TI 4	Sparks, Nevada 894	Sparks, Nevada 89431-5778 AX: (775) 355-0406		Report Due By: 5:00 PM On: 12-Feb-09	M On : 12-Feb-09
Client:			Report Attention	Ι.	Pho	Phone Number	~	EMail A	EMail Address		,	
Battelle Memorial Institute	al Institute		David Conne	4	(619)	(619) 574-4827	27 x	connerd@	connerd@battelle.org	UY]	
505 King Avenue	U		Betsy Cutie		(614	(614) 424-4899	x 66	cutiee@batelle.org	atelle.org		EDD Required : Yes	
Columbus, OH 43201	13201		Shane Waltor	n	(614	(614) 424-4117	17 x	waltons@	waltons@battelle.org		Sampled by : Client	
PO: 218013			l								đ	Samples Received Date Printed
Client's COC #: 24	24141	Job :	G005862/JPL Groundwater Monitoring	L Groun	Idwater N	Monitorir	DI				4 °C 29	29-Jan-09 29-Jan-09
QC Level: S4	= Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates	InitCal/Co	onCal data, LC	S, MS/	MSD Wi	th Surro	gates					
										Requested Tests	fests	
Alpha Sample ID	Client Sample ID	C Matrix	Collection rix Date	No. of Alpha	No. of Bottles Alpha Sub	TAT	314_W	METALS_D W	VOC_TICW	V0C_W		Sample Remarks
BMI09012942-01A	MW-17-4	AQ	01/28/09 08:57	თ	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria		
BMI09012942-02A	MW-17-3	AQ	01/28/09 09:30	G	0	10	Perchlorate	۵	VOC by 524 Criteria	VOC by 524 Criteria		
BMI09012942-03A	MW-17-2	AQ	01/28/09 10:10	თ	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria		Level IV QC
BMI09012942-04A	MW-18-5	AQ	01/28/09 11:20	4	0	10	Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria		
BMI09012942-05A	MW-18-4	AQ	01/28/09 11:53	ෆ	0	10	Perchlorate	Ŷ	VOC by 524 Criteria	VOC by 524 Criteria		
BMI09012942-06A	MW-18-3	AQ	01/28/09 12:21	UI	0	10	Perchlorate	ç	VOC by 524 Criteria	VOC by 524 Criteria		
BMI09012942-07A	MW-18-2	AQ	01/28/09 12:50	თ	0	10	Perchlorate	ç	VOC by 524 Criteria	VOC by 524 Criteria		Level IV QC
BM109012942-08A	EB-04-01/28/09	AQ	01/28/09 09:54	GI	0	10	Perchlorate	ç	VOC by 524 Criteria	VOC by 524 Criteria		
BMI09012942-09A	TB-04-01/28/09	AQ	01/28/09 00:00	-	0	10			VOC by 524 Criteria	VOC by 524 Criteria		Reno Trip Blank 9/30/08
Comments:	Security seals intact. Fr	ozen ice. T	emp Blank #86	91 recei	ved @ 4 (legrees C	elcius. Sam	ples shou	ld be used a	s the control sp	Security seals intact. Frozen ice. Temp Blank #8691 received @ 4 degrees Celcius. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC. :). Level IV QC. :
		Sig	Signature					Pr	Print Name		Company	Date/Time
Logged in by:	K	1	(•		-		Π	diosa	Alpha Analytical, Inc.	ci:ci polpel

		Samples Collected Exam Which State?	S
TOMP	Alpha Analytical, Inc. 255 Glendale Avenue, Suite 21	AZ CA X NV WA	2 +
Address <u>505 NNC AVE</u> . City, State, Zip <u>Columents</u> , 0H 43201	Sparks, Nevada 89431-5778 Phone (775) 355-1044 Eav (775) 355-0406	Analyses Required	
_ Fax	Fax (113) 333-0400		
Client Name LAVID CONNER P.O. # 2/8	218013 Job # 6005862	1 1 10 (m) 10	Required QC Level?
TOWN AVE, C-205 EMail Ad		4.	/ ' " (III) IV
<u>ר וה</u>	~ 72<- 73/1 Fax #		EDD / EDF? YES NO
Date Matrix* Sampled by Report Atter			Global ID #
Sampled Sampled Below Lab ID Number (Use Only)	Sample Description TAT Field See below	below / I A A J / / / /	REMARKS
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ADDITIONAL INSTRUCTIONS:			
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Relinquished by	isn' range	16-11 EEL 01/28/	109 1430
Relinquisted by	ricia Edinsa	Alpha lilag	CI.CI POLO
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.	ner AR - Air **: L-Liter V-Voa S-Soil Jar s other arrangements are made. Hazardous samples will be he laboratory with this coc. The liability of the laboratory is li	il Jar O-Orbo T-Tedlar B-Brass P-F ill be returned to client or disposed of at client expense. y is limited to the amount paid for the report.	P-Plastic OT-Other ise. The report for the analysis
of the above satisfies is applicable only to those satisfies received by t		y is influed to the arrivalit part for the report.	



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

Date: 09-Feb-09 David Conner Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 (619) 574-4827

CASE NARRATIVE

Order: BMI09013053		Cooler Temp: 4 °C
Alpha's Sample ID	Client's Sample ID	Matrix
09013053-01A	MW-26-2	Aqueous
09013053-02A	MW-26-1	Aqueous
09013053-03A	MW-25-5	Aqueous
09013053-04A	MW-25-4	Aqueous
09013053-05A	MW-25-3	Aqueous
09013053-06A	MW-25-2	Aqueous
09013053-07A	MW-25-1	Aqueous
09013053-08A	DUPE-02-1Q09	Aqueous
09013053-09A	EB-05-1-29-09	Aqueous
09013053-10A	TB-05-1-29-09	Aqueous
	Manually Integrated	Analytes
Alpha's Sample ID	Test Reference	Analyte
09013053-02A	EPA Method 314.0	Perchlorate
09013053-04A	EPA Method 314.0	Perchlorate
09013053-05A	EPA Method 314.0	Perchlorate
09013053-06A	EPA Method 314.0	Perchlorate
09013053-07A	EPA Method 314.0	Perchlorate
09013053-08A	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/Chainof-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.

Walter Arihm Kandy Santur Roger Scholl

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 / info@alpha-analytical.com 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.



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ANALYTICAL REPORT

Attn:

Fax:

Phone:

Alpha Analytical Number: BMI09013053-01A Client I.D. Number: MW-26-2 Sampled: 01/29/09 Received: 01/30/09

David Conner

(619) 574-4827

(614) 458-6641

Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
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 (DBCI	P) 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	106	(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	93	(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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Walter Acrim Kandy Sandmer

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 / info@alpha-analytical.com

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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: <u>G005862/JPL</u> Groundwater Monitoring

Alpha Analytical Number: BMI09013053-02A Client I.D. Number: MW-26-1 Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641

Sampled: 01/29/09 Received: 01/30/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
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 (DBC	P) 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	103	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Kandy Sandman

Walter Hirihun

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 / info@alpha-analytical.com

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N 2/17/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: <u>G005862/JPL</u> Groundwater Monitoring

Alpha Analytical Number: BMI09013053-03A Client I.D. Number: MW-25-5 Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641

Sampled: 01/29/09 Received: 01/30/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
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 (DBCF	P) 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	107	(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	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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Kandy Santur

Dalta Airian

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 / info@alpha-analytical.com

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.

2/17/09 Report Date



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

ANALYTICAL REPORT

Attn:

Phone:

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09013053-04A Client I.D. Number: MW-25-4 Fax: (614) 458-6641 Sampled: 01/29/09

David Conner

(619) 574-4827

Received: 01/30/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
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	NĎ	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	ug/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 (DBCI	P) 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	107	(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	95	(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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Kandy Sandmer

Walter Acrilmon

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 / info@alpha-analytical.com

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¢ 2/17/09 Report Date



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 505 King Avenue Columbus, OH 43201 Job#: _____G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09013053-05A Client I.D. Number: MW-25-3 Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641

Sampled: 01/29/09 Received: 01/30/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
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	0.93	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 (DBCI	P) 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	107	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32		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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Walter Acrim

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 / info@alpha-analytical.com

Kandy Sandmer

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2/17/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09013053-06A Client I.D. Number: MW-25-2 Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641

Sampled: 01/29/09 Received: 01/30/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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 (DBC	P) 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	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	(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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Walter Hiridmon Kandy Sandmar

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 / info@alpha-analytical.com

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2/17/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: ______G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09013053-07A Client I.D. Number: MW-25-1 Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641

Sampled: 01/29/09 Received: 01/30/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
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 (DBC	P) 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	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	104	(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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Kandy Sandmer

Dalter Hirihm

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2/17/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09013053-08A Client I.D. Number: DUPE-02-1Q09
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

Sampled: 01/29/09 Received: 01/30/09

Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	Chioroethane	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 (DBC	P) 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	107	(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	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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Walter Airihun Kandy Saulmer

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 / info@alpha-analytical.com

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2/**\$**7/09 Report Date



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 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09013053-09A Client I.D. Number: EB-05-1-29-09 Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641

Sampled: 01/29/09 Received: 01/30/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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 (DBC	P) 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	104	(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	96	(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.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Dalter Acrilmon Kandy Sandmer

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 / info@alpha-analytical.com

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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	
505 King Avenue	
Columbus, OH 43201	
Job#: G005862/JPL Groundwater Monitoring	

Alpha Analytical Number: BMI09013053-10A Client I.D. Number: TB-05-1-29-09
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

Sampled: 01/29/09 Received: 01/30/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	lsopropylbenzene	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 (DBC	P) 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	102	(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	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

This replaces the report originally signed 2/12/09, due to a change in the reporting limits, due to lab error.

ND = Not Detected

Roger Scholl

Walter Airihur Kandy Saulur

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 / info@alpha-analytical.com

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2/17/09 Report Date



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: BMI09013053

Project: G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH	
09013053-01A	MW-26-2	Aqueous	2	
09013053-02A	MW-26-1	Aqueous	2	
09013053-03A	MW-25-5	Aqueous	2	
09013053-04A	MW-25-4	Aqueous	2	
09013053-05A	MW-25-3	Aqueous	2	
09013053-06A	MW-25-2	Aqueous	2	
09013053-07A	MW-25-1	Aqueous	2	
09013053-08A	DUPE-02-1Q09	Aqueous	2	
09013053-09A	EB-05-1-29-09	Aqueous	2	
09013053-10A	TB-05-1-29-09	Aqueous	2	



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Attn:David ConnerPhone:(619) 574-4827Fax:(614) 458-6641Date Received : 01/30/09

Job#: G005862/JPL Groundwater Monitoring

		Р	erchlorate by Ion Chromatography EPA Method 314.0			
		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : Lab ID :	MW-26-2 BMI09013053-01A	Perchlorate	ND	1.00 μg/L	01/29/09	02/02/09
Client ID : Lab ID :	MW-26-1 BMI09013053-02A	Perchlorate	2.38	1.00 μg/L	01/29/09	02/02/09
Client ID : Lab ID :	MW-25-5 BMI09013053-03A	Perchlorate	ND	1.00 μg/L	01/29/09	02/02/09
Client ID : Lab ID :	MW-25-4 BMI09013053-04A	Perchlorate	7.39	1.00 µg/L	01/29/09	02/02/09
Client ID : Lab ID :	MW-25-3 BMI09013053-05A	Perchlorate	8.19	1.00 μg/L	01/29/09	02/02/09
Client ID : Lab ID :	MW-25-2 BMI09013053-06A	Perchlorate	13.2	1.00 µg/L	01/29/09	02/02/09
Client ID : Lab ID :	MW-25-1 BMI09013053-07A	Perchlorate	9.11	1.00 μg/L	01/29/09	02/02/09
Client ID : Lab ID :	DUPE-02-1Q09 BMI09013053-08A	Perchlorate	8.81	1.00 μg/L	01/29/09	02/02/09
Client ID : Lab ID :	EB-05-1-29-09 BMI09013053-09A	Perchlorate	ND	1.00 µg/L	01/29/09	02/02/09

ND = Not Detected

Roger Scholl

Kandy Santur

Walter Airihum

2/12/09 Report Date

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 / info@alpha-analytical.com 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.



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

 Date Received : 01/30/09

Job#: G005862/JPL Groundwater Monitoring

			Metals by ICPMS EPA Method 200.8		
		Parameter	Concentration	Reporting Limit	Date Date Sampled Analyzed
Client ID : Lab ID :	MW-26-2 BMI09013053-01A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09
Client ID : Lab ID :	MW-26-1 BMI09013053-02A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09
Client ID : Lab ID :	MW-25-5 BMI09013053-03A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09
Client ID : Lab ID :	MW-25-4 BMI09013053-04A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09
Client ID : Lab ID :	MW-25-3 BMI09013053-05A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09
Client ID : Lab ID :	MW-25-2 BMI09013053-06A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09
Client ID : Lab ID :	MW-25-1 BMI09013053-07A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09
Client ID : Lab ID :	DUPE-02-1Q09 BMI09013053-08A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09
Client ID : Lab ID :	EB-05-1-29-09 BMI09013053-09A	Chromium (Cr)	ND	0.0050 mg/L	01/29/09 02/04/09

ND = Not Detected

Walter Airihm Kandy Saulmer Roger Scholl

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 / info@alpha-analytical.com 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.

2/12/09 **Report Date**



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	Attn:	David Conner
505 King Avenue	Phone	: (619) 574-4827
Columbus, OH 43201	Fax:	(614) 458-6641
Joh# G005862/IPI Groundwater Monitoring		

G005862/JPL Groundwater Monitoring

Tentatively Identified Compounds - Volatile Organics by GC/MS

	······	· · · · · · · · · · · · · · · · · · ·		Estimated			
		Parameter	Estimated	Reporting	Date	Date	Date
			Concentration	Limit	Received	Sampled	Analyzed
Client ID :	MW-26-2						
Lab ID :	BMI09013053-01A	Sulfur dioxide	2.9	2.0 µg/L	01/30/09	01/29/09	02/05/09
Client ID :	MW-26-1						
Lab ID :	BMI09013053-02A	* * * None Found * * *	ND	2.0 µg/L	01/30/09	01/29/09	02/05/09
Client ID :	MW-25-5						
Lab ID :	BMI09013053-03A	Sulfur dioxide	59	2.0 µg/L	01/30/09	01/29/09	02/05/09
Client ID :	MW-25-4						
Lab ID :	BMI09013053-04A	Sulfur dioxide	21	2.0 μg/L	01/30/09	01/29/09	02/05/09
Client ID :	MW-25-3						
Lab ID :	BMI09013053-05A	Sulfur dioxide	11	2.0 µg/L	01/30/09	01/29/09	02/05/09
Client ID :	MW-25-2						
Lab ID :	BMI09013053-06A	Sulfur dioxide	7.0	2.0 µg/L	01/30/09	01/29/09	02/05/09
Client ID :	MW-25-1				01/00/00	01/00/00	00/05/00
Lab ID :	BMI09013053-07A	Sulfur dioxide	3.6	2.0 µg/L	01/30/09	01/29/09	02/05/09
Client ID :	DUPE-02-1Q09				01/20/00	01/20/00	00/05/00
Lab ID :	BMI09013053-08A	Sulfur dioxide	2.2	2.0 μg/L	01/30/09	01/29/09	02/05/09
Client ID :	EB-05-1-29-09				01/00/00	01/00/00	00/05/00
Lab ID :	BMI09013053-09A	* * * None Found * * *	ND	2.0 µg/L	01/30/09	01/29/09	02/05/09
Client ID : Lab ID :	TB-05-1-29-09	444 1 7 1 4 4		2 0 1	01/20/00	01/20/00	02/05/00
Lauid	BMI09013053-10A	* * * None Found * * *	ND	2.0 μg/L	01/30/09	01/29/09	02/05/09

Note: Analysis conducted using EPA Method 524.2 criteria. ND = Not Detected

Roger Scholl

Kandy Saulmer

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

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

2/12/09 **Report Date**

Page 1 of 1



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

Date: 09-Feb-09	QC Summary Report										Work Order: 09013053	
Method Blank File ID: 14		Туре	MBLK		est Code: EF atch ID: 2142		thod 314.0		sis Date:	02/02/2009 12:37		
Sample ID: MB-21420	Units : µg/L		Run	ID: IC	_3_090202A	`		Prep [Date:	01/30/2009		
Analyte	Result	PQL	Sp	kVal	SpkRefVal	%REC	CLCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qua	
Perchlorate	ND		2									
Laboratory Fortified Blank		Туре	LFB	Te	est Code: EF	PA Met	thod 314.0					
File ID: 15				Ba	atch ID: 2142	20		Analys	sis Date:	02/02/2009 12:56		
Sample ID: LFB-21420	Units : µg/L		Run	ID: IC	_3_090202A			Prep [Date:	01/30/2009		
Analyte	Result	PQL	Sp	kVal	SpkRefVal	%REC	CLCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qua	
Perchlorate	23.4		2	25		94	85	115				
Sample Matrix Spike		Туре	LFM	Τe	est Code: EF	PA Met	thod 314.0					
File ID: 23				Ba	atch ID: 2142	20		Analys	sis Date:	02/02/2009 15:23		
Sample ID: 09013053-01ALFM	Units : µg/L		Run	ID: IC	_3_090202A			Prep [Date:	01/30/2009		
Analyte	Result	PQL	Sp	kVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual	
Perchlorate	22.5		2	25	0	90	80	120				
Sample Matrix Spike Duplicate		Туре	LFMD	Τe	est Code: EF	A Met	thod 314.0					
File ID: 24				Ba	atch ID: 2142	20		Analys	sis Date:	02/02/2009 15:41		
Sample ID: 09013053-01ALFMD	Units : µg/L		Run	ID: IC	_3_090202A			Prep (Date:	01/30/2009		
Analyte	Result	PQL	Sp	kVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qua	
Perchlorate	22.7		2	25	0	91	80	120	22.4			
	•											

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: 11-Feb-09	(QC S	ummar	y Repor	t				Work Ord 09013053	
Method Blank File ID: 020409.B\052SMPL.D\	· · · · · · · · · · · · · · · · · · ·	Туре І		est Code: E atch ID: 214		hod 200.8		sis Date:	02/04/2009 19:09	
Sample ID: MB-21448	Units : mg/L		Run ID: IC	P/MS_0902	04D		Prep	Date:	02/04/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Chromium (Cr)	ND	0.00	5							
Laboratory Control Spike File ID: 020409.B\053_LCS.D\		Туре 1		est Code: E		hod 200.8		sis Date:	02/04/2009 19:15	
Sample ID: LCS-21448	Units : mg/L		Run ID: IC	P/MS_0902	04D		Prep	Date:	02/04/2009	<u> </u>
Analyte Chromium (Cr)	Result 0.0505	PQL 0.00			%REC	80	120	RPDRen	Val %RPD(Limit)	Qual
Sample Matrix Spike File ID: 020409.B\057SMPL.D\ Sample ID: 09013053-01AMS Analyte	Units : mg/L Result	Туре І	MS T B Run ID: IC	est Code: E atch ID: 214 P/MS_0902	PA Met 48K 04D	hod 200.8	Analy Prep	Date:	02/04/2009 19:38 02/04/2009 Val %RPD(Limit)	Qual
Chromium (Cr)	0.0545	0.00	5 0.05	0	109	80	120			
Sample Matrix Spike Duplicate File ID: 020409.B\058SMPL.D\		Туре І		est Code: E atch ID: 214		hod 200.8		sis Date:	02/04/2009 19:44	
Sample ID: 09013053-01AMSD	Units : mg/L			P/MS_0902			Prep		02/04/2009	01
Analyte Chromium (Cr)	Result 0.0535	PQL 0.00		SpkRefVal 0		80	120	0.054	Val %RPD(Limit) 47 1.8(20)	Qual

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.



Date: 10-Feb-09	(QC Sumn	nary Report		Work Order: 09013053
Method Blank		Type MBLK	Test Code:		
File ID: 09020506.D			Batch ID: MS15W0205M	Analysis Date: 0	
Sample ID: MBLK MS15W0205M	Units : µg/L		D: MSD_15_090205A	•	2/05/2009
Analyte	Result		Val SpkRefVal %REC LCL(ME	E) UCL(ME) RPDRefVa	I %RPD(Limit) Qual
Dichlorodifluoromethane Chloromethane	ND	0.5			
Vinyl chloride	ND ND	1 0.5			
Chloroethane	ND	0.5			
Bromomethane	ND	1			
Trichlorofluoromethane	ND	0.5			
1,1-Dichloroethene Dichloromethane	ND ND	0.5 1			
Freon-113	ND	0.5			
trans-1,2-Dichloroethene	ND	0.5			
Methyl tert-butyl ether (MTBE)	ND	0.5			
1,1-Dichloroethane 2-Butanone (MEK)	ND ND	0.5 10			
cis-1,2-Dichloroethene	ND	0.5			
Bromochloromethane	ND	0.5			
Chloroform	ND	0.5			
2,2-Dichloropropane 1,2-Dichloroethane	ND ND	0.5 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 1,2-Dichloropropane	ND ND	0.5 0.5			
Trichloroethene	ND	0.5			
Bromodichloromethane	ND	0.5			
4-Methyl-2-pentanone (MIBK)	ND	2.5			
cis-1,3-Dichloropropene trans-1,3-Dichloropropene	ND ND	0.5 0.5			
1,1,2-Trichloroethane	ND	0.5			
Toluene	ND	0.5			
1,3-Dichloropropane	ND	0.5			
Dibromochloromethane 1,2-Dibromoethane (EDB)	ND ND	0.5 1			
Tetrachloroethene	ND	0.5			
1,1,1,2-Tetrachloroethane	ND	0.5			
Chlorobenzene	ND	0.5			
Ethylbenzene m,p-Xylene	ND	0.5			
Bromoform	ND ND	0.5 0.5			
Styrene	ND	0.5			
o-Xylene	ND	0.5			
1,1,2,2-Tetrachloroethane	ND	0.5			
1,2,3-Trichloropropane Isopropylbenzene	ND ND	1 0.5			
Bromobenzene	ND	0.5			
n-Propylbenzene	ND	0.5			
4-Chlorotoluene 2-Chlorotoluene	ND	0.5			
1,3,5-Trimethylbenzene	ND ND	0.5 0.5			
tert-Butylbenzene	ND	0.5			
1,2,4-Trimethylbenzene	ND	0.5			
sec-Butylbenzene	ND	0.5			
1,3-Dichlorobenzene 1,4-Dichlorobenzene	ND ND	0.5 0.5			
4-Isopropyltoluene	ND	0.5			
1,2-Dichlorobenzene	ND	0.5			
n-Butylbenzene	ND	0.5			
1,2-Dibromo-3-chloropropane (DBCP) 1,2,4-Trichlorobenzene	ND ND	2.5 1			
Naphthalene	ND	1			
Hexachlorobutadiene	ND	1			
1,2,3-Trichlorobenzene	ND	1	10 · · · ·	100	
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	10.5		10105701010170	130 130	
	10.1		10 101 70	150	



Date: 10-Feb-09		(QC Sui	mmary	Report				Work Ord 09013053	
Surr: 4-Bromo	fluorobenzene	9.44		10		94	70	130		
Laboratory File ID: 09020 Sample ID:	Control Spike 504.D LCS MS15W0205M	l loite : ug/l	Type LC:	Ва	st Code: tch ID: MS15		5M	Analysis Date: Prep Date:	02/05/2009 09:20 02/05/2009	
Analyte	LC3 W313W0203W	Units : µg/L Result	PQL		5D_15_090205 SpkReft/al_%		LCL(ME)	UCL(ME) RPDRef		Qual
Dichlorodifluor	romethane	7.91	1	10		79	70	130		
Chloromethan		7.88	2	10		79	70	130		
Vinyl chloride		9.28	1	10		93	70	130		
Chloroethane Bromomethan		8.38	1	10		84	70 70	130 130		
Trichlorofluoro		8.43 10.8	2 1	10 10		84 108	70 70	130		
1,1-Dichloroet		10.4	1	10		104	70	130		
Dichlorometha		9.76	2	10		98	70	130		
trans-1,2-Dich		10.5	1	10		105	70	130		
1,1-Dichloroet	tyl ether (MTBE) hane	10.2 10.4	0.5 1	10 10		102 104	62 70	136 130		
cis-1,2-Dichlor		10.4	1	10		106	70	130		
Bromochloron	nethane	11.3	1	10	1	113	70	130		
Chloroform		9.78	1	10		98	70	130		
2,2-Dichloropr 1,2-Dichloroet	•	8.9 10.4	1 1	10 10		89 104	70 70	130 130		
1,1,1-Trichlord		10.4	1	10		104	70	130		
1,1-Dichloropr		10.8	1	10		108	70	130		
Carbon tetracl	hloride	10.2	1	10		102	70	130		
Benzene		9.56	0.5	10		96	70	130		
Dibromometha 1,2-Dichloropr		10.6 9.96	1	10 10		106)9.6	70 70	130 130		
Trichloroether	•	10.9	1	10		109	70	130		
Bromodichloro	omethane	10.5	1	10	1	105	70	130		
cis-1,3-Dichlor		10.4	1	10		104	70	130		
trans-1,3-Dich 1,1,2-Trichloro		10.3 9.72	1 1	10 10		103 97	70 70	130 130		
Toluene	Jeniane	9.72	0.5	10		95	70	130		
1,3-Dichloropr	ropane	9.31	1	10		93	70	130		
Dibromochlor		10.2	1	10		102	70	130		
1,2-Dibromoei Tetrachloroeth	· ·	19	2	20		95	70 70	130 130		
1,1,1,2-Tetrac		10.1 9.57	1 1	10 10		101 96	70	130		
Chlorobenzen		9.31	1	10		93	70	130		
Ethylbenzene		9.51	0.5	10		95	70	130		
m,p-Xylene		9.77	0.5	10		98	70	130		
Bromoform Styrene		9.31 9.57	1 1	10 10		93 96	70 70	130 130		
o-Xylene		9.46	0.5	10		95	70	130		
1,1,2,2-Tetrac	hloroethane	8.74	1	10		87	70	130		
1,2,3-Trichlord		18	2	20		90	70	130		
Isopropylbenz Bromobenzen		9.61 9.35	1	10 10		96 94	70 70	130 130		
n-Propylbenze		9.78	1	10		94 98	70	130		
4-Chlorotolue		9.8	1	10		98	70	130		
2-Chlorotolue		9.67	1	10		97	70	130		
1,3,5-Trimethy		9.34	1	10		93	70 70	130 130		
tert-Butylbenz 1.2.4-Trimethy		9.22 9.66	1	10 10		92 97	70	130		
sec-Butylbenz	,	9.28	1	10		93	70	130		
1,3-Dichlorobe		9.52	1	10		95	70	130		
1,4-Dichlorobe		9.15	1	10		92	70	130		
4-Isopropyltol 1,2-Dichlorobe		9.46 9.09	1	10 10		95 91	70 70	130 130		
n-Butylbenzer	ne	9.6	1	10		96	70	130		
1,2-Dibromo-3	B-chloropropane (DBCP)	44.7	3	50		89	70	130		
1,2,4-Trichlord	obenzene	10.2	2	10		102	70	130		
Naphthalene Hexachlorobu	tadiene	8.76 18.4	2	10		88 02	70 70	130 130		
1,2,3-Trichlor		18.4 10.1	2 2	20 10		92 101	70 70	130		
Surr: 1,2-Dich	loroethane-d4	9.88	2	10		99	70	130		
Surr: Toluene		9.94		10		99	70	130		
Surr: 4-Bromo	ofluorobenzene	9.78		10		98	70	130		



Date: 10-Feb-09	(QC Su	mmar	y Report	,			Work Ord 09013053	
Sample Matrix Spike		Type MS		est Code:					i
File ID: 09020507.D			Ba	atch ID: MS1	5W020	05M	Analysis Date	: 02/05/2009 10:41	
Sample ID: 09020401-05AMS	Units : µg/L	R	Run ID: M	SD_15_09020	05 A		Prep Date:	02/05/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal %	%REC	LCL(ME)	UCL(ME) RPDRe	fVal %RPD(Limit)	Qual
Dichlorodifluoromethane	41.3	2.5	50	0	83	13	167		
Chloromethane	38.4	10	50	0	77	28	145		
Vinyl chloride	43.5	2.5	50	0	87	43	134		
Chloroethane Bromomethane	37.4	2.5	50	0 0	70 78	39 10	154 176		
Trichlorofluoromethane	39.1 49	10 2.5	50 50	0	70 98	19 34	160		
1,1-Dichloroethene	46.7	2.5	50 50	0	93	60	130		
Dichloromethane	45.4	10	50	õ	91	68	130		
trans-1,2-Dichloroethene	47.4	2.5	50	0	95	63	130		
Methyl tert-butyl ether (MTBE)	48.7	1.3	50	0	97	56	141		
1,1-Dichloroethane	47.4	2.5	50	0	95	61	130		
cis-1,2-Dichloroethene Bromochloromethane	48.6	2.5	50	0	97	70	130		
Chloroform	53.5 45.5	2.5 2.5	50 50	0 0	107 91	70 67	130 130		
2,2-Dichloropropane	39.9	2.5	50 50	0	80	30	152		
1,2-Dichloroethane	49.4	2.5	50	0	99	60	135		
1,1,1-Trichloroethane	47	2.5	50	0	94	59	137		
1,1-Dichloropropene	48	2.5	50	0	96	63	130		
Carbon tetrachloride	45.7	2.5	50	0	91	50	147		
Benzene	43.7	1.3	50	0	87	67	130		
Dibromomethane 1,2-Dichloropropane	51.8	2.5	50	0 0	104 93	69 69	133 130		
Trichloroethene	46.4 49.2	2.5 2.5	50 50	0	93 98	69	130		
Bromodichloromethane	49.9	2.5	50	Ő	99.8	66	134		
cis-1,3-Dichloropropene	47.8	2.5	50	Õ	96	63	130		
trans-1,3-Dichloropropene	50.1	2.5	50	0	100	66	131		
1,1,2-Trichloroethane	46.7	2.5	50	0	93	68	130		
	43.3	1.3	50	0	87	66	130		
1,3-Dichloropropane Dibromochloromethane	44.9	2.5	50	0	90 07	70 70	130 130		
1,2-Dibromoethane (EDB)	48.7 92.6	2.5 10	50 100	0 0	97 93	70 70	130		
Tetrachloroethene	45.5	2.5	50	0	91	61	134		
1,1,1,2-Tetrachloroethane	45.9	2.5	50	Ō	92	70	130		
Chlorobenzene	43.5	2.5	50	0	87	70	130		
Ethylbenzene	43.6	1.3	50	0	87	68	130		
m,p-Xylene	44.8	1.3	50	0	90	64	130		
Bromoform Styrene	45.1 44.8	2.5 2.5	50 50	0 0	90 90	64 69	138 130		
o-Xylene	44.8 43.5	2.5 1.3	50 50	0	90 87	69 70	130		
1,1,2,2-Tetrachloroethane	43.5	2.5	50	0	87	65	131		
1,2,3-Trichloropropane	88.9	10	100	õ	89	70	130		
Isopropylbenzene	43.4	2.5	50	0	87	64	138		
Bromobenzene	44.6	2.5	50	0	89	70	130		
n-Propylbenzene	43.2	2.5	50	0	86	66	132		
4-Chlorotoluene 2-Chlorotoluene	45.9 44.4	2.5 2.5	50 50	0	92 89	70 70	130 130		
1,3,5-Trimethylbenzene	44.4 43.1	2.5 2.5	50 50	0	69 86	70 66	136		
tert-Butylbenzene	42.1	2.5	50	0	84	65	137		
1,2,4-Trimethylbenzene	44.2	2.5	50	Ő	88	65	137		
sec-Butylbenzene	42.2	2.5	50	0	84	66	134		
1,3-Dichlorobenzene	44.4	2.5	50	0	89	70	130		
1,4-Dichlorobenzene	42.7	2.5	50	0	85	70	130		
4-Isopropyltoluene 1,2-Dichlorobenzene	43.3	2.5	50	0	87 86	66 70	137 130		
n-Butylbenzene	43 43.4	2.5 2.5	50 50	0	86 87	70 60	142		
1,2-Dibromo-3-chloropropane (DBCP)	43.4	2.5	250	0	89	67	130		
1,2,4-Trichlorobenzene	48.6	10	50	Ö	97	61	137		
Naphthalene	43.6	10	50	0	87	40	167		
Hexachlorobutadiene	85	10	100	0	85	61	130		
1,2,3-Trichlorobenzene	50.6	10	50	0	101	51	144		
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	49.2		50		98 99	70 70	130 130		
Surr: 4-Bromofluorobenzene	49.6 49.4		50 50		99 99	70	130		
	43.4		50		33	10	100		



Date: 10-Feb-09	(QC Si	ummar	y Repor	't				Work Ord 0901305	
Sample Matrix Spike Duplicate		Туре N	ISD Te	est Code:						
File ID: 09020508.D			Ba	atch ID: MS	15W020	05M	Analys	sis Date: 0	2/05/2009 11:04	
Sample ID: 09020401-05AMSD	Units : µg/L		Run ID: M	SD_15_0902	205 A		Prep [Date: 02	2/05/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVa	I %RPD(Limit)	Qual
Dichlorodifluoromethane	40.2	2.5		0	80	13	167	41.31	2.6(20)	
Chloromethane	37.2	10		0	74	28	145	38.37	3.2(20)	
Vinyl chloride Chloroethane	42 38.6	2.5 2.5		0	84 72	43 39	134 154	43.49 37.44	3.6(20) 3.0(20)	
Bromomethane	41.5	2.0		0	83	39 19	176	37.44	6.0(20)	
Trichlorofluoromethane	47.9	2.5		0	96	34	160	49.04	2.4(20)	
1,1-Dichloroethene	45	2.5		0	90	60	130	46.71	3.8(20)	
Dichloromethane	45.3	10		0	91	68	130	45.43	0.2(20)	
trans-1,2-Dichloroethene Methyl tert-butyl ether (MTBE)	47.3 48.2	2.5 1.3		0	95 96	63 56	130 141	47.36 48.7	0.1(20) 1.0(20)	
1,1-Dichloroethane	48.2	2.5		0	90 95	61	130	40.7	0.2(20)	
cis-1,2-Dichloroethene	50	2.5		Ő	100	70	130	48.61	2.9(20)	
Bromochloromethane	52.8	2.5	50	0	106	70	130	53.52	1.4(20)	
Chloroform	45.7	2.5		0	91	67	130	45.49	0.4(20)	
2,2-Dichloropropane	40.2	2.5		0	80	30	152	39.87	0.9(20)	
1,2-Dichloroethane 1,1,1-Trichloroethane	49.3 47.1	2.5 2.5		0	99 94	60 59	135 137	49.41 47.02	0.2(20) 0.1(20)	
1,1-Dichloropropene	47.1	2.5		0	94 95	63	137	47.02	1.1(20)	
Carbon tetrachloride	45.9	2.5		0	92	50	147	45.65	0.5(20)	
Benzene	44.2	1.3		0	88	67	130	43.68	1.2(20)	
Dibromomethane	52	2.5		0	104	69	133	51.8	0.4(20)	
1,2-Dichloropropane	46.7	2.5		0	93	69	130	46.38	0.7(20)	
Trichloroethene Bromodichloromethane	48.8 50.1	2.5 2.5		0	98 100	69 66	130 134	49.17 49.92	0.8(20) 0.3(20)	
cis-1,3-Dichloropropene	47.5	2.5		0	95	63	134	49.92 47.84	0.3(20)	
trans-1,3-Dichloropropene	49.7	2.5		0	99	66	131	50.14	0.9(20)	
1,1,2-Trichloroethane	46.2	2.5		0	92	68	130	46.72	1.1(20)	
Toluene	44	1.3		0	88	66	130	43.29	1.7(20)	
1,3-Dichloropropane	45	2.5		0	90	70	130	44.91	0.2(20)	
Dibromochloromethane 1,2-Dibromoethane (EDB)	49.6 92.8	2.5 10		0	99 93	70 70	130 130	48.66 92.63	2.0(20) 0.2(20)	
Tetrachloroethene	92.0 46	2.5		0	93 92	61	134	45.52	1.0(20)	
1,1,1,2-Tetrachloroethane	46.8	2.5		0	94	70	130	45.91	1.9(20)	
Chlorobenzene	44.6	2.5		0	89	70	130	43.48	2.6(20)	
Ethylbenzene	44.4	1.3		0	89	68	130	43.57	1.8(20)	
m,p-Xylene Bromoform	45.1 45.6	1.3 2.5		0	90 91	64 64	130 138	44.76 45.06	0.8(20) 1.3(20)	
Styrene	45.8	2.5		0	91 91	69	130	45.08 44.75	1.2(20)	
o-Xylene	44.6	1.3		0	89	70	130	43.45	2.5(20)	
1,1,2,2-Tetrachloroethane	41.9	2.5		0	84	65	131	43.45	3.6(20)	
1,2,3-Trichloropropane	88.8	10		0	89	70	130	88.87	0.1(20)	
Isopropylbenzene Bromobenzene	44.5	2.5		0	89	64	138	43.35	2.6(20)	
n-Propylbenzene	46.1 45.1	2.5 2.5		0	92 90	70 66	130 132	44.59 43.2	3.2(20) 4.2(20)	
4-Chlorotoluene	48	2.5		0	96	70	130	45.88	4.4(20)	
2-Chlorotoluene	45.8	2.5		Ō	92	70	130	44.36	3.2(20)	
1,3,5-Trimethylbenzene	44.4	2.5		0	89	66	136	43.13	2.9(20)	
tert-Butylbenzene	43.3	2.5		0	87	65	137	42.11	2.7(20)	
1,2,4-Trimethylbenzene sec-Butylbenzene	45.8 42.8	2.5 2.5		0	92 86	65 66	137 134	44.22 42.19	3.6(20) 1.4(20)	
1,3-Dichlorobenzene	46.5	2.5		0	93	70	134	44.42	4.5(20)	
1,4-Dichlorobenzene	44.5	2.5		Ő	89	70	130	42.72	4.0(20)	
4-Isopropyltoluene	44.1	2.5		0	88	66	137	43.28	1.9(20)	
1,2-Dichlorobenzene	45.1	2.5		0	90	70	130	43.02	4.6(20)	
n-Butylbenzene 1,2-Dibromo-3-chloropropane (DBCP)	44.8	2.5		0	90	60 67	142	43.36	3.4(20)	
1,2,4-Trichlorobenzene	221 52.9	15 10		0	89 106	67 61	130 137	221.5 48.56	0.0(20) 8.5(20)	
Naphthalene	45.7	10		0	91	40	167	43.58	4.7(20)	
Hexachlorobutadiene	90.4	10		Ő	90	61	130	85	6.1(20)	
1,2,3-Trichlorobenzene	54.5	10		0	109	51	144	50.61	7.4(20)	
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	47.8		50		96	70	130			
Surr: 4-Bromofluorobenzene	50.6 49.6		50 50		101 99	70 70	130 130			
			50		55	10	100			



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

QC Summary Report

Work Order: 09013053

10-Feb-09 Comments:

Date:

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.

2) R. UR		Alpha Analytical, Inc.	UNSU	hatry	(F)	ē			han	UN sa.	M	une !	Logged in by:	ŗ
t signed when Date/Time	vel IV OC. Chain no vany	pike sample if possible (I.E.: MS/MSD). Level IV OC. Chain not signed when Company Date/Ti	vike sample if	the control sp Print Name	e used as	oles should t) 4°. Sam	received @	ank #8566	. Temp Bl Signature	Frozen ice	Security seals intact. Frozen ice. Temp Blank #8566 received @ 4°. Samples should be used as the control s relinquished : Signature		Comments:
Reno 8260 TB, 1/6/09.	Re		VOC by 524 Criteria	VOC by 524 Criteria			10	0	00:00	Q	AQ	TB-05-1-29-09	BMI09013053-10A T	BMI090
Equipment Blank			VOC by 524 Criteria	VOC by 524 Criteria	<u>ନ</u>	Perchlorate	10	5 0		0	AQ	EB-05-1-29-09	BMI09013053-09A E	BMI090
Duplicate		-	VOC by 524 Criteria	VOC by 524 Criteria	ې ۲	Perchlorate	10	თ 0		o	AQ	DUPE-02-1Q09	BMI09013053-08A D	BMI090
			VOC by 524 Criteria	VOC by 524 Criteria	Ŷ	Perchlorate	10	5 0		0	AQ	MW-25-1	BMI09013053-07A M	BMI090
			VOC by 524 Criteria	VOC by 524 Criteria	Ŷ	Perchlorate	10	5 0	01/29/09 (10:38		AQ	MW-25-2	BMI09013053-06A M	BMI090
			VOC by 524 Criteria	VOC by 524 Criteria	c,	Perchlorate	10	5	01/29/09 10:10		AQ	MW-25-3	BMI09013053-05A M	BMI090
			VOC by 524 Criteria	VOC by 524 Criteria	ନ	Perchlorate	10	5	01/29/09 09:44	-	AQ	MW-25-4	BMI09013053-04A M	BMI090
		· · · · · ·	VOC by 524 Criteria	VOC by 524 Criteria	្ន	Perchlorate	10	5 0	01/29/09 09:16		Α	MW-25-5	BM109013053-03A M	BMI090
		AF * 4	VOC by 524 Criteria	VOC by 524 Criteria	ې ۲	Perchlorate	10	5			AQ	MW-26-1	BM109013053-02A M	BMI090
			VOC by 524 Criteria	VOC by 524 Criteria	<u>ې</u>	Perchlorate	10	5 0		Q	AQ	MW-26-2	BMI09013053-01A M	BMI090
Sample Remarks			VUC_W		METALS	314_W	o TAT	Alpha Sub	ġ	Matrix Date	Z	Sample ID	-	Sample ID
		1 Tests	Requested Tests				5			<u>[2]</u>			7	1053
						rogates	With Su	MS/MSD	tata, LCS,	ConCal o	K, InitCal/	 Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates 	el: S4 -	QC Level :
	30-Jan-09	4 °C	- - - - - - - - - - - - - - - - - - -			oring	er Monit	∂roundwat	G005862/JPL Groundwater Monitoring		: dol	3 4	COC #: 026064	ťs
ved Date Printed	Samples Received	Cooler Temp											218013	P0
	lient	Sampled by : Client		waltons@battelle.org	waltons	4117 x	(614) 424-4117	()	Shane Walton	Shan		ž	Columbus. OH 43201	S
	es	EDD Required : Yes	a	Shatalla orn	cution	9	(614) 474 4800		Refev Cutia	Refe			505 King Avenue	505
			D.	2	conner	4827 x	(619) 574-4827		David Conner	Davi		stitute	Battelle Memorial Institute	Bat
t: 13-Feb-09	5:00 PM On	Report Due By: 5:00 PM On: 13-Feb-09	a concrete de desente a la la televi-	75) 355-0406 EMail Address	FAX: (775) 355-0406	1044 FAX	TEL: (775) 355-1044 Phone Number	TEL: ()	Report Attention	Repo			nt:	Client:
3053	: BMI0901.	WorkOrder : BMI09013053	78	Alpha Analytical, Inc. 255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778	ical, I arks, Neva	Alpha Analytical, Inc ale Avenue, Suite 21 Sparks, Nevada 8	l pha / Avenue, S	Glendale .	255			ζ.		
			-	-		a compare or and compare we have been a compared								

Billing Information:		J	Samples Collected From Which State?	
AVE	255 Glence Sparks, N Phone (7)	5778	OR OTHER WA	- Page # of
an Bus,		Fax (775) 355-0406	Analyses Required	
Client Name DAVID CONNER	P.O.# 2/80/3	100# (-05862)	1 1 1 0 1 m	Required QC Level?
d d				/ 1 11 (111) IV
01126 V.J. CA 92110	Phone #619-726-7311	Fax #		EDD / EDF? YES NO
Matrix* Samp		Total and type of		Global ID #
ĮÕ	Sample Description	TAT Field ** See below		REMARKS
1751 1/206 AQ BMILAO13053-01	MW-26-2	У У		
ZO-	MW-26-1			
ST 9160	MW-25-5	X	××	
-04	Mr-25-4	×		
-05-	MW-25-3	X	×	
glo-	MW-25-2	×	X	
to-	MW-25-1	X		
30-	Dupe-02-1209	X		DUPLICATE
40- P811	EB-05-1-28-09	×	××	CONTRACT BLANK
-10	13-05-1-28-09	14 X	7	TRIP BLINK
ADDITIONAL INSTRUCTIONS:				
Signature	Print Name	Co	Company D	Date Time
Relinquighted by	/			
Received by Occ Chundrer	Tare , Muller	and for	n 30	8701 La
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 been specific behavior to be returned to the specific behavior to behavior to be returned to the specific behavior to be returned to the specific behavior to	te OT - Other AR - Air **: L-Liter e reported unless other arrangements are made. Ha	Liter V-Voa S-Soil Jar O 9. Hazardous samples will be returned	L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass F nade. Hazardous samples will be returned to client or disposed of at client expens	P-Plastic OT-Other se. The report for the analysis
NOTE: Samples are discarded 60 days after results an	e reported unless other arrangements are mad	 Hazardous samples will be returned 	d to client or disposed of at client expens	se. The report for

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.



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

Date: 11-Feb-09

David Conner Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 (619) 574-4827

CASE NARRATIVE

Project:	G005862/JPL Groun	dwater Monitoring		
Work Order:	BMI09020305		Cooler Temp: 4 °C	
Alpha's	Sample ID	Client's Sample ID	Matrix	
09020)305-01A	MW-20-5	Aqueous	
09020)305-02A	MW-20-4	Aqueous	
09020)305-03A	MW-20-3	Aqueous	
09020)305-04A	MW-20-2	Aqueous	
09020)305-05A	MW-20-1	Aqueous	
09020)305-06A	DUPE-03-1Q09	Aqueous	
09020)305-07A	DUPE-04-1Q09	Aqueous	
09020)305-08A	EB-06-01/30/09	Aqueous	
09020)305-09A	TB-06-01/30/09	Aqueous	
09020)305-10A	MW-24-4	Aqueous	
09020)305-11A	MW-24-3	Aqueous	
09020)305-12A	MW-24-2	Aqueous	
09020)305-13A	MW-24-1	Aqueous	
09020)305-14A	EB-07-02/02/09	Aqueous	
09020)305-15A	TB-07-02/02/09	Aqueous	

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

Walter Hinknow Roger Scholl Kandy Saulan

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 / info@alpha-analytical.com



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

 Date Received : 02/03/09

Job#: G005862/JPL Groundwater Monitoring

			Perchlorate by Ion Chromatography EPA Method 314.0		
		Parameter	Concentration	Reporting Limit	Date Date Sampled Analyzed
Client ID : Lab ID :	MW-20-5 BMI09020305-01A	Perchlorate	19.7	1.00 µg/L	01/30/09 02/04/09
Client ID : Lab ID :	MW-20-4 BMI09020305-02A	Perchlorate	61.0	5.00 µg/L	01/30/09 02/05/09
Client ID : Lab ID :	MW-20-3 BMI09020305-03A	Perchlorate	3.67	1.00 µg/L	01/30/09 02/04/09
Client ID : Lab ID :	MW-20-2 BMI09020305-04A	Perchlorate	2.96	1.00 µg/L	01/30/09 02/04/09
Client ID : Lab ID :	MW-20-1 BMI09020305-05A	Perchlorate	ND	1.00 µg/L	01/30/09 02/04/09
Client ID : Lab ID :	DUPE-03-1Q09 BMI09020305-06A	Perchlorate	2.97	1.00 µg/L	01/30/09 02/04/09
Client ID : Lab ID :	DUPE-04-1Q09 BMI09020305-07A	Perchlorate	ND	1.00 μg/L	01/30/09 02/04/09
Client ID : Lab ID :	EB-06-01/30/09 BMI09020305-08A	Perchlorate	ND	1.00 µg/L	01/30/09 02/04/09
Client ID : Lab ID :	MW-24-3 BMI09020305-11A	Perchlorate	20.3	1.00 µg/L	02/02/09 02/04/09
Client ID : Lab ID :	MW-24-2 BMI09020305-12A	Perchlorate	14.6	1.00 µg/L	02/02/09 02/04/09
Client ID : Lab ID :	MW-24-1 BMI09020305-13A	Perchlorate	326	20.0 µg/L	02/02/09 02/05/09
Client ID : Lab ID :	EB-07-02/02/09 BMI09020305-14A	Perchlorate	ND	1.00 µg/L	02/02/09 02/04/09



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ND = Not Detected

Roger Scholl

Kandy Sandmer

Walter Aridman

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 / info@alpha-analytical.com 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.

A

2/16/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201

Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641 Date Received : 02/03/09

Job#: G005862/JPL Groundwater Monitoring

			Metals by ICPMS EPA Method 200.8		
		Parameter	Concentration	Reporting Limit	Date Date Sampled Analyzed
Client ID : Lab ID :	MW-20-5 BMI09020305-01A	Chromium (Cr)	ND	0.0050 mg/L	01/30/09 02/05/09
Client ID : Lab ID :	MW-20-4 BM109020305-02A	Chromium (Cr)	ND	0.0050 mg/L	01/30/09 02/05/09
Client ID : Lab ID :	MW-20-3 BMI09020305-03A	Chromium (Cr)	ND	0.0050 mg/L	01/30/09 02/05/09
Client ID : Lab ID :	MW-20-2 BMI09020305-04A	Chromium (Cr)	ND	0.0050 mg/L	01/30/09 02/05/09
Client ID : Lab ID :	MW-20-1 BM109020305-05A	Chromium (Cr)	ND	0.0050 mg/L	01/30/09 02/05/09
Client ID : Lab ID :	DUPE-03-1Q09 BM109020305-06A	Chromium (Cr)	ND	0.0050 mg/L	01/30/09 02/05/09
Client ID : Lab ID :	DUPE-04-1Q09 BM109020305-07A	Chromium (Cr)	ND	0.0050 mg/L	01/30/09 02/05/09
Client ID : Lab ID :	EB-06-01/30/09 BMI09020305-08A	Chromium (Cr)	ND	0.0050 mg/L	01/30/09 02/05/09
Client ID : Lab ID :	MW-24-4 BM109020305-10A	Chromium (Cr)	ND	0.0050 mg/L	02/02/09 02/05/09
Client ID : Lab ID :	MW-24-3 BMI09020305-11A	Chromium (Cr)	ND	0.0050 mg/L	02/02/09 02/05/09
Client ID : Lab ID :	MW-24-2 BMI09020305-12A	Chromium (Cr)	ND	0.0050 mg/L	02/02/09 02/05/09
Client ID : Lab ID :	MW-24-1 BMI09020305-13A	Chromium (Cr)	0.0086	0.0050 mg/L	02/02/09 02/05/09
Client ID : Lab ID :	EB-07-02/02/09 BMI09020305-14A	Chromium (Cr)	ND	0.0050 mg/L	02/02/09 02/05/09



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ND = Not Detected

Dalter Arihun

Roger Scholl Kandy Stanbur Dalter Hirihum 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 / info@alpha-analytical.com 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.

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute	Attn:	David Conner
505 King Avenue	Phone	: (619) 574-4827
Columbus, OH 43201	Fax:	(614) 458-6641
Job#: G005862/JPL Groundwater Monitoring		

Tentatively Identified Compounds - Volatile Organics by GC/MS

				Estimated			
		Parameter	Estimated	Reporting	Date	Date	Date
			Concentration	Limit	Received	Sampled	Analyzed
Client ID :	MW-20-5						
Lab ID :	BMI09020305-01A	Sulfur dioxide	52	2.0 µg/L	02/03/09	01/30/09	02/06/09
Client ID :	MW-20-4						
Lab ID :	BMI09020305-02A	Sulfur dioxide	53	2.0 μg/L	02/03/09	01/30/09	02/06/09
Client ID :	MW-20-3						
Lab ID :	BMI09020305-03A	Sulfur dioxide	38	2.0 µg/L	02/03/09	01/30/09	02/06/09
Client ID :	MW-20-2						
Lab ID :	BMI09020305-04A	Sulfur dioxide	26	2.0 µg/L	02/03/09	01/30/09	02/06/09
Client ID :	MW-20-1						
Lab ID :	BMI09020305-05A	Sulfur dioxide	31	2.0 µg/L	02/03/09	01/30/09	02/06/09
Client ID :	DUPE-03-1Q09				00 10 0 10 0	01/00/00	00106100
Lab ID :	BMI09020305-06A	Sulfur dioxide	24	2.0 µg/L	02/03/09	01/30/09	02/06/09
Client ID : Lab ID :	DUPE-04-1Q09 BM109020305-07A	Sulfur dioxide	22	2.0	02/02/00	01/30/09	02/06/09
		Sultur dioxide	32	2.0 μg/L	02/03/09	01/30/09	02/06/09
Client ID : Lab ID :	EB-06-01/30/09 BMI09020305-08A	2-Methyl-1-propene	12	2.0 μg/L	02/03/09	01/30/09	02/06/09
200121	Dimoyo20305 CON	Tertiary Butyl Alcohol (TBA)	12	10 μg/L	02/03/09	01/30/09	02/06/09
Client ID :	TB-06-01/30/09						
Lab ID :	BMI09020305-09A	*** None Found ***	ND	2.0 µg/L	02/03/09	01/30/09	02/06/09
Client ID :	MW-24-3						
Lab ID :	BMI09020305-11A	Sulfur dioxide	38	2.0 µg/L	02/03/09	02/02/09	02/06/09
Client ID :	MW-24-2						
Lab ID :	BMI09020305-12A	Sulfur dioxide	26	2.0 µg/L	02/03/09	02/02/09	02/06/09
Client ID :	MW-24-1						
Lab ID :	BMI09020305-13A	Sulfur dioxide	25	2.0 μg/L	02/03/09	02/02/09	02/06/09
Client ID :	EB-07-02/02/09				00/00/00	00/00/00	02/06/00
Lab ID :	BMI09020305-14A	2-Methyl-1-propene	9.3	2.0 µg/L	02/03/09	02/02/09	02/06/09
Client ID : Lab ID :	TB-07-02/02/09 BMI09020305-15A	* * * None Found * * *	ND	2.0	02/03/09	02/02/09	02/06/09
Luo 12 .	507020305-13A	· None Found · · · ·	ND	2.0 μg/L	02/03/09	02/02/09	02/00/07



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Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Kandy Soulan Dalter Hindman Roger L. Scholl, Ph.D., Laboratory Director · · Randy Gardner, Laboratory Manager · · Walter Hinchman, Quality Assurance Officer

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 / info@alpha-analytical.com 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.

2/16/09 **Report Date**



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-01A Client I.D. Number: MW-20-5

Attn: David Conner Phone: (619) 574-4827 (614) 458-6641 Fax:

Sampled: 01/30/09 Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	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	ug/L	45	Isopropyibenzene	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	ug/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 (DBC	P) 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	ug/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	107	(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	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	ND	0.50	µg/L						

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Sandmer 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 / info(a)alpha-analytical.com

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S/16/09 **Report Date** 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.



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-02A Client I.D. Number: MW-20-4

Attn: David Conner Phone: (619) 574-4827 (614) 458-6641 Fax:

Sampled: 01/30/09 Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	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	NĎ	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 (DBC	P) 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	107	(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	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

Kandy Santur

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

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Walter Aridmon

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

2/16/09

Report Date



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 505 King Avenue Columbus, OH 43201 Job#: _____G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-03A Client I.D. Number: MW-20-3
 Attn:
 David Conner

 Phone:
 (619) 574-4827

 Fax:
 (614) 458-6641

Sampled: 01/30/09 Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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	Chioroethane	ND	0.50	ug/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-Chiorotoluene	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 (DBC	P) 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	104	(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	96	(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

Kandy Sandmer

Walter Acrim

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 / info@alpha-analytical.com

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2/16/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-04A Client I.D. Number: MW-20-2 Attn: David Conner Phone: (619) 574-4827 Fax: (614) 458-6641

Sampled: 01/30/09 Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
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 (DBC	P) 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	103	(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	95	(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

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2/16/09 **Report Date**



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201 Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-05A Client I.D. Number: MW-20-1

David Conner Attn: Phone: (619) 574-4827 (614) 458-6641 Fax:

Sampled: 01/30/09 Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	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	Ethyibenzene	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
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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
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17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
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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 (DBC	P) 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
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29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
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31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	94	(70-130)	%REC
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35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

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