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 Kelso, Washington.

Alpha Analytical, Inc.

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

Date: *04-Aug-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08072222 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08072222-01A	MW-14-5	Aqueous
08072222-02A	MW-14-4	Aqueous
08072222-03A	MW-14-3	Aqueous
08072222-04A	MW-14-2	Aqueous
08072222-05A	MW-14-1	Aqueous
08072222-06A	DUPE-01-3Q08	Aqueous
08072222-07A	EB-02-7/21/08	Aqueous
08072222-08A	TB-02-7/21/08	Aqueous

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

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

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

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-14-5**						
Lab ID :	BMI08072222-01A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/21/08	07/29/08
Client ID :	**MW-14-4**						
Lab ID :	BMI08072222-02A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/21/08	07/29/08
Client ID :	**MW-14-3**						
Lab ID :	BMI08072222-03A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/21/08	07/29/08
Client ID :	**MW-14-2**						
Lab ID :	BMI08072222-04A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/21/08	07/29/08
Client ID :	**MW-14-1**						
Lab ID :	BMI08072222-05A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/21/08	07/29/08
Client ID :	**DUPE-01-3Q08**						
Lab ID :	BMI08072222-06A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/21/08	07/29/08
Client ID :	**EB-02-7/21/08**						
Lab ID :	BMI08072222-07A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/21/08	07/29/08
Client ID :	**TB-02-7/21/08**						
Lab ID :	BMI08072222-08A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/21/08	07/29/08

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/4/08
Report Date

Alpha Analytical, Inc.

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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: BMI08072222-01A
Client I.D. Number: MW-14-5

Sampled: 07/21/08
Received: 07/22/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	89	(70-120)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(85-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(75-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/4/08
Report Date

Alpha Analytical, Inc.

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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: BMI08072222-02A
Client I.D. Number: MW-14-4

Sampled: 07/21/08
Received: 07/22/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	91	(70-120)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(85-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(75-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/4/08
Report Date

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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: BMI08072222-03A
Client I.D. Number: MW-14-3

Sampled: 07/21/08
Received: 07/22/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L
3	Vinyl chloride	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L
9	Freon-113	ND	0.50	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L
25	Trichloroethene	1.2	0.50	µg/L
26	Bromodichloromethane	ND	0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L
30	1,1,2-Trichloroethane	ND	0.50	µg/L
31	Toluene	ND	0.50	µg/L
32	1,3-Dichloropropane	ND	0.50	µg/L
33	Dibromochloromethane	ND	0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L
35	Tetrachloroethene	ND	0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
37	Chlorobenzene	ND	0.50	µg/L
38	Ethylbenzene	ND	0.50	µg/L
39	m,p-Xylene	ND	0.50	µg/L
40	Bromoform	ND	0.50	µg/L
41	Styrene	ND	0.50	µg/L
42	o-Xylene	ND	0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
44	1,2,3-Trichloropropane	ND	1.0	µg/L
45	Isopropylbenzene	ND	0.50	µg/L
46	Bromobenzene	ND	0.50	µg/L
47	n-Propylbenzene	ND	0.50	µg/L
48	4-Chlorotoluene	ND	0.50	µg/L
49	2-Chlorotoluene	ND	0.50	µg/L
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
51	tert-Butylbenzene	ND	0.50	µg/L
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
53	sec-Butylbenzene	ND	0.50	µg/L
54	1,3-Dichlorobenzene	ND	0.50	µg/L
55	1,4-Dichlorobenzene	ND	0.50	µg/L
56	4-Isopropyltoluene	ND	0.50	µg/L
57	1,2-Dichlorobenzene	ND	0.50	µg/L
58	n-Butylbenzene	ND	0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
61	Naphthalene	ND	1.0	µg/L
62	Hexachlorobutadiene	ND	1.0	µg/L
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	90	(70-120)	%REC
65	Surr: Toluene-d8	102	(85-120)	%REC
66	Surr: 4-Bromofluorobenzene	99	(75-120)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/4/08
Report Date

Alpha Analytical, Inc.

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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: BMI08072222-04A
Client I.D. Number: MW-14-2

Sampled: 07/21/08
Received: 07/22/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	8.1	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	90	(70-120)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(85-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(75-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/4/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072222-05A
Client I.D. Number: MW-14-1

Sampled: 07/21/08
Received: 07/22/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	94	(70-120)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(85-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(75-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	3.8	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072222-06A
Client I.D. Number: DUPE-01-3Q08

Sampled: 07/21/08
Received: 07/22/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	1.0	µg/L	36	1,1,1,2-Tetrachloroethane	ND	1.0	µg/L
2	Chloromethane	ND	2.0	µg/L	37	Chlorobenzene	ND	1.0	µg/L
3	Vinyl chloride	ND	1.0	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	1.0	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	2.0	µg/L	40	Bromoform	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	1.0	µg/L	41	Styrene	ND	1.0	µg/L
7	1,1-Dichloroethene	ND	1.0	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	2.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	1.0	µg/L
9	Freon-113	ND	1.0	µg/L	44	1,2,3-Trichloropropane	ND	2.0	µg/L
10	trans-1,2-Dichloroethene	ND	1.0	µg/L	45	Isopropylbenzene	ND	1.0	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	1.0	µg/L
12	1,1-Dichloroethane	ND	1.0	µg/L	47	n-Propylbenzene	ND	1.0	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	1.0	µg/L
14	cis-1,2-Dichloroethene	ND	1.0	µg/L	49	2-Chlorotoluene	ND	1.0	µg/L
15	Bromochloromethane	ND	1.0	µg/L	50	1,3,5-Trimethylbenzene	ND	1.0	µg/L
16	Chloroform	ND	1.0	µg/L	51	tert-Butylbenzene	ND	1.0	µg/L
17	2,2-Dichloropropane	ND	1.0	µg/L	52	1,2,4-Trimethylbenzene	ND	1.0	µg/L
18	1,2-Dichloroethane	ND	1.0	µg/L	53	sec-Butylbenzene	ND	1.0	µg/L
19	1,1,1-Trichloroethane	ND	1.0	µg/L	54	1,3-Dichlorobenzene	ND	1.0	µg/L
20	1,1-Dichloropropene	ND	1.0	µg/L	55	1,4-Dichlorobenzene	ND	1.0	µg/L
21	Carbon tetrachloride	ND	1.0	µg/L	56	4-Isopropyltoluene	ND	1.0	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	1.0	µg/L
23	Dibromomethane	ND	1.0	µg/L	58	n-Butylbenzene	ND	1.0	µg/L
24	1,2-Dichloropropane	ND	1.0	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	3.0	µg/L
25	Trichloroethene	7.9	1.0	µg/L	60	1,2,4-Trichlorobenzene	ND	2.0	µg/L
26	Bromodichloromethane	ND	1.0	µg/L	61	Naphthalene	ND	2.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	2.0	µg/L
28	cis-1,3-Dichloropropene	ND	1.0	µg/L	63	1,2,3-Trichlorobenzene	ND	2.0	µg/L
29	trans-1,3-Dichloropropene	ND	1.0	µg/L	64	Surr: 1,2-Dichloroethane-d4	91	(70-120)	%REC
30	1,1,2-Trichloroethane	ND	1.0	µg/L	65	Surr: Toluene-d8	101	(85-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(75-120)	%REC
32	1,3-Dichloropropane	ND	1.0	µg/L					
33	Dibromochloromethane	ND	1.0	µg/L					
34	1,2-Dibromoethane (EDB)	ND	2.0	µg/L					
35	Tetrachloroethene	ND	1.0	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072222-07A
Client I.D. Number: EB-02-7/21/08

Sampled: 07/21/08
Received: 07/22/08
Analyzed: 07/29/08

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	1.0	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	94	(70-120)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(85-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(75-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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Report Date

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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: BMI08072222-08A
Client I.D. Number: TB-02-7/21/08

Sampled: 07/21/08
Received: 07/22/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	93	(70-120)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(85-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(75-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/4/08
Report Date

Alpha Analytical, Inc.

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

VOC Sample Preservation Report

Work Order: BMI08072222 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08072222-01A	MW-14-5	Aqueous	2
08072222-02A	MW-14-4	Aqueous	2
08072222-03A	MW-14-3	Aqueous	2
08072222-04A	MW-14-2	Aqueous	2
08072222-05A	MW-14-1	Aqueous	2
08072222-06A	DUPE-01-3Q08	Aqueous	2
08072222-07A	EB-02-7/21/08	Aqueous	2
08072222-08A	TB-02-7/21/08	Aqueous	2

8/4/08

Report Date

Alpha Analytical, Inc.

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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 : 07/22/08

Job#: G005862/JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-14-5**					
Lab ID :	BMI08072222-01A	Specific Conductance (at 25°C)	310	10 µS/cm	07/21/08	07/22/08
Client ID :	**MW-14-4**					
Lab ID :	BMI08072222-02A	Specific Conductance (at 25°C)	580	10 µS/cm	07/21/08	07/22/08
Client ID :	**MW-14-3**					
Lab ID :	BMI08072222-03A	Specific Conductance (at 25°C)	1,100	10 µS/cm	07/21/08	07/22/08
Client ID :	**MW-14-2**					
Lab ID :	BMI08072222-04A	Specific Conductance (at 25°C)	1,200	10 µS/cm	07/21/08	07/22/08
Client ID :	**MW-14-1**					
Lab ID :	BMI08072222-05A	Specific Conductance (at 25°C)	1,200	10 µS/cm	07/21/08	07/22/08
Client ID :	**DUPE-01-3Q08**					
Lab ID :	BMI08072222-06A	Specific Conductance (at 25°C)	1,200	10 µS/cm	07/21/08	07/22/08
Client ID :	**EB-02-7/21/08**					
Lab ID :	BMI08072222-07A	Specific Conductance (at 25°C)	ND	10 µS/cm	07/21/08	07/22/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/4/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/22/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-14-5**					
Lab ID :	BMI08072222-01A	Perchlorate	ND	1.00 µg/L	07/21/08	07/24/08
Client ID :	**MW-14-4**					
Lab ID :	BMI08072222-02A	Perchlorate	2.27	1.00 µg/L	07/21/08	07/24/08
Client ID :	**MW-14-3**					
Lab ID :	BMI08072222-03A	Perchlorate	4.66	1.00 µg/L	07/21/08	07/24/08
Client ID :	**MW-14-2**					
Lab ID :	BMI08072222-04A	Perchlorate	3.21	1.00 µg/L	07/21/08	07/24/08
Client ID :	**MW-14-1**					
Lab ID :	BMI08072222-05A	Perchlorate	2.71	1.00 µg/L	07/21/08	07/24/08
Client ID :	**DUPE-01-3Q08**					
Lab ID :	BMI08072222-06A	Perchlorate	2.80	1.00 µg/L	07/21/08	07/29/08
Client ID :	**EB-02-7/21/08**					
Lab ID :	BMI08072222-07A	Perchlorate	ND	1.00 µg/L	07/21/08	07/24/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/4/08
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (626) 345-0598
Fax: (760) 385-4613
Date Received : 07/22/08

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 :	BMI08072222-03A	Chromium (Cr)	ND	0.0050 mg/L	07/21/08	07/28/08
Client ID :	**MW-14-2**					
Lab ID :	BMI08072222-04A	Chromium (Cr)	ND	0.0050 mg/L	07/21/08	07/28/08
Client ID :	**MW-14-1**					
Lab ID :	BMI08072222-05A	Chromium (Cr)	ND	0.0050 mg/L	07/21/08	07/28/08
Client ID :	**DUPE-01-3Q08**					
Lab ID :	BMI08072222-06A	Chromium (Cr)	ND	0.0050 mg/L	07/21/08	07/28/08
Client ID :	**EB-02-7/21/08**					
Lab ID :	BMI08072222-07A	Chromium (Cr)	ND	0.0050 mg/L	07/21/08	07/28/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

8/4/08
Report Date

Alpha Analytical, Inc.

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

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

Date: *30-Jul-08*

QC Summary Report

Work Order: 08072222

Method Blank

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

File ID: **16** Batch ID: **20307** Analysis Date: **07/24/2008 14:06**

Sample ID: **MBLK-20307** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

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

Laboratory Fortified Blank

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

File ID: **17** Batch ID: **20307** Analysis Date: **07/24/2008 14:24**

Sample ID: **LFB-20307** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.3	2	25		89	85	115			

Sample Matrix Spike

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

File ID: **21** Batch ID: **20307** Analysis Date: **07/24/2008 15:38**

Sample ID: **08072345-02ALFM** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24.5	2	25	2.29	89	80	120			

Sample Matrix Spike Duplicate

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

File ID: **22** Batch ID: **20307** Analysis Date: **07/24/2008 15:57**

Sample ID: **08072345-02ALFMD** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24.2	2	25	2.29	88	80	120	24.52	1.3(15)	

Comments:

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

Alpha Analytical, Inc.

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Date: *30-Jul-08*

QC Summary Report

Work Order: 08072222

Method Blank

Type **MBLK** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0722CNA** Analysis Date: **07/22/2008 00:00**

Sample ID: **MBLK-W0722CNA** Units : **µS/cm** Run ID: **WETLAB_080722B** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0722CNA** Analysis Date: **07/22/2008 00:00**

Sample ID: **LCS-W0722CNA** Units : **µS/cm** Run ID: **WETLAB_080722B** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	1380	10	1410		98	98	102			

Comments:

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

Alpha Analytical, Inc.

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Date: *30-Jul-08*

QC Summary Report

Work Order: 08072222

Method Blank

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

File ID: **072808.B\032SMPL.D** Batch ID: **20289K** Analysis Date: **07/28/2008 15:12**

Sample ID: **MB-20289** Units : **mg/L** Run ID: **ICP/MS_080728A** Prep Date: **07/22/2008**

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

Laboratory Control Spike

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

File ID: **072808.B\033_LCS.D** Batch ID: **20289K** Analysis Date: **07/28/2008 15:18**

Sample ID: **LCS-20289** Units : **mg/L** Run ID: **ICP/MS_080728A** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0484	0.005	0.05		97	85	115			

Sample Matrix Spike

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

File ID: **072808.B\036SMPL.D** Batch ID: **20289K** Analysis Date: **07/28/2008 15:34**

Sample ID: **08072222-03AMS** Units : **mg/L** Run ID: **ICP/MS_080728A** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0502	0.005	0.05	0	100	70	130			

Sample Matrix Spike Duplicate

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

File ID: **072808.B\037SMPL.D** Batch ID: **20289K** Analysis Date: **07/28/2008 15:40**

Sample ID: **08072222-03AMSD** Units : **mg/L** Run ID: **ICP/MS_080728A** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0481	0.005	0.05	0	96	70	130	0.05021	4.4(20)	

Comments:

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

Alpha Analytical, Inc.

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

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

Date: *04-Aug-08*

QC Summary Report

Work Order: 08072222

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

File ID: **08072907.D** Batch ID: **MS15W0729K5** Analysis Date: **07/29/2008 10:53**

Sample ID: **MBLK MS15W0729K** Units : **µg/L** Run ID: **MSD_15_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9		10		90	75	128			
Surr: Toluene-d8	10		10		100	80	120			

Alpha Analytical, Inc.

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

Date: *04-Aug-08*

QC Summary Report

Work Order: 08072222

Surr: 4-Bromofluorobenzene	9.93		10	99	70	130

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

File ID: **08072905.D** Batch ID: **MS15W0729K5** Analysis Date: **07/29/2008 09:47**

Sample ID: **LCS MS15W0729K** Units : **µg/L** Run ID: **MSD_15_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	7.24	1	10		72	29	133			
Chloromethane	9.67	2	10		97	44	140			
Vinyl chloride	9.77	1	10		98	70	130			
Chloroethane	9.09	1	10		91	62	158			
Bromomethane	11.9	2	10		119	20	179			
Trichlorofluoromethane	9.73	1	10		97	63	156			
1,1-Dichloroethene	10.8	1	10		108	70	130			
Dichloromethane	10.4	2	10		104	70	130			
trans-1,2-Dichloroethene	11.3	1	10		113	70	130			
Methyl tert-butyl ether (MTBE)	12.1	0.5	10		121	70	130			
1,1-Dichloroethane	10.3	1	10		103	70	130			
cis-1,2-Dichloroethene	11.6	1	10		116	70	130			
Bromochloromethane	11.5	1	10		115	70	130			
Chloroform	9.88	1	10		99	80	120			
2,2-Dichloropropane	10.5	1	10		105	65	152			
1,2-Dichloroethane	10.1	1	10		101	70	130			
1,1,1-Trichloroethane	10.5	1	10		105	70	130			
1,1-Dichloropropene	11.2	1	10		112	70	130			
Carbon tetrachloride	10.6	1	10		106	70	130			
Benzene	10.7	0.5	10		107	70	130			
Dibromomethane	11.8	1	10		118	70	130			
1,2-Dichloropropane	11.2	1	10		112	70	130			
Trichloroethene	11.3	1	10		113	70	130			
Bromodichloromethane	11.2	1	10		112	70	130			
cis-1,3-Dichloropropene	10	1	10		100	70	130			
trans-1,3-Dichloropropene	9.81	1	10		98	68	134			
1,1,2-Trichloroethane	11.8	1	10		118	70	130			
Toluene	10.3	0.5	10		103	70	130			
1,3-Dichloropropane	11.4	1	10		114	70	130			
Dibromochloromethane	10.6	1	10		106	68	130			
1,2-Dibromoethane (EDB)	24.1	2	20		120	70	130			
Tetrachloroethene	11.1	1	10		111	70	130			
1,1,1,2-Tetrachloroethane	10.9	1	10		109	70	130			
Chlorobenzene	10.5	1	10		105	70	130			
Ethylbenzene	10.5	0.5	10		105	70	130			
m,p-Xylene	11.5	0.5	10		115	70	130			
Bromoform	11.8	1	10		118	59	132			
Styrene	10.7	1	10		107	70	130			
o-Xylene	10.7	0.5	10		107	70	130			
1,1,2,2-Tetrachloroethane	10.1	1	10		101	65	135			
1,2,3-Trichloropropane	20.9	2	20		105	68	132			
Isopropylbenzene	10.4	1	10		104	70	130			
Bromobenzene	9.99	1	10		99.9	70	130			
n-Propylbenzene	10.6	1	10		106	70	130			
4-Chlorotoluene	10.4	1	10		104	70	130			
2-Chlorotoluene	10.4	1	10		104	70	130			
1,3,5-Trimethylbenzene	10.2	1	10		102	70	141			
tert-Butylbenzene	10.9	1	10		109	70	130			
1,2,4-Trimethylbenzene	10.3	1	10		103	67	146			
sec-Butylbenzene	10.5	1	10		105	70	130			
1,3-Dichlorobenzene	9.86	1	10		99	70	130			
1,4-Dichlorobenzene	9.74	1	10		97	70	130			
4-Isopropyltoluene	10.5	1	10		105	70	133			
1,2-Dichlorobenzene	9.22	1	10		92	70	130			
n-Butylbenzene	10.5	1	10		105	68	145			
1,2-Dibromo-3-chloropropane (DBCP)	47.9	3	50		96	57	133			
1,2,4-Trichlorobenzene	10.4	2	10		104	70	130			
Naphthalene	11.1	2	10		111	26	161			
Hexachlorobutadiene	19.9	2	20		100	39	172			
1,2,3-Trichlorobenzene	11.2	2	10		112	33	166			
Surr: 1,2-Dichloroethane-d4	8.23		10		82	75	128			
Surr: Toluene-d8	9.79		10		98	80	120			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Alpha Analytical, Inc.

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

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

Date: *04-Aug-08*

QC Summary Report

Work Order: 08072222

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
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

CHAIN-OF-CUSTODY RECORD

AMENDED #2

CA

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

Report Attention	Phone Number	EMail Address
David Conner	(619) 574-4827 x	connerd@battelle.org

WorkOrder : BMI08072222

Report Due By : 5:00 PM On : 05-Aug-08

EDD Required : **Yes**

Sampled by : Client

PO : 218017

Client's COC # : 026277 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	22-Jul-08	**31-Jul-08**

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_TIC_W	VOC_W				Sample Remarks
BMI08072222-01A	MW-14-5	AQ	07/21/08 08:00	4	0	10	Perchlorate	Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072222-02A	MW-14-4	AQ	07/21/08 08:26	4	0	10	Perchlorate	Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				Level IV QC required.
BMI08072222-03A	MW-14-3	AQ	07/21/08 08:55	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072222-04A	MW-14-2	AQ	07/21/08 09:30	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072222-05A	MW-14-1	AQ	07/21/08 10:50	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072222-06A	DUPE-01-3Q08	AQ	07/21/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072222-07A	EB-02-7/21/08	AQ	07/21/08 10:40	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072222-08A	TB-02-7/21/08	AQ	07/21/08 00:00	1	0	10				VOC by 524 Criteria	VOC by 524 Criteria				Reno Trip Blank 6/26/08

Comments: No security seals. Frozen ice. Level IV QC. Amended 7/24/08 14:30 to change Job Name, QC Level and VOC test description due to project requirements.KM Amended #2 7/31/08 13:50 to add TICs due to project requirements.KM :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	7/31/08 1350

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

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026277 Job : G005862/JPL Groundwater Monitoring

CHAIN-OF-CUSTODY RECORD

CA AMENDED

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

WorkOrder : BMI08072222

Report Due By : 5:00 PM On : 05-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	22-Jul-08	**24-Jul-08**

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W					Sample Remarks
BMI08072222-01A	MW-14-5	AQ	07/21/08 08:00	4	0	10	Perchlorate	Perchlorate		VOC by 524 Criteria					
BMI08072222-02A	MW-14-4	AQ	07/21/08 08:26	4	0	10	Perchlorate	Perchlorate		VOC by 524 Criteria					Level IV QC required.
BMI08072222-03A	MW-14-3	AQ	07/21/08 08:55	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072222-04A	MW-14-2	AQ	07/21/08 09:30	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072222-05A	MW-14-1	AQ	07/21/08 10:50	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072222-06A	DUPE-01-3Q08	AQ	07/21/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072222-07A	EB-02-7/21/08	AQ	07/21/08 10:40	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072222-08A	TB-02-7/21/08	AQ	07/21/08 00:00	1	0	10				VOC by 524 Criteria					Reno Trip Blank 6/26/08

Comments: No security seals. Frozen ice. Level IV QC. Amended 7/24/08 14:30 to change Job Name, QC Level and VOC test description due to project requirements.KM :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	**Alpha Analytical, Inc.**	7/24/08 1430

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

CHAIN-OF-CUSTODY RECORD

CA

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026277 Job : G005862

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

WorkOrder : BMI08072222

Report Due By : 5:00 PM On : 05-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	22-Jul-08	**22-Jul-08**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W					Sample Remarks
BMI08072222-01A	MW-14-5	AQ	07/21/08 08:00	4	0	10	Perchlorate	Perchlorate		8260 by 524 Criteria					
BMI08072222-02A	MW-14-4	AQ	07/21/08 08:26	4	0	10	Perchlorate	Perchlorate		8260 by 524 Criteria					Level IV QC required.
BMI08072222-03A	MW-14-3	AQ	07/21/08 08:55	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072222-04A	MW-14-2	AQ	07/21/08 09:30	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072222-05A	MW-14-1	AQ	07/21/08 10:50	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072222-06A	DUPE-01-3Q08	AQ	07/21/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072222-07A	EB-02-7/21/08	AQ	07/21/08 10:40	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072222-08A	TB-02-7/21/08	AQ	07/21/08 00:00	1	0	10				8260 by 524 Criteria					Reno Trip Blank 6/26/08

Comments: No security seals. Frozen ice. Level IV QC. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	**Alpha Analytical, Inc.**	7/22/08 1125

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

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

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

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

026277

Page # 1 of 1

Client Name DAVID CONNER | P.O. # 218017 | Job # G005862
Address 3990 OLD TOWN AVE, C-205 | EMail Address
City, State, Zip SAN DIEGO, CA 92110 | Phone # 619-726-7311 | Fax #

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	Analyses Required: VOC (524.2)	TOTAL Cr (6010B)	CLAY - (314.0)	REMARKS
800	7/21/08	AQ	BM108072222-01	MW-14-5	NORM		4	X		X	
826			02	MW-14-4			4	X		X	QC LEVEL III
855			03	MW-14-3			5	X	X	X	
0930			04	MW-14-2			5	X	X	X	
1050			05	MW-14-1			5	X	X	X	
—			06	DUPE-01-3Q08			5	X	X	X	DUPLICATE
1040			07	EB-02-7/21/08			5	X	X	X	EQUIPMENT BLANK
—			08	TB-02-7/21/08			1	X			TRIP BLANK

Alpha Analytical Sample Receipt
Security Seals? YES (NO)
Frozen Ice? (YES) NO
Temperature 4 °C

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROGDON	INSIGHT ECCI	07/21/08	1200
Received by	K Murray	K Murray	AAI	7/25/08	1100
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *04-Aug-08*

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

CASE NARRATIVE

Project: G005862/ JPL Groundwater Monitoring
Work Order: BMI08072244 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08072244-01A	MW-21-5	Aqueous
08072244-02A	MW-21-4	Aqueous
08072244-03A	MW-21-3	Aqueous
08072244-04A	MW-21-2	Aqueous
08072244-05A	MW-21-1	Aqueous
08072244-06A	EB-01-7/18/08	Aqueous
08072244-07A	TB-01-7/18/08	Aqueous

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/22/08

Job#: G005862 / JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-21-5**					
Lab ID :	BMI08072244-01A	Perchlorate	2.84	1.00 µg/L	07/18/08	07/24/08
Client ID :	**MW-21-4**					
Lab ID :	BMI08072244-02A	Perchlorate	2.08	1.00 µg/L	07/18/08	07/24/08
Client ID :	**MW-21-3**					
Lab ID :	BMI08072244-03A	Perchlorate	3.56	1.00 µg/L	07/18/08	07/24/08
Client ID :	**MW-21-2**					
Lab ID :	BMI08072244-04A	Perchlorate	1.99	1.00 µg/L	07/18/08	07/29/08
Client ID :	**MW-21-1**					
Lab ID :	BMI08072244-05A	Perchlorate	3.36	1.00 µg/L	07/18/08	07/24/08
Client ID :	**EB-01-7/18/08**					
Lab ID :	BMI08072244-06A	Perchlorate	ND	1.00 µg/L	07/18/08	07/24/08

This replaces the report signed 8/4/08 due to a change in the date analyzed for -04A.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

9/5/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-21-5**						
Lab ID :	BMI08072244-01A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/18/08	07/29/08
Client ID :	**MW-21-4**						
Lab ID :	BMI08072244-02A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/18/08	07/29/08
Client ID :	**MW-21-3**						
Lab ID :	BMI08072244-03A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/18/08	07/29/08
Client ID :	**MW-21-2**						
Lab ID :	BMI08072244-04A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/18/08	07/29/08
Client ID :	**MW-21-1**						
Lab ID :	BMI08072244-05A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/18/08	07/29/08
Client ID :	**EB-01-7/18/08**						
Lab ID :	BMI08072244-06A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/18/08	07/29/08
Client ID :	**TB-01-7/18/08**						
Lab ID :	BMI08072244-07A	* * * None Found * * *	ND	2.0 µg/L	07/22/08	07/18/08	07/29/08

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

Roger Scholl Randy Gardner Walter Hinchman

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

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8/4/08
Report Date

Page 1 of 1

Alpha Analytical, Inc.

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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: BMI08072244-01A
Client I.D. Number: MW-21-5

Sampled: 07/18/08
Received: 07/22/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L
3	Vinyl chloride	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L
9	Freon-113	ND	0.50	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L
16	Chloroform	3.3	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L
25	Trichloroethene	ND	0.50	µg/L
26	Bromodichloromethane	ND	0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L
30	1,1,2-Trichloroethane	ND	0.50	µg/L
31	Toluene	ND	0.50	µg/L
32	1,3-Dichloropropane	ND	0.50	µg/L
33	Dibromochloromethane	ND	0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L
35	Tetrachloroethene	0.79	0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
37	Chlorobenzene	ND	0.50	µg/L
38	Ethylbenzene	ND	0.50	µg/L
39	m,p-Xylene	ND	0.50	µg/L
40	Bromoform	ND	0.50	µg/L
41	Styrene	ND	0.50	µg/L
42	o-Xylene	ND	0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
44	1,2,3-Trichloropropane	ND	1.0	µg/L
45	Isopropylbenzene	ND	0.50	µg/L
46	Bromobenzene	ND	0.50	µg/L
47	n-Propylbenzene	ND	0.50	µg/L
48	4-Chlorotoluene	ND	0.50	µg/L
49	2-Chlorotoluene	ND	0.50	µg/L
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
51	tert-Butylbenzene	ND	0.50	µg/L
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
53	sec-Butylbenzene	ND	0.50	µg/L
54	1,3-Dichlorobenzene	ND	0.50	µg/L
55	1,4-Dichlorobenzene	ND	0.50	µg/L
56	4-Isopropyltoluene	ND	0.50	µg/L
57	1,2-Dichlorobenzene	ND	0.50	µg/L
58	n-Butylbenzene	ND	0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
61	Naphthalene	ND	1.0	µg/L
62	Hexachlorobutadiene	ND	1.0	µg/L
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	95	(75-128)	%REC
65	Surr: Toluene-d8	100	(80-120)	%REC
66	Surr: 4-Bromofluorobenzene	101	(80-120)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/4/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072244-02A
Client I.D. Number: MW-21-4

Sampled: 07/18/08
Received: 07/22/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit		
1	Dichlorodifluoromethane	ND	0.50	µg/L	
2	Chloromethane	ND	1.0	µg/L	
3	Vinyl chloride	ND	0.50	µg/L	
4	Chloroethane	ND	0.50	µg/L	
5	Bromomethane	ND	1.0	µg/L	
6	Trichlorofluoromethane	ND	0.50	µg/L	
7	1,1-Dichloroethene	ND	0.50	µg/L	
8	Dichloromethane	ND	1.0	µg/L	
9	Freon-113	ND	0.50	µg/L	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	
12	1,1-Dichloroethane	ND	0.50	µg/L	
13	2-Butanone (MEK)	ND	10	µg/L	
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	
15	Bromochloromethane	ND	0.50	µg/L	
16	Chloroform	4.8	0.50	µg/L	
17	2,2-Dichloropropane	ND	0.50	µg/L	
18	1,2-Dichloroethane	ND	0.50	µg/L	
19	1,1,1-Trichloroethane	ND	0.50	µg/L	
20	1,1-Dichloropropene	ND	0.50	µg/L	
21	Carbon tetrachloride	ND	0.50	µg/L	
22	Benzene	ND	0.50	µg/L	
23	Dibromomethane	ND	0.50	µg/L	
24	1,2-Dichloropropane	ND	0.50	µg/L	
25	Trichloroethene	ND	0.50	µg/L	
26	Bromodichloromethane	ND	0.50	µg/L	
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	
30	1,1,2-Trichloroethane	ND	0.50	µg/L	
31	Toluene	ND	0.50	µg/L	
32	1,3-Dichloropropane	ND	0.50	µg/L	
33	Dibromochloromethane	ND	0.50	µg/L	
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L	
35	Tetrachloroethene	1.7	0.50	µg/L	
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	
37	Chlorobenzene	ND	0.50	µg/L	
38	Ethylbenzene	ND	0.50	µg/L	
39	m,p-Xylene	ND	0.50	µg/L	
40	Bromoform	ND	0.50	µg/L	
41	Styrene	ND	0.50	µg/L	
42	o-Xylene	ND	0.50	µg/L	
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	
44	1,2,3-Trichloropropane	ND	1.0	µg/L	
45	Isopropylbenzene	ND	0.50	µg/L	
46	Bromobenzene	ND	0.50	µg/L	
47	n-Propylbenzene	ND	0.50	µg/L	
48	4-Chlorotoluene	ND	0.50	µg/L	
49	2-Chlorotoluene	ND	0.50	µg/L	
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L	
51	tert-Butylbenzene	ND	0.50	µg/L	
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L	
53	sec-Butylbenzene	ND	0.50	µg/L	
54	1,3-Dichlorobenzene	ND	0.50	µg/L	
55	1,4-Dichlorobenzene	ND	0.50	µg/L	
56	4-Isopropyltoluene	ND	0.50	µg/L	
57	1,2-Dichlorobenzene	ND	0.50	µg/L	
58	n-Butylbenzene	ND	0.50	µg/L	
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L	
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L	
61	Naphthalene	ND	1.0	µg/L	
62	Hexachlorobutadiene	ND	1.0	µg/L	
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L	
64	Surr: 1,2-Dichloroethane-d4	95	(75-128)	%REC	
65	Surr: Toluene-d8	100	(80-120)	%REC	
66	Surr: 4-Bromofluorobenzene	98	(80-120)	%REC	

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

8/4/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072244-03A
Client I.D. Number: MW-21-3

Sampled: 07/18/08
Received: 07/22/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit		
1	Dichlorodifluoromethane	ND	0.50	µg/L	
2	Chloromethane	ND	1.0	µg/L	
3	Vinyl chloride	ND	0.50	µg/L	
4	Chloroethane	ND	0.50	µg/L	
5	Bromomethane	ND	1.0	µg/L	
6	Trichlorofluoromethane	ND	0.50	µg/L	
7	1,1-Dichloroethene	ND	0.50	µg/L	
8	Dichloromethane	ND	1.0	µg/L	
9	Freon-113	ND	0.50	µg/L	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	
12	1,1-Dichloroethane	ND	0.50	µg/L	
13	2-Butanone (MEK)	ND	10	µg/L	
14	cis-1,2-Dichloroethene	1.2	0.50	µg/L	
15	Bromochloromethane	ND	0.50	µg/L	
16	Chloroform	3.0	0.50	µg/L	
17	2,2-Dichloropropane	ND	0.50	µg/L	
18	1,2-Dichloroethane	ND	0.50	µg/L	
19	1,1,1-Trichloroethane	ND	0.50	µg/L	
20	1,1-Dichloropropene	ND	0.50	µg/L	
21	Carbon tetrachloride	ND	0.50	µg/L	
22	Benzene	ND	0.50	µg/L	
23	Dibromomethane	ND	0.50	µg/L	
24	1,2-Dichloropropane	ND	0.50	µg/L	
25	Trichloroethene	1.7	0.50	µg/L	
26	Bromodichloromethane	ND	0.50	µg/L	
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	
30	1,1,2-Trichloroethane	ND	0.50	µg/L	
31	Toluene	ND	0.50	µg/L	
32	1,3-Dichloropropane	ND	0.50	µg/L	
33	Dibromochloromethane	ND	0.50	µg/L	
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L	
35	Tetrachloroethene	8.6	0.50	µg/L	
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	
37	Chlorobenzene	ND	0.50	µg/L	
38	Ethylbenzene	ND	0.50	µg/L	
39	m,p-Xylene	ND	0.50	µg/L	
40	Bromoform	ND	0.50	µg/L	
41	Styrene	ND	0.50	µg/L	
42	o-Xylene	ND	0.50	µg/L	
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	
44	1,2,3-Trichloropropane	ND	1.0	µg/L	
45	Isopropylbenzene	ND	0.50	µg/L	
46	Bromobenzene	ND	0.50	µg/L	
47	n-Propylbenzene	ND	0.50	µg/L	
48	4-Chlorotoluene	ND	0.50	µg/L	
49	2-Chlorotoluene	ND	0.50	µg/L	
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L	
51	tert-Butylbenzene	ND	0.50	µg/L	
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L	
53	sec-Butylbenzene	ND	0.50	µg/L	
54	1,3-Dichlorobenzene	ND	0.50	µg/L	
55	1,4-Dichlorobenzene	ND	0.50	µg/L	
56	4-Isopropyltoluene	ND	0.50	µg/L	
57	1,2-Dichlorobenzene	ND	0.50	µg/L	
58	n-Butylbenzene	ND	0.50	µg/L	
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L	
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L	
61	Naphthalene	ND	1.0	µg/L	
62	Hexachlorobutadiene	ND	1.0	µg/L	
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L	
64	Surr: 1,2-Dichloroethane-d4	98	(75-128)	%REC	
65	Surr: Toluene-d8	101	(80-120)	%REC	
66	Surr: 4-Bromofluorobenzene	99	(80-120)	%REC	

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

8/4/08
Report Date

Alpha Analytical, Inc.

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

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072244-04A
Client I.D. Number: MW-21-2

Sampled: 07/18/08
Received: 07/22/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	1.5	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	3.6	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	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	95	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	8.2	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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.

8/4/08

Report Date

Alpha Analytical, Inc.

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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: BMI08072244-05A
Client I.D. Number: MW-21-1

Sampled: 07/18/08
Received: 07/22/08
Analyzed: 07/29/08

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	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	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/4/08
Report Date

Alpha Analytical, Inc.

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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: BMI08072244-06A
Client I.D. Number: EB-01-7/18/08

Sampled: 07/18/08
Received: 07/22/08
Analyzed: 07/29/08

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	0.72	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072244-07A
Client I.D. Number: TB-01-7/18/08

Sampled: 07/18/08
Received: 07/22/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

8/4/08
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI08072244 **Project:** G005862/ JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08072244-01A	MW-21-5	Aqueous	2
08072244-02A	MW-21-4	Aqueous	2
08072244-03A	MW-21-3	Aqueous	2
08072244-04A	MW-21-2	Aqueous	2
08072244-05A	MW-21-1	Aqueous	2
08072244-06A	EB-01-7/18/08	Aqueous	2
08072244-07A	TB-01-7/18/08	Aqueous	2

8/4/08

Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/22/08

Job#: G005862/ JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-21-5**					
Lab ID :	BMI08072244-01A	Specific Conductance (at 25°C)	900	10 µS/cm	07/18/08	07/22/08
Client ID :	**MW-21-4**					
Lab ID :	BMI08072244-02A	Specific Conductance (at 25°C)	800	10 µS/cm	07/18/08	07/22/08
Client ID :	**MW-21-3**					
Lab ID :	BMI08072244-03A	Specific Conductance (at 25°C)	1,200	10 µS/cm	07/18/08	07/22/08
Client ID :	**MW-21-2**					
Lab ID :	BMI08072244-04A	Specific Conductance (at 25°C)	1,300	10 µS/cm	07/18/08	07/22/08
Client ID :	**MW-21-1**					
Lab ID :	BMI08072244-05A	Specific Conductance (at 25°C)	1,200	10 µS/cm	07/18/08	07/22/08
Client ID :	**EB-01-7/18/08**					
Lab ID :	BMI08072244-06A	Specific Conductance (at 25°C)	ND	10 µS/cm	07/18/08	07/22/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/4/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (626) 345-0598
Fax: (760) 385-4613
Date Received : 07/22/08

Job#: G005862/ JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-21-5**					
Lab ID :	BMI08072244-01A	Chromium (Cr)	ND	0.0050 mg/L	07/18/08	07/28/08
Client ID :	**MW-21-4**					
Lab ID :	BMI08072244-02A	Chromium (Cr)	ND	0.0050 mg/L	07/18/08	07/28/08
Client ID :	**MW-21-3**					
Lab ID :	BMI08072244-03A	Chromium (Cr)	ND	0.0050 mg/L	07/18/08	07/28/08
Client ID :	**MW-21-2**					
Lab ID :	BMI08072244-04A	Chromium (Cr)	ND	0.0050 mg/L	07/18/08	07/28/08
Client ID :	**MW-21-1**					
Lab ID :	BMI08072244-05A	Chromium (Cr)	ND	0.0050 mg/L	07/18/08	07/28/08
Client ID :	**EB-01-7/18/08**					
Lab ID :	BMI08072244-06A	Chromium (Cr)	ND	0.0050 mg/L	07/18/08	07/28/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

8/4/08
Report Date

Alpha Analytical, Inc.

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

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

Date: *30-Jul-08*

QC Summary Report

Work Order: 08072244

Method Blank

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

File ID: **16** Batch ID: **20307** Analysis Date: **07/24/2008 14:06**

Sample ID: **MBLK-20307** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

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

Laboratory Fortified Blank

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

File ID: **17** Batch ID: **20307** Analysis Date: **07/24/2008 14:24**

Sample ID: **LFB-20307** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.3	2	25		89	85	115			

Sample Matrix Spike

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

File ID: **21** Batch ID: **20307** Analysis Date: **07/24/2008 15:38**

Sample ID: **08072345-02ALFM** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24.5	2	25	2.29	89	80	120			

Sample Matrix Spike Duplicate

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

File ID: **22** Batch ID: **20307** Analysis Date: **07/24/2008 15:57**

Sample ID: **08072345-02ALFMD** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24.2	2	25	2.29	88	80	120	24.52	1.3(15)	

Comments:

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

Alpha Analytical, Inc.

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Date: *30-Jul-08*

QC Summary Report

Work Order: 08072244

Method Blank

Type **MBLK** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0722CNA** Analysis Date: **07/22/2008 00:00**

Sample ID: **MBLK-W0722CNA** Units : **µS/cm** Run ID: **WETLAB_080722B** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0722CNA** Analysis Date: **07/22/2008 00:00**

Sample ID: **LCS-W0722CNA** Units : **µS/cm** Run ID: **WETLAB_080722B** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	1380	10	1410		98	98	102			

Comments:

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

Alpha Analytical, Inc.

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

Date: 04-Aug-08

QC Summary Report

Work Order: 08072244

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

File ID: **08072907.D** Batch ID: **MS15W0729K5** Analysis Date: **07/29/2008 10:53**

Sample ID: **MBLK MS15W0729K** Units : **µg/L** Run ID: **MSD_15_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	20								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9		10		90	75	128			
Surr: Toluene-d8	10		10		100	80	120			

Alpha Analytical, Inc.

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

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

Date: 04-Aug-08

QC Summary Report

Work Order: 08072244

Surr: 4-Bromofluorobenzene	9.93		10		99	70	130			

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

File ID: **08072905.D** Batch ID: **MS15W0729K5** Analysis Date: **07/29/2008 09:47**

Sample ID: **LCS MS15W0729K** Units : **µg/L** Run ID: **MSD_15_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	7.24	1	10		72	29	133			
Chloromethane	9.67	2	10		97	44	140			
Vinyl chloride	9.77	1	10		98	70	130			
Chloroethane	9.09	1	10		91	62	158			
Bromomethane	11.9	2	10		119	20	179			
Trichlorofluoromethane	9.73	1	10		97	63	156			
1,1-Dichloroethene	10.8	1	10		108	70	130			
Dichloromethane	10.4	2	10		104	70	130			
trans-1,2-Dichloroethene	11.3	1	10		113	70	130			
Methyl tert-butyl ether (MTBE)	12.1	0.5	10		121	70	130			
1,1-Dichloroethane	10.3	1	10		103	70	130			
cis-1,2-Dichloroethene	11.6	1	10		116	70	130			
Bromochloromethane	11.5	1	10		115	70	130			
Chloroform	9.88	1	10		99	80	120			
2,2-Dichloropropane	10.5	1	10		105	65	152			
1,2-Dichloroethane	10.1	1	10		101	70	130			
1,1,1-Trichloroethane	10.5	1	10		105	70	130			
1,1-Dichloropropene	11.2	1	10		112	70	130			
Carbon tetrachloride	10.6	1	10		106	70	130			
Benzene	10.7	0.5	10		107	70	130			
Dibromomethane	11.8	1	10		118	70	130			
1,2-Dichloropropane	11.2	1	10		112	70	130			
Trichloroethene	11.3	1	10		113	70	130			
Bromodichloromethane	11.2	1	10		112	70	130			
cis-1,3-Dichloropropene	10	1	10		100	70	130			
trans-1,3-Dichloropropene	9.81	1	10		98	68	134			
1,1,2-Trichloroethane	11.8	1	10		118	70	130			
Toluene	10.3	0.5	10		103	70	130			
1,3-Dichloropropane	11.4	1	10		114	70	130			
Dibromochloromethane	10.6	1	10		106	68	130			
1,2-Dibromoethane (EDB)	24.1	2	20		120	70	130			
Tetrachloroethene	11.1	1	10		111	70	130			
1,1,1,2-Tetrachloroethane	10.9	1	10		109	70	130			
Chlorobenzene	10.5	1	10		105	70	130			
Ethylbenzene	10.5	0.5	10		105	70	130			
m,p-Xylene	11.5	0.5	10		115	70	130			
Bromoform	11.8	1	10		118	59	132			
Styrene	10.7	1	10		107	70	130			
o-Xylene	10.7	0.5	10		107	70	130			
1,1,2,2-Tetrachloroethane	10.1	1	10		101	65	135			
1,2,3-Trichloropropane	20.9	2	20		105	68	132			
Isopropylbenzene	10.4	1	10		104	70	130			
Bromobenzene	9.99	1	10		99.9	70	130			
n-Propylbenzene	10.6	1	10		106	70	130			
4-Chlorotoluene	10.4	1	10		104	70	130			
2-Chlorotoluene	10.4	1	10		104	70	130			
1,3,5-Trimethylbenzene	10.2	1	10		102	70	141			
tert-Butylbenzene	10.9	1	10		109	70	130			
1,2,4-Trimethylbenzene	10.3	1	10		103	67	146			
sec-Butylbenzene	10.5	1	10		105	70	130			
1,3-Dichlorobenzene	9.86	1	10		99	70	130			
1,4-Dichlorobenzene	9.74	1	10		97	70	130			
4-Isopropyltoluene	10.5	1	10		105	70	133			
1,2-Dichlorobenzene	9.22	1	10		92	70	130			
n-Butylbenzene	10.5	1	10		105	68	145			
1,2-Dibromo-3-chloropropane (DBCP)	47.9	3	50		96	57	133			
1,2,4-Trichlorobenzene	10.4	2	10		104	70	130			
Naphthalene	11.1	2	10		111	26	161			
Hexachlorobutadiene	19.9	2	20		100	39	172			
1,2,3-Trichlorobenzene	11.2	2	10		112	33	166			
Surr: 1,2-Dichloroethane-d4	8.23		10		82	75	128			
Surr: Toluene-d8	9.79		10		98	80	120			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Alpha Analytical, Inc.

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

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

Date: *04-Aug-08*

QC Summary Report

Work Order: 08072244

Comments:

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

Alpha Analytical, Inc.

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

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

Date: *30-Jul-08*

QC Summary Report

Work Order: 08072244

Method Blank

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

File ID: **072808.B\032SMPL.D** Batch ID: **20289K** Analysis Date: **07/28/2008 15:12**

Sample ID: **MB-20289** Units : **mg/L** Run ID: **ICP/MS_080728A** Prep Date: **07/22/2008**

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

Laboratory Control Spike

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

File ID: **072808.B\033_LCS.D** Batch ID: **20289K** Analysis Date: **07/28/2008 15:18**

Sample ID: **LCS-20289** Units : **mg/L** Run ID: **ICP/MS_080728A** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0484	0.005	0.05		97	85	115			

Sample Matrix Spike

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

File ID: **072808.B\036SMPL.D** Batch ID: **20289K** Analysis Date: **07/28/2008 15:34**

Sample ID: **08072222-03AMS** Units : **mg/L** Run ID: **ICP/MS_080728A** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0502	0.005	0.05	0	100	70	130			

Sample Matrix Spike Duplicate

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

File ID: **072808.B\037SMPL.D** Batch ID: **20289K** Analysis Date: **07/28/2008 15:40**

Sample ID: **08072222-03AMSD** Units : **mg/L** Run ID: **ICP/MS_080728A** Prep Date: **07/22/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0481	0.005	0.05	0	96	70	130	0.05021	4.4(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.

AMENDED #2

CHAIN-OF-CUSTODY RECORD

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

CA

WorkOrder : BMI08072244

Report Due By : 5:00 PM On : 05-Aug-08

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Report Attention	Phone Number	EMail Address
David Conner	(619) 574-4827 x	connerd@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218017

Client's COC # : 026283 Job : G005862/ JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	22-Jul-08	31-Jul-08

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_TIC_W	VOC_W				Sample Remarks
BMI08072244-01A	MW-21-5	AQ	07/18/08 08:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072244-02A	MW-21-4	AQ	07/18/08 08:55	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072244-03A	MW-21-3	AQ	07/18/08 09:19	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072244-04A	MW-21-2	AQ	07/18/08 09:47	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072244-05A	MW-21-1	AQ	07/18/08 10:58	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072244-06A	EB-01-7/18/08	AQ	07/18/08 10:15	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				3 voa's rec'd w/ air bubbles > 6mm
BMI08072244-07A	TB-01-7/18/08	AQ	07/18/08 00:00	1	0	10				VOC by 524 Criteria	VOC by 524 Criteria				Client provided trip blank

Comments: No security seals. Frozen ice. Level IV QC. Amended 7/25 8:00 to change Job Name, QC Level and VOC test description due to project requirements.TP Amended 7/31/08 13:46 to add TICS per project requirements. TP :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tasha Pascal	Tasha Pascal	Alpha Analytical, Inc.	7/31/08 1345

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

AMENDED

CHAIN-OF-CUSTODY RECORD

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

CA

WorkOrder : BMI08072244

Report Due By : 5:00 PM On : 05-Aug-08

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218017

Client's COC # : 026283 Job : G005862/ JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	22-Jul-08	**25-Jul-08**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W					Sample Remarks
BMI08072244-01A	MW-21-5	AQ	07/18/08 08:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072244-02A	MW-21-4	AQ	07/18/08 08:55	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072244-03A	MW-21-3	AQ	07/18/08 09:19	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072244-04A	MW-21-2	AQ	07/18/08 09:47	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072244-05A	MW-21-1	AQ	07/18/08 10:58	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072244-06A	EB-01-7/18/08	AQ	07/18/08 10:15	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					3 voa's rec'd w/ air bubbles > 6mm
BMI08072244-07A	TB-01-7/18/08	AQ	07/18/08 00:00	1	0	10				VOC by 524 Criteria					Client provided trip blank

Comments: No security seals. Frozen ice. Level IV QC. Amended 7/25 8:00 to change Job Name, QC Level and VOC test description due to project requirements.TP :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tasha Pascal	Tasha Pascal	Alpha Analytical, Inc.	7/25/08 810

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026283 Job : G005862

CHAIN-OF-CUSTODY RECORD

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

CA

WorkOrder : BMI08072244

Report Due By : 5:00 PM On : 05-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	22-Jul-08	22-Jul-08

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W					Sample Remarks
BMI08072244-01A	MW-21-5	AQ	07/18/08 08:00	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072244-02A	MW-21-4	AQ	07/18/08 08:55	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072244-03A	MW-21-3	AQ	07/18/08 09:19	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072244-04A	MW-21-2	AQ	07/18/08 09:47	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072244-05A	MW-21-1	AQ	07/18/08 10:58	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072244-06A	EB-01-7/18/08	AQ	07/18/08 10:15	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					3 voa's rec'd w/ air bubbles > 6mm
BMI08072244-07A	TB-01-7/18/08	AQ	07/18/08 00:00	1	0	10				8260 by 524 Criteria					Client provided trip blank

Comments: No security seals. Frozen ice. Level IV QC. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tasha Pascal	Tasha Pascal	Alpha Analytical, Inc.	7/22/08 1300

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

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

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

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

026285

Page # 1 of 1

Client Name: DAVID CONNER | P.O. # 218017 | Job # 6005862
Address: 3990 OLD TOWN AVE, C-205 | EMail Address:
City, State, Zip: SAN DIEGO, CA 92110 | Phone # 619-726-7311 | Fax #

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TOTAL Cr (200.8)	Cl, SO4 (314.0)	REMARKS
800	7/18/08	AQ	BMI08072244-01	MW-21-5	NORM		5	X	X	X	
855			-02	MW-21-4				X	X	X	
919			-03	MW-21-3				X	X	X	
947			-04	MW-21-2				X	X	X	
1058			-05	MW-21-1				X	X	X	
1015			-06	EB-01 - 7/18/08				X	X	X	3 voa rec'd w/air bubble EQUIP. BLANK
—			-07	TB-01 - 7/18/08			1	X			TRIP BLANK

Alpha Analytical Sample Receipt
Security Seal? YES NO
Frozen Ice? YES NO
Temperature 4 °C

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROGDON	INSIGHT ECT	07/21/08	1200
Received by	Tasha Pascal	Tasha Pascal	AAI	7/22/08	11:30
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *04-Aug-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08072345 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08072345-01A	MW-19-5	Aqueous
08072345-02A	MW-19-4	Aqueous
08072345-03A	MW-19-3	Aqueous
08072345-04A	MW-19-2	Aqueous
08072345-05A	MW-19-1	Aqueous
08072345-06A	DUPE-2-3Q08	Aqueous
08072345-07A	EB-03-7/22/08	Aqueous
08072345-08A	TB-03-7/22/08	Aqueous

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**						
Lab ID :	BMI08072345-01A	* * * None Found * * *	ND	2.0 µg/L	07/23/08	07/22/08	07/29/08
Client ID :	**MW-19-4**						
Lab ID :	BMI08072345-02A	* * * None Found * * *	ND	2.0 µg/L	07/23/08	07/22/08	07/29/08
Client ID :	**MW-19-3**						
Lab ID :	BMI08072345-03A	* * * None Found * * *	ND	2.0 µg/L	07/23/08	07/22/08	07/29/08
Client ID :	**MW-19-2**						
Lab ID :	BMI08072345-04A	* * * None Found * * *	ND	2.0 µg/L	07/23/08	07/22/08	07/29/08
Client ID :	**MW-19-1**						
Lab ID :	BMI08072345-05A	* * * None Found * * *	ND	2.0 µg/L	07/23/08	07/22/08	07/29/08
Client ID :	**DUPE-2-3Q08**						
Lab ID :	BMI08072345-06A	* * * None Found * * *	ND	2.0 µg/L	07/23/08	07/22/08	07/29/08
Client ID :	**EB-03-7/22/08**						
Lab ID :	BMI08072345-07A	* * * None Found * * *	ND	2.0 µg/L	07/23/08	07/22/08	07/30/08
Client ID :	**TB-03-7/22/08**						
Lab ID :	BMI08072345-08A	* * * None Found * * *	ND	2.0 µg/L	07/23/08	07/22/08	07/30/08

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/5/08
Report Date

Page 1 of 1

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072345-01A
Client I.D. Number: MW-19-5

Sampled: 07/22/08
Received: 07/23/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	UJ	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	1.0		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND		1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	2.1		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

UJ- The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

8/5/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072345-02A
Client I.D. Number: MW-19-4

Sampled: 07/22/08
Received: 07/23/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	UJ	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND		1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

UJ- The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/5/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072345-03A
Client I.D. Number: MW-19-3

Sampled: 07/22/08
Received: 07/23/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit	
1	Dichlorodifluoromethane	ND	UJ	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L
3	Vinyl chloride	ND		0.50	µg/L
4	Chloroethane	ND		0.50	µg/L
5	Bromomethane	ND		1.0	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L
9	Freon-113	ND		0.50	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L
16	Chloroform	ND		0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L
22	Benzene	ND		0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L
25	Trichloroethene	ND		0.50	µg/L
26	Bromodichloromethane	ND		0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L
30	1,1,2-Trichloroethane	ND		0.50	µg/L
31	Toluene	ND		0.50	µg/L
32	1,3-Dichloropropane	ND		0.50	µg/L
33	Dibromochloromethane	ND		0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L
35	Tetrachloroethene	ND		0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND		0.50	µg/L
37	Chlorobenzene	ND		0.50	µg/L
38	Ethylbenzene	ND		0.50	µg/L
39	m,p-Xylene	ND		0.50	µg/L
40	Bromoform	ND		0.50	µg/L
41	Styrene	ND		0.50	µg/L
42	o-Xylene	ND		0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND		0.50	µg/L
44	1,2,3-Trichloropropane	ND		1.0	µg/L
45	Isopropylbenzene	ND		0.50	µg/L
46	Bromobenzene	ND		0.50	µg/L
47	n-Propylbenzene	ND		0.50	µg/L
48	4-Chlorotoluene	ND		0.50	µg/L
49	2-Chlorotoluene	ND		0.50	µg/L
50	1,3,5-Trimethylbenzene	ND		0.50	µg/L
51	tert-Butylbenzene	ND		0.50	µg/L
52	1,2,4-Trimethylbenzene	ND		0.50	µg/L
53	sec-Butylbenzene	ND		0.50	µg/L
54	1,3-Dichlorobenzene	ND		0.50	µg/L
55	1,4-Dichlorobenzene	ND		0.50	µg/L
56	4-Isopropyltoluene	ND		0.50	µg/L
57	1,2-Dichlorobenzene	ND		0.50	µg/L
58	n-Butylbenzene	ND		0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND		2.5	µg/L
60	1,2,4-Trichlorobenzene	ND		1.0	µg/L
61	Naphthalene	ND		1.0	µg/L
62	Hexachlorobutadiene	ND		1.0	µg/L
63	1,2,3-Trichlorobenzene	ND		1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	97		(70-120)	%REC
65	Surr: Toluene-d8	99		(85-120)	%REC
66	Surr: 4-Bromofluorobenzene	99		(75-120)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

UJ- The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/5/08
Report Date

Alpha Analytical, Inc.

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

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072345-04A
Client I.D. Number: MW-19-2

Sampled: 07/22/08
Received: 07/23/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	UJ	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND		1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.0		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

UJ- The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/5/08

Report Date

Alpha Analytical, Inc.

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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: BMI08072345-05A
Client I.D. Number: MW-19-1

Sampled: 07/22/08
Received: 07/23/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	UJ	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND		1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

UJ- The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

ND = Not Detected

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

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8/5/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072345-06A
Client I.D. Number: DUPE-2-3Q08

Sampled: 07/22/08
Received: 07/23/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	UJ	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND		1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.99		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	98	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	100	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

UJ- The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/5/08
Report Date

Alpha Analytical, Inc.

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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: BMI08072345-07A
Client I.D. Number: EB-03-7/22/08

Sampled: 07/22/08
Received: 07/23/08
Analyzed: 07/30/08

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	UJ	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	0.99	0.50	µg/L
5	Bromomethane	ND		1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

UJ- The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/5/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072345-08A
Client I.D. Number: TB-03-7/22/08

Sampled: 07/22/08
Received: 07/23/08
Analyzed: 07/30/08

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit			Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	UJ	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND		0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND		1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-120)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(85-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(75-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

UJ- The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/5/08
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI08072345 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08072345-01A	MW-19-5	Aqueous	2
08072345-02A	MW-19-4	Aqueous	2
08072345-03A	MW-19-3	Aqueous	2
08072345-04A	MW-19-2	Aqueous	2
08072345-05A	MW-19-1	Aqueous	2
08072345-06A	DUPE-2-3Q08	Aqueous	2
08072345-07A	EB-03-7/22/08	Aqueous	2
08072345-08A	TB-03-7/22/08	Aqueous	2

8/5/08

Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (626) 345-0598
Fax: (760) 385-4613
Date Received : 07/23/08

Job#: G005862/JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**					
Lab ID :	BMI08072345-01A	Specific Conductance (at 25°C)	750	10 µS/cm	07/22/08	07/23/08
Client ID :	**MW-19-4**					
Lab ID :	BMI08072345-02A	Specific Conductance (at 25°C)	620	10 µS/cm	07/22/08	07/23/08
Client ID :	**MW-19-3**					
Lab ID :	BMI08072345-03A	Specific Conductance (at 25°C)	230	10 µS/cm	07/22/08	07/23/08
Client ID :	**MW-19-2**					
Lab ID :	BMI08072345-04A	Specific Conductance (at 25°C)	1,000	10 µS/cm	07/22/08	07/23/08
Client ID :	**MW-19-1**					
Lab ID :	BMI08072345-05A	Specific Conductance (at 25°C)	370	10 µS/cm	07/22/08	07/23/08
Client ID :	**DUPE-2-3Q08**					
Lab ID :	BMI08072345-06A	Specific Conductance (at 25°C)	1,000	10 µS/cm	07/22/08	07/23/08
Client ID :	**EB-03-7/22/08**					
Lab ID :	BMI08072345-07A	Specific Conductance (at 25°C)	ND	10 µS/cm	07/22/08	07/23/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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8/5/08
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (626) 345-0598
Fax: (760) 385-4613
Date Received : 07/23/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**					
Lab ID :	BMI08072345-01A	Perchlorate	2.33	1.00 µg/L	07/22/08	07/24/08
Client ID :	**MW-19-4**					
Lab ID :	BMI08072345-02A	Perchlorate	2.29	1.00 µg/L	07/22/08	07/24/08
Client ID :	**MW-19-3**					
Lab ID :	BMI08072345-03A	Perchlorate	2.54	1.00 µg/L	07/22/08	07/24/08
Client ID :	**MW-19-2**					
Lab ID :	BMI08072345-04A	Perchlorate	4.68	1.00 µg/L	07/22/08	07/24/08
Client ID :	**MW-19-1**					
Lab ID :	BMI08072345-05A	Perchlorate	ND	1.00 µg/L	07/22/08	07/24/08
Client ID :	**DUPE-2-3Q08**					
Lab ID :	BMI08072345-06A	Perchlorate	4.87	1.00 µg/L	07/22/08	07/24/08
Client ID :	**EB-03-7/22/08**					
Lab ID :	BMI08072345-07A	Perchlorate	ND	1.00 µg/L	07/22/08	07/24/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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8/6/08
Report Date

Alpha Analytical, Inc.

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

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

Date: *30-Jul-08*

QC Summary Report

Work Order: 08072345

Method Blank

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

File ID: **16** Batch ID: **20307** Analysis Date: **07/24/2008 14:06**

Sample ID: **MBLK-20307** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

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

Laboratory Fortified Blank

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

File ID: **17** Batch ID: **20307** Analysis Date: **07/24/2008 14:24**

Sample ID: **LFB-20307** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.3	2	25		89	85	115			

Sample Matrix Spike

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

File ID: **21** Batch ID: **20307** Analysis Date: **07/24/2008 15:38**

Sample ID: **08072345-02ALFM** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24.5	2	25	2.29	89	80	120			

Sample Matrix Spike Duplicate

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

File ID: **22** Batch ID: **20307** Analysis Date: **07/24/2008 15:57**

Sample ID: **08072345-02ALFMD** Units : **µg/L** Run ID: **IC_3_080724A** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24.2	2	25	2.29	88	80	120	24.52	1.3(15)	

Comments:

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

Alpha Analytical, Inc.

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Date: *30-Jul-08*

QC Summary Report

Work Order: 08072345

Method Blank

Type **MBLK** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0723CN** Analysis Date: **07/23/2008 00:00**

Sample ID: **MBLK-W0723CN** Units : **µS/cm** Run ID: **WETLAB_080723E** Prep Date: **07/23/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0723CN** Analysis Date: **07/23/2008 00:00**

Sample ID: **LCS-W0723CN** Units : **µS/cm** Run ID: **WETLAB_080723E** Prep Date: **07/23/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	1400	10	1410		99.6	98	102			

Comments:

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

Alpha Analytical, Inc.

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Date: 04-Aug-08

QC Summary Report

Work Order: 08072345

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

File ID: **08072936.D** Batch ID: **MS15W0729L5** Analysis Date: **07/29/2008 21:40**

Sample ID: **MBLK MS15W0729L** Units : **µg/L** Run ID: **MSD_15_080729B** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.34		10		93	75	128			
Surr: Toluene-d8	10.2		10		102	80	120			

Alpha Analytical, Inc.

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Date: 04-Aug-08

QC Summary Report

Work Order: 08072345

Surr: 4-Bromofluorobenzene	9.95		10	100	70	130

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

File ID: **08072934.D** Batch ID: **MS15W0729L5** Analysis Date: **07/29/2008 20:55**

Sample ID: **LCS MS15W0729L** Units : **µg/L** Run ID: **MSD_15_080729B** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	6.8	1	10		68	29	133			
Chloromethane	9.73	2	10		97	44	140			
Vinyl chloride	9.83	1	10		98	70	130			
Chloroethane	9.33	1	10		93	62	158			
Bromomethane	11.3	2	10		113	20	179			
Trichlorofluoromethane	10.1	1	10		101	63	156			
1,1-Dichloroethene	10.8	1	10		108	70	130			
Dichloromethane	10.3	2	10		103	70	130			
trans-1,2-Dichloroethene	11.2	1	10		112	70	130			
Methyl tert-butyl ether (MTBE)	12.4	0.5	10		124	70	130			
1,1-Dichloroethane	10.4	1	10		104	70	130			
cis-1,2-Dichloroethene	11.6	1	10		116	70	130			
Bromochloromethane	11.5	1	10		115	70	130			
Chloroform	10.1	1	10		101	80	120			
2,2-Dichloropropane	9.29	1	10		93	65	152			
1,2-Dichloroethane	10.4	1	10		104	70	130			
1,1,1-Trichloroethane	10.7	1	10		107	70	130			
1,1-Dichloropropene	11.3	1	10		113	70	130			
Carbon tetrachloride	10.5	1	10		105	70	130			
Benzene	10.7	0.5	10		107	70	130			
Dibromomethane	12.3	1	10		123	70	130			
1,2-Dichloropropane	11	1	10		110	70	130			
Trichloroethene	11.9	1	10		119	70	130			
Bromodichloromethane	11.4	1	10		114	70	130			
cis-1,3-Dichloropropene	10.1	1	10		101	70	130			
trans-1,3-Dichloropropene	9.64	1	10		96	68	134			
1,1,2-Trichloroethane	11.9	1	10		119	70	130			
Toluene	10.1	0.5	10		101	70	130			
1,3-Dichloropropane	11.4	1	10		114	70	130			
Dibromochloromethane	10.7	1	10		107	68	130			
1,2-Dibromoethane (EDB)	24.5	2	20		122	70	130			
Tetrachloroethene	10.7	1	10		107	70	130			
1,1,1,2-Tetrachloroethane	10.7	1	10		107	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10.5	0.5	10		105	70	130			
m,p-Xylene	11.3	0.5	10		113	70	130			
Bromoform	12.1	1	10		121	59	132			
Styrene	10.6	1	10		106	70	130			
o-Xylene	10.6	0.5	10		106	70	130			
1,1,2,2-Tetrachloroethane	9.41	1	10		94	65	135			
1,2,3-Trichloropropane	21.7	2	20		109	68	132			
Isopropylbenzene	10.5	1	10		105	70	130			
Bromobenzene	10.2	1	10		102	70	130			
n-Propylbenzene	10.6	1	10		106	70	130			
4-Chlorotoluene	10.7	1	10		107	70	130			
2-Chlorotoluene	10.5	1	10		105	70	130			
1,3,5-Trimethylbenzene	10.4	1	10		104	70	141			
tert-Butylbenzene	9.75	1	10		98	70	130			
1,2,4-Trimethylbenzene	10.4	1	10		104	67	146			
sec-Butylbenzene	10.7	1	10		107	70	130			
1,3-Dichlorobenzene	9.96	1	10		99.6	70	130			
1,4-Dichlorobenzene	9.93	1	10		99	70	130			
4-Isopropyltoluene	10.6	1	10		106	70	133			
1,2-Dichlorobenzene	9.44	1	10		94	70	130			
n-Butylbenzene	10.6	1	10		106	68	145			
1,2-Dibromo-3-chloropropane (DBCP)	50	3	50		100	57	133			
1,2,4-Trichlorobenzene	11.1	2	10		111	70	130			
Naphthalene	11.9	2	10		119	26	161			
Hexachlorobutadiene	20.8	2	20		104	39	172			
1,2,3-Trichlorobenzene	12.3	2	10		123	33	166			
Surr: 1,2-Dichloroethane-d4	8.48		10		85	75	128			
Surr: Toluene-d8	9.63		10		96	80	120			
Surr: 4-Bromofluorobenzene	10.2		10		102	70	130			

Alpha Analytical, Inc.

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

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

Date: 04-Aug-08

QC Summary Report

Work Order: 08072345

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

File ID: **08073109.D** Batch ID: **MS15W0729L5** Analysis Date: **07/31/2008 11:33**

Sample ID: **08072345-02AMS** Units : **µg/L** Run ID: **MSD_15_080729B** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	44.5	2.5	50	0	89	20	137			
Chloromethane	48.8	10	50	0	98	31	148			
Vinyl chloride	55.8	2.5	50	0	112	46	138			
Chloroethane	51.8	2.5	50	0	104	34	170			
Bromomethane	72.4	10	50	0	145	20	189			
Trichlorofluoromethane	65.6	2.5	50	0	131	51	156			
1,1-Dichloroethene	52.1	2.5	50	0	104	66	132			
Dichloromethane	50.6	10	50	0	101	48	145			
trans-1,2-Dichloroethene	54.6	2.5	50	0	109	68	132			
Methyl tert-butyl ether (MTBE)	56.4	1.3	50	0	113	62	139			
1,1-Dichloroethane	51.7	2.5	50	0	103	70	130			
cis-1,2-Dichloroethene	56.2	2.5	50	0	112	70	130			
Bromochloromethane	54.9	2.5	50	0	110	70	130			
Chloroform	50.1	2.5	50	0	100	70	130			
2,2-Dichloropropane	53.4	2.5	50	0	107	50	152			
1,2-Dichloroethane	51	2.5	50	0	102	65	136			
1,1,1-Trichloroethane	52.8	2.5	50	0	106	67	133			
1,1-Dichloropropene	54.8	2.5	50	0	110	70	130			
Carbon tetrachloride	52.9	2.5	50	0	106	61	142			
Benzene	52.2	1.3	50	0	104	70	130			
Dibromomethane	57	2.5	50	0	114	69	130			
1,2-Dichloropropane	54.7	2.5	50	0	109	70	132			
Trichloroethene	51.5	2.5	50	0	103	69	130			
Bromodichloromethane	56.2	2.5	50	0	112	70	130			
cis-1,3-Dichloropropene	45.6	2.5	50	0	91	66	130			
trans-1,3-Dichloropropene	46.4	2.5	50	0	93	65	134			
1,1,2-Trichloroethane	55.4	2.5	50	0	111	67	132			
Toluene	48.4	1.3	50	0	97	67	130			
1,3-Dichloropropane	51.6	2.5	50	0	103	70	130			
Dibromochloromethane	49.5	2.5	50	0	99	66	130			
1,2-Dibromoethane (EDB)	110	10	100	0	110	70	130			
Tetrachloroethene	50.1	2.5	50	0	100	59	135			
1,1,1,2-Tetrachloroethane	52.1	2.5	50	0	104	70	130			
Chlorobenzene	49.9	2.5	50	0	99.7	70	130			
Ethylbenzene	50.7	1.3	50	0	101	70	130			
m,p-Xylene	53.4	1.3	50	0	107	69	130			
Bromoform	54.4	2.5	50	0	109	57	132			
Styrene	50.8	2.5	50	0	102	58	135			
o-Xylene	50.6	1.3	50	0	101	70	130			
1,1,2,2-Tetrachloroethane	47.2	2.5	50	0	94	65	137			
1,2,3-Trichloropropane	94.9	10	100	0	95	67	132			
Isopropylbenzene	51.2	2.5	50	0	102	70	130			
Bromobenzene	49.6	2.5	50	0	99	70	130			
n-Propylbenzene	51.7	2.5	50	0	103	70	130			
4-Chlorotoluene	51.7	2.5	50	0	103	70	130			
2-Chlorotoluene	52	2.5	50	0	104	70	130			
1,3,5-Trimethylbenzene	51.3	2.5	50	0	103	68	141			
tert-Butylbenzene	54.7	2.5	50	0	109	70	130			
1,2,4-Trimethylbenzene	51.2	2.5	50	0	102	67	146			
sec-Butylbenzene	52.5	2.5	50	0	105	70	130			
1,3-Dichlorobenzene	48.7	2.5	50	0	97	70	130			
1,4-Dichlorobenzene	48.6	2.5	50	0	97	70	130			
4-Isopropyltoluene	52.4	2.5	50	0	105	70	133			
1,2-Dichlorobenzene	46	2.5	50	0	92	70	130			
n-Butylbenzene	54	2.5	50	0	108	66	145			
1,2-Dibromo-3-chloropropane (DBCP)	225	15	250	0	90	57	137			
1,2,4-Trichlorobenzene	49.9	10	50	0	99.7	39	157			
Naphthalene	47.9	10	50	0	96	26	163			
Hexachlorobutadiene	105	10	100	0	105	35	172			
1,2,3-Trichlorobenzene	50.6	10	50	0	101	30	170			
Surr: 1,2-Dichloroethane-d4	42.6		50		85	75	128			
Surr: Toluene-d8	47.4		50		95	80	120			
Surr: 4-Bromofluorobenzene	51.2		50		102	70	130			

Alpha Analytical, Inc.

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

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

Date: 04-Aug-08

QC Summary Report

Work Order: 08072345

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

File ID: **08073110.D** Batch ID: **MS15W0729L5** Analysis Date: **07/31/2008 11:55**

Sample ID: **08072345-02AMSD** Units : **µg/L** Run ID: **MSD_15_080729B** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	41.4	2.5	50	0	83	20	137	44.52	7.4(20)	
Chloromethane	48.8	10	50	0	98	31	148	48.77	0.1(20)	
Vinyl chloride	51.5	2.5	50	0	103	46	138	55.83	8.0(20)	
Chloroethane	50.2	2.5	50	0	100	34	170	51.75	3.0(20)	
Bromomethane	68.6	10	50	0	137	20	189	72.41	5.4(20)	
Trichlorofluoromethane	59.4	2.5	50	0	119	51	156	65.62	9.9(20)	
1,1-Dichloroethene	49.3	2.5	50	0	99	66	132	52.05	5.4(20)	
Dichloromethane	48.2	10	50	0	96	48	145	50.63	4.9(20)	
trans-1,2-Dichloroethene	51.5	2.5	50	0	103	68	132	54.58	5.8(20)	
Methyl tert-butyl ether (MTBE)	55.4	1.3	50	0	111	62	139	56.38	1.7(20)	
1,1-Dichloroethane	48.7	2.5	50	0	97	70	130	51.65	5.8(20)	
cis-1,2-Dichloroethene	53.4	2.5	50	0	107	70	130	56.21	5.1(20)	
Bromochloromethane	53.1	2.5	50	0	106	70	130	54.93	3.4(20)	
Chloroform	48.2	2.5	50	0	96	70	130	50.06	3.9(20)	
2,2-Dichloropropane	49.7	2.5	50	0	99	50	152	53.4	7.1(20)	
1,2-Dichloroethane	49.6	2.5	50	0	99	65	136	51.02	2.8(20)	
1,1,1-Trichloroethane	49.4	2.5	50	0	99	67	133	52.76	6.7(20)	
1,1-Dichloropropene	51.6	2.5	50	0	103	70	130	54.76	6.0(20)	
Carbon tetrachloride	49.7	2.5	50	0	99	61	142	52.86	6.1(20)	
Benzene	49.9	1.3	50	0	99.8	70	130	52.16	4.4(20)	
Dibromomethane	54.9	2.5	50	0	110	69	130	56.98	3.7(20)	
1,2-Dichloropropane	52.7	2.5	50	0	105	70	132	54.67	3.6(20)	
Trichloroethene	48.9	2.5	50	0	98	69	130	51.53	5.2(20)	
Bromodichloromethane	54	2.5	50	0	108	70	130	56.17	3.9(20)	
cis-1,3-Dichloropropene	43.9	2.5	50	0	88	66	130	45.58	3.8(20)	
trans-1,3-Dichloropropene	43.9	2.5	50	0	88	65	134	46.42	5.7(20)	
1,1,2-Trichloroethane	52.7	2.5	50	0	105	67	132	55.43	5.1(20)	
Toluene	45.7	1.3	50	0	91	67	130	48.38	5.6(20)	
1,3-Dichloropropane	50.6	2.5	50	0	101	70	130	51.59	2.0(20)	
Dibromochloromethane	48.4	2.5	50	0	97	66	130	49.46	2.3(20)	
1,2-Dibromoethane (EDB)	108	10	100	0	108	70	130	109.9	2.1(20)	
Tetrachloroethene	47.4	2.5	50	0	95	59	135	50.08	5.6(20)	
1,1,1,2-Tetrachloroethane	49.9	2.5	50	0	99.8	70	130	52.11	4.3(20)	
Chlorobenzene	48	2.5	50	0	96	70	130	49.87	3.8(20)	
Ethylbenzene	48.1	1.3	50	0	96	70	130	50.69	5.2(20)	
m,p-Xylene	51	1.3	50	0	102	69	130	53.42	4.7(20)	
Bromoform	52.3	2.5	50	0	105	57	132	54.36	3.9(20)	
Styrene	48.3	2.5	50	0	97	58	135	50.81	5.0(20)	
o-Xylene	48.1	1.3	50	0	96	70	130	50.59	5.1(20)	
1,1,2,2-Tetrachloroethane	46	2.5	50	0	92	65	137	47.17	2.6(20)	
1,2,3-Trichloropropane	91.6	10	100	0	92	67	132	94.87	3.5(20)	
Isopropylbenzene	48.5	2.5	50	0	97	70	130	51.23	5.4(20)	
Bromobenzene	47.8	2.5	50	0	96	70	130	49.6	3.7(20)	
n-Propylbenzene	48.6	2.5	50	0	97	70	130	51.74	6.3(20)	
4-Chlorotoluene	50.3	2.5	50	0	101	70	130	51.74	2.9(20)	
2-Chlorotoluene	49.6	2.5	50	0	99	70	130	51.97	4.7(20)	
1,3,5-Trimethylbenzene	49.1	2.5	50	0	98	68	141	51.33	4.5(20)	
tert-Butylbenzene	51.7	2.5	50	0	103	70	130	54.67	5.5(20)	
1,2,4-Trimethylbenzene	48.8	2.5	50	0	98	67	146	51.2	4.8(20)	
sec-Butylbenzene	49.1	2.5	50	0	98	70	130	52.47	6.6(20)	
1,3-Dichlorobenzene	46.9	2.5	50	0	94	70	130	48.7	3.7(20)	
1,4-Dichlorobenzene	46.9	2.5	50	0	94	70	130	48.62	3.6(20)	
4-Isopropyltoluene	49.4	2.5	50	0	99	70	133	52.39	5.9(20)	
1,2-Dichlorobenzene	44.5	2.5	50	0	89	70	130	45.95	3.2(20)	
n-Butylbenzene	51.1	2.5	50	0	102	66	145	54.03	5.7(20)	
1,2-Dibromo-3-chloropropane (DBCP)	224	15	250	0	90	57	137	225.2	0.3(20)	
1,2,4-Trichlorobenzene	48.9	10	50	0	98	39	157	49.85	2.0(20)	
Naphthalene	47.6	10	50	0	95	26	163	47.9	0.6(20)	
Hexachlorobutadiene	101	10	100	0	101	35	172	105.4	4.6(20)	
1,2,3-Trichlorobenzene	52.6	10	50	0	105	30	170	50.63	3.9(20)	
Surr: 1,2-Dichloroethane-d4	43.5		50		87	75	128			
Surr: Toluene-d8	47.6		50		95	80	120			
Surr: 4-Bromofluorobenzene	51.8		50		104	70	130			

Alpha Analytical, Inc.

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

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

Date: *04-Aug-08*

QC Summary Report

Work Order: 08072345

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.

AMENDED #2

CHAIN-OF-CUSTODY RECORD

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

CA

WorkOrder : BMI08072345

Report Due By : 5:00 PM On : 06-Aug-08

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Report Attention	Phone Number	EMail Address
David Conner	(619) 574-4827 x	connerd@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218017

Client's COC # : 026280 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	23-Jul-08	**31-Jul-08**

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	VOC_TIC_W	VOC_W					Sample Remarks
BMI08072345-01A	MW-19-5	AQ	07/22/08 07:43	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08072345-02A	MW-19-4	AQ	07/22/08 08:18	8	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria					MS/MSD
BMI08072345-03A	MW-19-3	AQ	07/22/08 08:50	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08072345-04A	MW-19-2	AQ	07/22/08 09:22	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08072345-05A	MW-19-1	AQ	07/22/08 09:54	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria					Level IV QC.
BMI08072345-06A	DUPE-2-3Q08	AQ	07/22/08 00:00	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08072345-07A	EB-03-7/22/08	AQ	07/22/08 09:39	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08072345-08A	TB-03-7/22/08	AQ	07/22/08 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 6/26/08

Comments: No security seals. Frozen ice. Level IV QC. Temp Blank #7669 rec'd @ 4°. Amended 7/25 8:00 to change Job Name, QC Level and VOC test description due to project requirements.TP Amended 7/31/08 13:46 to add TICS per project requirements. TP :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tasha Pascal	Tasha Pascal	Alpha Analytical, Inc.	7/31/08 1400

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

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026280 Job : G005862/JPL Groundwater Monitoring

AMENDED CHAIN-OF-CUSTODY RECORD

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

CA

WorkOrder : BMI08072345

Report Due By : 5:00 PM On : 06-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	23-Jul-08	25-Jul-08

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	VOC_W						Sample Remarks
BMI08072345-01A	MW-19-5	AQ	07/22/08 07:43	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria						
BMI08072345-02A	MW-19-4	AQ	07/22/08 08:18	8	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria						MS/MSD
BMI08072345-03A	MW-19-3	AQ	07/22/08 08:50	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria						
BMI08072345-04A	MW-19-2	AQ	07/22/08 09:22	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria						
BMI08072345-05A	MW-19-1	AQ	07/22/08 09:54	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria						Level IV QC.
BMI08072345-06A	DUPE-2-3Q08	AQ	07/22/08 00:00	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria						
BMI08072345-07A	EB-03-7/22/08	AQ	07/22/08 09:39	4	0	10	Perchlorate	Perchlorate	VOC by 524 Criteria						
BMI08072345-08A	TB-03-7/22/08	AQ	07/22/08 00:00	1	0	10			VOC by 524 Criteria						Reno Trip Blank 6/26/08

Comments: No security seals. Frozen ice. Level IV QC. Temp Blank #7669 rec'd @ 4°. Amended 7/25 8:00 to change Job Name, QC Level and VOC test description due to project requirements.TP :

	Signature	Print Name	Company	Date/Time
Logged in by:	TM Pascal	Tasha Pascal	Alpha Analytical, Inc.	7/25/08 820

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

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026280 Job : G005862

CHAIN-OF-CUSTODY RECORD

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

CA

WorkOrder : BMI08072345

Report Due By : 5:00 PM On : 06-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	23-Jul-08	**23-Jul-08**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	VOC_W					Sample Remarks
BMI08072345-01A	MW-19-5	AQ	07/22/08 07:43	4	0	10	Perchlorate	Perchlorate	8260 by 524 Criteria					
BMI08072345-02A	MW-19-4	AQ	07/22/08 08:18	8	0	10	Perchlorate	Perchlorate	8260 by 524 Criteria					MS/MSD
BMI08072345-03A	MW-19-3	AQ	07/22/08 08:50	4	0	10	Perchlorate	Perchlorate	8260 by 524 Criteria					
BMI08072345-04A	MW-19-2	AQ	07/22/08 09:22	4	0	10	Perchlorate	Perchlorate	8260 by 524 Criteria					
BMI08072345-05A	MW-19-1	AQ	07/22/08 09:54	4	0	10	Perchlorate	Perchlorate	8260 by 524 Criteria					Level IV QC.
BMI08072345-06A	DUPE-2-3Q08	AQ	07/22/08 00:00	4	0	10	Perchlorate	Perchlorate	8260 by 524 Criteria					
BMI08072345-07A	EB-03-7/22/08	AQ	07/22/08 09:39	4	0	10	Perchlorate	Perchlorate	8260 by 524 Criteria					
BMI08072345-08A	TB-03-7/22/08	AQ	07/22/08 00:00	1	0	10			8260 by 524 Criteria					Reno Trip Blank 6/26/08

Comments: No security seals. Frozen ice. Level IV QC. Temp Blank #7669 rec'd @ 4°. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tasha Pascal	Tasha PaScal	Alpha Analytical, Inc.	7/23/08 1045

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

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

Billing Information:

Name GERALD TOMPKINS

Address 505 KING AVE.

City, State, Zip COLUMBUS, OH 43201

Phone Number ______ Fax ______

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

Samples Collected From Which State? 026280

AZ ___ **CA** ✓ **NV** ___ **WA** ___
ID ___ **OR** ___ **OTHER** ___

Page # 1 **of** 1

Client Name DAVID CONNER	P.O. # 218017	Job # G005862
Address 3990 OLD TOWN AVE, C-205	EMail Address	
City, State, Zip SAN DIEGO, CA 92110	Phone # 619-726-7311	Fax #

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # ______

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TOTAL Cr (200.8)	ClO4 (314.0)					REMARKS
743	7/22/08	AQ	BMI08072345-01	MW-19-5	NORM		4	X		X					
818			-02	MW-19-4			8	X		X					MS/MSD
850			-03	MW-19-3			4	X		X					
922			-04	MW-19-2				X		X					
954			-05	MW-19-1				X		X					QC LEVEL IV
—			-06	DUPE-2-3Q08			4	X		X					DUPLICATE
939			-07	EB-03-7/22/08			4	X		X					EQUIP. BLANK
—			-08	TB-03-7/22/08			1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	MARCO MENDOZA	INSIGHT ECC	7/22/08	1200
Received by	[signature]	Tasha Pascal	AAI	7/23/08	1042
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *06-Aug-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08072423 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08072423-01A	MW-17-4	Aqueous
08072423-02A	MW-17-3	Aqueous
08072423-03A	MW-17-2	Aqueous
08072423-04A	DUPE-3-3Q08	Aqueous
08072423-05A	EB-04-7/23/08	Aqueous
08072423-06A	TB-04-7/23/08	Aqueous

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

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

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

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-17-4**						
Lab ID :	BMI08072423-01A	*** None Found ***	ND	2.0 µg/L	07/24/08	07/23/08	07/30/08
Client ID :	**MW-17-3**						
Lab ID :	BMI08072423-02A	*** None Found ***	ND	2.0 µg/L	07/24/08	07/23/08	07/30/08
Client ID :	**MW-17-2**						
Lab ID :	BMI08072423-03A	*** None Found ***	ND	2.0 µg/L	07/24/08	07/23/08	07/30/08
Client ID :	**DUPE-3-3Q08**						
Lab ID :	BMI08072423-04A	*** None Found ***	ND	2.0 µg/L	07/24/08	07/23/08	07/30/08
Client ID :	**EB-04-7/23/08**						
Lab ID :	BMI08072423-05A	*** None Found ***	ND	2.0 µg/L	07/24/08	07/23/08	07/30/08
Client ID :	**TB-04-7/23/08**						
Lab ID :	BMI08072423-06A	*** None Found ***	ND	2.0 µg/L	07/24/08	07/23/08	07/30/08

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / info@alpha-analytical.com
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8/6/08
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Alpha Analytical, Inc.

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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: BMI08072423-01A
Client I.D. Number: MW-17-4

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/30/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit		
1	Dichlorodifluoromethane	ND	0.50	µg/L	
2	Chloromethane	ND	1.0	µg/L	
3	Vinyl chloride	ND	0.50	µg/L	
4	Chloroethane	ND	0.50	µg/L	
5	Bromomethane	ND	1.0	µg/L	
6	Trichlorofluoromethane	ND	0.50	µg/L	
7	1,1-Dichloroethene	ND	0.50	µg/L	
8	Dichloromethane	ND	1.0	µg/L	
9	Freon-113	ND	0.50	µg/L	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	
12	1,1-Dichloroethane	ND	0.50	µg/L	
13	2-Butanone (MEK)	ND	10	µg/L	
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	
15	Bromochloromethane	ND	0.50	µg/L	
16	Chloroform	ND	0.50	µg/L	
17	2,2-Dichloropropane	ND	0.50	µg/L	
18	1,2-Dichloroethane	ND	0.50	µg/L	
19	1,1,1-Trichloroethane	ND	0.50	µg/L	
20	1,1-Dichloropropene	ND	0.50	µg/L	
21	Carbon tetrachloride	ND	0.50	µg/L	
22	Benzene	ND	0.50	µg/L	
23	Dibromomethane	ND	0.50	µg/L	
24	1,2-Dichloropropane	ND	0.50	µg/L	
25	Trichloroethene	0.60	0.50	µg/L	
26	Bromodichloromethane	ND	0.50	µg/L	
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	
30	1,1,2-Trichloroethane	ND	0.50	µg/L	
31	Toluene	ND	0.50	µg/L	
32	1,3-Dichloropropane	ND	0.50	µg/L	
33	Dibromochloromethane	ND	0.50	µg/L	
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L	
35	Tetrachloroethene	ND	0.50	µg/L	
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	
37	Chlorobenzene	ND	0.50	µg/L	
38	Ethylbenzene	ND	0.50	µg/L	
39	m,p-Xylene	ND	0.50	µg/L	
40	Bromoform	ND	0.50	µg/L	
41	Styrene	ND	0.50	µg/L	
42	o-Xylene	ND	0.50	µg/L	
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	
44	1,2,3-Trichloropropane	ND	1.0	µg/L	
45	Isopropylbenzene	ND	0.50	µg/L	
46	Bromobenzene	ND	0.50	µg/L	
47	n-Propylbenzene	ND	0.50	µg/L	
48	4-Chlorotoluene	ND	0.50	µg/L	
49	2-Chlorotoluene	ND	0.50	µg/L	
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L	
51	tert-Butylbenzene	ND	0.50	µg/L	
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L	
53	sec-Butylbenzene	ND	0.50	µg/L	
54	1,3-Dichlorobenzene	ND	0.50	µg/L	
55	1,4-Dichlorobenzene	ND	0.50	µg/L	
56	4-Isopropyltoluene	ND	0.50	µg/L	
57	1,2-Dichlorobenzene	ND	0.50	µg/L	
58	n-Butylbenzene	ND	0.50	µg/L	
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L	
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L	
61	Naphthalene	ND	1.0	µg/L	
62	Hexachlorobutadiene	ND	1.0	µg/L	
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L	
64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC	
65	Surr: Toluene-d8	99	(70-130)	%REC	
66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC	

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072423-02A
Client I.D. Number: MW-17-3

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/30/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L
3	Vinyl chloride	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L
9	Freon-113	ND	0.50	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L
16	Chloroform	0.66	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L
21	Carbon tetrachloride	1.2	0.50	µg/L
22	Benzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L
25	Trichloroethene	0.88	0.50	µg/L
26	Bromodichloromethane	ND	0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L
30	1,1,2-Trichloroethane	ND	0.50	µg/L
31	Toluene	ND	0.50	µg/L
32	1,3-Dichloropropane	ND	0.50	µg/L
33	Dibromochloromethane	ND	0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L
35	Tetrachloroethene	ND	0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
37	Chlorobenzene	ND	0.50	µg/L
38	Ethylbenzene	ND	0.50	µg/L
39	m,p-Xylene	ND	0.50	µg/L
40	Bromoform	ND	0.50	µg/L
41	Styrene	ND	0.50	µg/L
42	o-Xylene	ND	0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
44	1,2,3-Trichloropropane	ND	1.0	µg/L
45	Isopropylbenzene	ND	0.50	µg/L
46	Bromobenzene	ND	0.50	µg/L
47	n-Propylbenzene	ND	0.50	µg/L
48	4-Chlorotoluene	ND	0.50	µg/L
49	2-Chlorotoluene	ND	0.50	µg/L
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
51	tert-Butylbenzene	ND	0.50	µg/L
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
53	sec-Butylbenzene	ND	0.50	µg/L
54	1,3-Dichlorobenzene	ND	0.50	µg/L
55	1,4-Dichlorobenzene	ND	0.50	µg/L
56	4-Isopropyltoluene	ND	0.50	µg/L
57	1,2-Dichlorobenzene	ND	0.50	µg/L
58	n-Butylbenzene	ND	0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
61	Naphthalene	ND	1.0	µg/L
62	Hexachlorobutadiene	ND	1.0	µg/L
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
65	Surr: Toluene-d8	98	(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/6/08
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Alpha Analytical, Inc.

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(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: BMI08072423-03A
Client I.D. Number: MW-17-2

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/30/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit		
1	Dichlorodifluoromethane	ND	0.50	µg/L	
2	Chloromethane	ND	1.0	µg/L	
3	Vinyl chloride	ND	0.50	µg/L	
4	Chloroethane	ND	0.50	µg/L	
5	Bromomethane	ND	1.0	µg/L	
6	Trichlorofluoromethane	ND	0.50	µg/L	
7	1,1-Dichloroethene	ND	0.50	µg/L	
8	Dichloromethane	ND	1.0	µg/L	
9	Freon-113	ND	0.50	µg/L	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	
12	1,1-Dichloroethane	ND	0.50	µg/L	
13	2-Butanone (MEK)	ND	10	µg/L	
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	
15	Bromochloromethane	ND	0.50	µg/L	
16	Chloroform	0.51	0.50	µg/L	
17	2,2-Dichloropropane	ND	0.50	µg/L	
18	1,2-Dichloroethane	ND	0.50	µg/L	
19	1,1,1-Trichloroethane	ND	0.50	µg/L	
20	1,1-Dichloropropene	ND	0.50	µg/L	
21	Carbon tetrachloride	ND	0.50	µg/L	
22	Benzene	ND	0.50	µg/L	
23	Dibromomethane	ND	0.50	µg/L	
24	1,2-Dichloropropane	ND	0.50	µg/L	
25	Trichloroethene	0.99	0.50	µg/L	
26	Bromodichloromethane	ND	0.50	µg/L	
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	
30	1,1,2-Trichloroethane	ND	0.50	µg/L	
31	Toluene	ND	0.50	µg/L	
32	1,3-Dichloropropane	ND	0.50	µg/L	
33	Dibromochloromethane	ND	0.50	µg/L	
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L	
35	Tetrachloroethene	0.67	0.50	µg/L	
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	
37	Chlorobenzene	ND	0.50	µg/L	
38	Ethylbenzene	ND	0.50	µg/L	
39	m,p-Xylene	ND	0.50	µg/L	
40	Bromoform	ND	0.50	µg/L	
41	Styrene	ND	0.50	µg/L	
42	o-Xylene	ND	0.50	µg/L	
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	
44	1,2,3-Trichloropropane	ND	1.0	µg/L	
45	Isopropylbenzene	ND	0.50	µg/L	
46	Bromobenzene	ND	0.50	µg/L	
47	n-Propylbenzene	ND	0.50	µg/L	
48	4-Chlorotoluene	ND	0.50	µg/L	
49	2-Chlorotoluene	ND	0.50	µg/L	
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L	
51	tert-Butylbenzene	ND	0.50	µg/L	
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L	
53	sec-Butylbenzene	ND	0.50	µg/L	
54	1,3-Dichlorobenzene	ND	0.50	µg/L	
55	1,4-Dichlorobenzene	ND	0.50	µg/L	
56	4-Isopropyltoluene	ND	0.50	µg/L	
57	1,2-Dichlorobenzene	ND	0.50	µg/L	
58	n-Butylbenzene	ND	0.50	µg/L	
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L	
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L	
61	Naphthalene	ND	1.0	µg/L	
62	Hexachlorobutadiene	ND	1.0	µg/L	
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L	
64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC	
65	Surr: Toluene-d8	97	(70-130)	%REC	
66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC	

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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Report Date

Alpha Analytical, Inc.

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

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072423-04A
Client I.D. Number: DUPE-3-3Q08

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/30/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.69	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	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/6/08

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

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

Alpha Analytical Number: BMI08072423-05A
Client I.D. Number: EB-04-7/23/08

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/30/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L
3	Vinyl chloride	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L
9	Freon-113	ND	0.50	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L
25	Trichloroethene	ND	0.50	µg/L
26	Bromodichloromethane	ND	0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L
30	1,1,2-Trichloroethane	ND	0.50	µg/L
31	Toluene	ND	0.50	µg/L
32	1,3-Dichloropropane	ND	0.50	µg/L
33	Dibromochloromethane	ND	0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L
35	Tetrachloroethene	ND	0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
37	Chlorobenzene	ND	0.50	µg/L
38	Ethylbenzene	ND	0.50	µg/L
39	m,p-Xylene	ND	0.50	µg/L
40	Bromoform	ND	0.50	µg/L
41	Styrene	ND	0.50	µg/L
42	o-Xylene	ND	0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
44	1,2,3-Trichloropropane	ND	1.0	µg/L
45	Isopropylbenzene	ND	0.50	µg/L
46	Bromobenzene	ND	0.50	µg/L
47	n-Propylbenzene	ND	0.50	µg/L
48	4-Chlorotoluene	ND	0.50	µg/L
49	2-Chlorotoluene	ND	0.50	µg/L
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
51	tert-Butylbenzene	ND	0.50	µg/L
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
53	sec-Butylbenzene	ND	0.50	µg/L
54	1,3-Dichlorobenzene	ND	0.50	µg/L
55	1,4-Dichlorobenzene	ND	0.50	µg/L
56	4-Isopropyltoluene	ND	0.50	µg/L
57	1,2-Dichlorobenzene	ND	0.50	µg/L
58	n-Butylbenzene	ND	0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
61	Naphthalene	ND	1.0	µg/L
62	Hexachlorobutadiene	ND	1.0	µg/L
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
65	Surr: Toluene-d8	99	(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072423-06A
Client I.D. Number: TB-04-7/23/08

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/30/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

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VOC Sample Preservation Report

Work Order: BMI08072423 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08072423-01A	MW-17-4	Aqueous	2
08072423-02A	MW-17-3	Aqueous	2
08072423-03A	MW-17-2	Aqueous	2
08072423-04A	DUPE-3-3Q08	Aqueous	2
08072423-05A	EB-04-7/23/08	Aqueous	2
08072423-06A	TB-04-7/23/08	Aqueous	2

8/6/08

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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 : 07/24/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-17-4**					
Lab ID :	BMI08072423-01A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08
Client ID :	**MW-17-3**					
Lab ID :	BMI08072423-02A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08
Client ID :	**MW-17-2**					
Lab ID :	BMI08072423-03A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08
Client ID :	**DUPE-3-3Q08**					
Lab ID :	BMI08072423-04A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08
Client ID :	**EB-04-7/23/08**					
Lab ID :	BMI08072423-05A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08

ND = Not Detected

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Fax: (614) 458-6641
Date Received : 07/24/08

Job#: G005862/JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-17-4**					
Lab ID :	BMI08072423-01A	Specific Conductance (at 25°C)	310	10 µS/cm	07/23/08	07/24/08
Client ID :	**MW-17-3**					
Lab ID :	BMI08072423-02A	Specific Conductance (at 25°C)	730	10 µS/cm	07/23/08	07/24/08
Client ID :	**MW-17-2**					
Lab ID :	BMI08072423-03A	Specific Conductance (at 25°C)	960	10 µS/cm	07/23/08	07/24/08
Client ID :	**DUPE-3-3Q08**					
Lab ID :	BMI08072423-04A	Specific Conductance (at 25°C)	310	10 µS/cm	07/23/08	07/24/08
Client ID :	**EB-04-7/23/08**					
Lab ID :	BMI08072423-05A	Specific Conductance (at 25°C)	ND	10 µS/cm	07/23/08	07/24/08

ND = Not Detected

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Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/24/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-17-4**					
Lab ID :	BMI08072423-01A	Perchlorate	ND	1.00 µg/L	07/23/08	07/25/08
Client ID :	**MW-17-3**					
Lab ID :	BMI08072423-02A	Perchlorate	17.3	1.00 µg/L	07/23/08	07/29/08
Client ID :	**MW-17-2**					
Lab ID :	BMI08072423-03A	Perchlorate	5.72	1.00 µg/L	07/23/08	07/25/08
Client ID :	**DUPE-3-3Q08**					
Lab ID :	BMI08072423-04A	Perchlorate	1.50	1.00 µg/L	07/23/08	07/25/08
Client ID :	**EB-04-7/23/08**					
Lab ID :	BMI08072423-05A	Perchlorate	ND	1.00 µg/L	07/23/08	07/25/08

ND = Not Detected

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Date: *30-Jul-08*

QC Summary Report

Work Order: 08072423

Method Blank

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

File ID: **14** Batch ID: **20317** Analysis Date: **07/25/2008 15:03**

Sample ID: **MBLK-20317** Units : **µg/L** Run ID: **IC_3_080725A** Prep Date: **07/25/2008**

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

Laboratory Fortified Blank

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

File ID: **15** Batch ID: **20317** Analysis Date: **07/25/2008 15:21**

Sample ID: **LFB-20317** Units : **µg/L** Run ID: **IC_3_080725A** Prep Date: **07/25/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	23.2	2	25		93	85	115			

Sample Matrix Spike

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

File ID: **18** Batch ID: **20317** Analysis Date: **07/25/2008 16:16**

Sample ID: **08072444-01ALFM** Units : **µg/L** Run ID: **IC_3_080725A** Prep Date: **07/25/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24	2	25	0	96	80	120			

Sample Matrix Spike Duplicate

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

File ID: **19** Batch ID: **20317** Analysis Date: **07/25/2008 16:35**

Sample ID: **08072444-01ALFMD** Units : **µg/L** Run ID: **IC_3_080725A** Prep Date: **07/25/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.9	2	25	0	91	80	120	23.97	4.7(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: *30-Jul-08*

QC Summary Report

Work Order: 08072423

Method Blank

Type **MBLK** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0724CN** Analysis Date: **07/24/2008 00:00**

Sample ID: **MBLK-W0724CN** Units : **µS/cm** Run ID: **WETLAB_080724C** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0724CN** Analysis Date: **07/24/2008 00:00**

Sample ID: **LCS-W0724CN** Units : **µS/cm** Run ID: **WETLAB_080724C** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	1390	10	1410		98	98	102			

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: *05-Aug-08*

QC Summary Report

Work Order: 08072423

Method Blank

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

File ID: **073108.B\053SMPL.D** Batch ID: **20337** Analysis Date: **07/31/2008 18:03**

Sample ID: **MB-20337** Units : **mg/L** Run ID: **ICP/MS_080731I** Prep Date: **07/30/2008**

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

Laboratory Control Spike

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

File ID: **080108.B\011_LCS.D** Batch ID: **20337** Analysis Date: **08/01/2008 16:57**

Sample ID: **LCS-20337** Units : **mg/L** Run ID: **ICP/MS_080731I** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0483	0.005	0.05		97	85	115			

Sample Matrix Spike

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

File ID: **073108.B\086SMPL.D** Batch ID: **20337** Analysis Date: **07/31/2008 21:09**

Sample ID: **08072555-01AMS** Units : **mg/L** Run ID: **ICP/MS_080731I** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0533	0.005	0.05	0	107	70	130			

Sample Matrix Spike Duplicate

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

File ID: **073108.B\058SMPL.D** Batch ID: **20337** Analysis Date: **07/31/2008 18:31**

Sample ID: **08072444-02AMSD** Units : **mg/L** Run ID: **ICP/MS_080731I** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0534	0.005	0.05	0	107	70	130	0.05438	1.9(20)	

Comments:

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

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Date: 06-Aug-08

QC Summary Report

Work Order: 08072423

Method Blank Type **MBLK** Test Code: _____

File ID: **08072936.D** Batch ID: **MS15W0729L5** Analysis Date: **07/29/2008 21:40**

Sample ID: **MBLK MS15W0729L** Units : **µg/L** Run ID: **MSD_15_080729B** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.34		10		93	75	128			
Surr: Toluene-d8	10.2		10		102	80	120			

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QC Summary Report

Work Order: 08072423

Surr: 4-Bromofluorobenzene	9.95		10	100	70	130			

Laboratory Control Spike Type **LCS** Test Code: _____

File ID: **08072934.D** Batch ID: **MS15W0729L5** Analysis Date: **07/29/2008 20:55**

Sample ID: **LCS MS15W0729L** Units : **µg/L** Run ID: **MSD_15_080729B** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	6.8	1	10		68	29	133			
Chloromethane	9.73	2	10		97	44	140			
Vinyl chloride	9.83	1	10		98	70	130			
Chloroethane	9.33	1	10		93	62	158			
Bromomethane	11.3	2	10		113	20	179			
Trichlorofluoromethane	10.1	1	10		101	63	156			
1,1-Dichloroethene	10.8	1	10		108	70	130			
Dichloromethane	10.3	2	10		103	70	130			
trans-1,2-Dichloroethene	11.2	1	10		112	70	130			
Methyl tert-butyl ether (MTBE)	12.4	0.5	10		124	70	130			
1,1-Dichloroethane	10.4	1	10		104	70	130			
cis-1,2-Dichloroethene	11.6	1	10		116	70	130			
Bromochloromethane	11.5	1	10		115	70	130			
Chloroform	10.1	1	10		101	80	120			
2,2-Dichloropropane	9.29	1	10		93	65	152			
1,2-Dichloroethane	10.4	1	10		104	70	130			
1,1,1-Trichloroethane	10.7	1	10		107	70	130			
1,1-Dichloropropene	11.3	1	10		113	70	130			
Carbon tetrachloride	10.5	1	10		105	70	130			
Benzene	10.7	0.5	10		107	70	130			
Dibromomethane	12.3	1	10		123	70	130			
1,2-Dichloropropane	11	1	10		110	70	130			
Trichloroethene	11.9	1	10		119	70	130			
Bromodichloromethane	11.4	1	10		114	70	130			
cis-1,3-Dichloropropene	10.1	1	10		101	70	130			
trans-1,3-Dichloropropene	9.64	1	10		96	68	134			
1,1,2-Trichloroethane	11.9	1	10		119	70	130			
Toluene	10.1	0.5	10		101	70	130			
1,3-Dichloropropane	11.4	1	10		114	70	130			
Dibromochloromethane	10.7	1	10		107	68	130			
1,2-Dibromoethane (EDB)	24.5	2	20		122	70	130			
Tetrachloroethene	10.7	1	10		107	70	130			
1,1,1,2-Tetrachloroethane	10.7	1	10		107	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10.5	0.5	10		105	70	130			
m,p-Xylene	11.3	0.5	10		113	70	130			
Bromoform	12.1	1	10		121	59	132			
Styrene	10.6	1	10		106	70	130			
o-Xylene	10.6	0.5	10		106	70	130			
1,1,2,2-Tetrachloroethane	9.41	1	10		94	65	135			
1,2,3-Trichloropropane	21.7	2	20		109	68	132			
Isopropylbenzene	10.5	1	10		105	70	130			
Bromobenzene	10.2	1	10		102	70	130			
n-Propylbenzene	10.6	1	10		106	70	130			
4-Chlorotoluene	10.7	1	10		107	70	130			
2-Chlorotoluene	10.5	1	10		105	70	130			
1,3,5-Trimethylbenzene	10.4	1	10		104	70	141			
tert-Butylbenzene	9.75	1	10		98	70	130			
1,2,4-Trimethylbenzene	10.4	1	10		104	67	146			
sec-Butylbenzene	10.7	1	10		107	70	130			
1,3-Dichlorobenzene	9.96	1	10		99.6	70	130			
1,4-Dichlorobenzene	9.93	1	10		99	70	130			
4-Isopropyltoluene	10.6	1	10		106	70	133			
1,2-Dichlorobenzene	9.44	1	10		94	70	130			
n-Butylbenzene	10.6	1	10		106	68	145			
1,2-Dibromo-3-chloropropane (DBCP)	50	3	50		100	57	133			
1,2,4-Trichlorobenzene	11.1	2	10		111	70	130			
Naphthalene	11.9	2	10		119	26	161			
Hexachlorobutadiene	20.8	2	20		104	39	172			
1,2,3-Trichlorobenzene	12.3	2	10		123	33	166			
Surr: 1,2-Dichloroethane-d4	8.48		10		85	75	128			
Surr: Toluene-d8	9.63		10		96	80	120			
Surr: 4-Bromofluorobenzene	10.2		10		102	70	130			

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Date: 06-Aug-08

QC Summary Report

Work Order: 08072423

Sample Matrix Spike Type **MS** Test Code: _____

File ID: **08073109.D** Batch ID: **MS15W0729L5** Analysis Date: **07/31/2008 11:33**

Sample ID: **08072345-02AMS** Units : **µg/L** Run ID: **MSD_15_080729B** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	44.5	2.5	50	0	89	20	137			
Chloromethane	48.8	10	50	0	98	31	148			
Vinyl chloride	55.8	2.5	50	0	112	46	138			
Chloroethane	51.8	2.5	50	0	104	34	170			
Bromomethane	72.4	10	50	0	145	20	189			
Trichlorofluoromethane	65.6	2.5	50	0	131	51	156			
1,1-Dichloroethene	52.1	2.5	50	0	104	66	132			
Dichloromethane	50.6	10	50	0	101	48	145			
trans-1,2-Dichloroethene	54.6	2.5	50	0	109	68	132			
Methyl tert-butyl ether (MTBE)	56.4	1.3	50	0	113	62	139			
1,1-Dichloroethane	51.7	2.5	50	0	103	70	130			
cis-1,2-Dichloroethene	56.2	2.5	50	0	112	70	130			
Bromochloromethane	54.9	2.5	50	0	110	70	130			
Chloroform	50.1	2.5	50	0	100	70	130			
2,2-Dichloropropane	53.4	2.5	50	0	107	50	152			
1,2-Dichloroethane	51	2.5	50	0	102	65	136			
1,1,1-Trichloroethane	52.8	2.5	50	0	106	67	133			
1,1-Dichloropropene	54.8	2.5	50	0	110	70	130			
Carbon tetrachloride	52.9	2.5	50	0	106	61	142			
Benzene	52.2	1.3	50	0	104	70	130			
Dibromomethane	57	2.5	50	0	114	69	130			
1,2-Dichloropropane	54.7	2.5	50	0	109	70	132			
Trichloroethene	51.5	2.5	50	0	103	69	130			
Bromodichloromethane	56.2	2.5	50	0	112	70	130			
cis-1,3-Dichloropropene	45.6	2.5	50	0	91	66	130			
trans-1,3-Dichloropropene	46.4	2.5	50	0	93	65	134			
1,1,2-Trichloroethane	55.4	2.5	50	0	111	67	132			
Toluene	48.4	1.3	50	0	97	67	130			
1,3-Dichloropropane	51.6	2.5	50	0	103	70	130			
Dibromochloromethane	49.5	2.5	50	0	99	66	130			
1,2-Dibromoethane (EDB)	110	10	100	0	110	70	130			
Tetrachloroethene	50.1	2.5	50	0	100	59	135			
1,1,1,2-Tetrachloroethane	52.1	2.5	50	0	104	70	130			
Chlorobenzene	49.9	2.5	50	0	99.7	70	130			
Ethylbenzene	50.7	1.3	50	0	101	70	130			
m,p-Xylene	53.4	1.3	50	0	107	69	130			
Bromoform	54.4	2.5	50	0	109	57	132			
Styrene	50.8	2.5	50	0	102	58	135			
o-Xylene	50.6	1.3	50	0	101	70	130			
1,1,2,2-Tetrachloroethane	47.2	2.5	50	0	94	65	137			
1,2,3-Trichloropropane	94.9	10	100	0	95	67	132			
Isopropylbenzene	51.2	2.5	50	0	102	70	130			
Bromobenzene	49.6	2.5	50	0	99	70	130			
n-Propylbenzene	51.7	2.5	50	0	103	70	130			
4-Chlorotoluene	51.7	2.5	50	0	103	70	130			
2-Chlorotoluene	52	2.5	50	0	104	70	130			
1,3,5-Trimethylbenzene	51.3	2.5	50	0	103	68	141			
tert-Butylbenzene	54.7	2.5	50	0	109	70	130			
1,2,4-Trimethylbenzene	51.2	2.5	50	0	102	67	146			
sec-Butylbenzene	52.5	2.5	50	0	105	70	130			
1,3-Dichlorobenzene	48.7	2.5	50	0	97	70	130			
1,4-Dichlorobenzene	48.6	2.5	50	0	97	70	130			
4-Isopropyltoluene	52.4	2.5	50	0	105	70	133			
1,2-Dichlorobenzene	46	2.5	50	0	92	70	130			
n-Butylbenzene	54	2.5	50	0	108	66	145			
1,2-Dibromo-3-chloropropane (DBCP)	225	15	250	0	90	57	137			
1,2,4-Trichlorobenzene	49.9	10	50	0	99.7	39	157			
Naphthalene	47.9	10	50	0	96	26	163			
Hexachlorobutadiene	105	10	100	0	105	35	172			
1,2,3-Trichlorobenzene	50.6	10	50	0	101	30	170			
Surr: 1,2-Dichloroethane-d4	42.6		50		85	75	128			
Surr: Toluene-d8	47.4		50		95	80	120			
Surr: 4-Bromofluorobenzene	51.2		50		102	70	130			

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Date: 06-Aug-08

QC Summary Report

Work Order: 08072423

Sample Matrix Spike Duplicate Type **MSD** Test Code: _____

File ID: **08073110.D** Batch ID: **MS15W0729L5** Analysis Date: **07/31/2008 11:55**

Sample ID: **08072345-02AMSD** Units : **µg/L** Run ID: **MSD_15_080729B** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	41.4	2.5	50	0	83	20	137	44.52	7.4(20)	
Chloromethane	48.8	10	50	0	98	31	148	48.77	0.1(20)	
Vinyl chloride	51.5	2.5	50	0	103	46	138	55.83	8.0(20)	
Chloroethane	50.2	2.5	50	0	100	34	170	51.75	3.0(20)	
Bromomethane	68.6	10	50	0	137	20	189	72.41	5.4(20)	
Trichlorofluoromethane	59.4	2.5	50	0	119	51	156	65.62	9.9(20)	
1,1-Dichloroethene	49.3	2.5	50	0	99	66	132	52.05	5.4(20)	
Dichloromethane	48.2	10	50	0	96	48	145	50.63	4.9(20)	
trans-1,2-Dichloroethene	51.5	2.5	50	0	103	68	132	54.58	5.8(20)	
Methyl tert-butyl ether (MTBE)	55.4	1.3	50	0	111	62	139	56.38	1.7(20)	
1,1-Dichloroethane	48.7	2.5	50	0	97	70	130	51.65	5.8(20)	
cis-1,2-Dichloroethene	53.4	2.5	50	0	107	70	130	56.21	5.1(20)	
Bromochloromethane	53.1	2.5	50	0	106	70	130	54.93	3.4(20)	
Chloroform	48.2	2.5	50	0	96	70	130	50.06	3.9(20)	
2,2-Dichloropropane	49.7	2.5	50	0	99	50	152	53.4	7.1(20)	
1,2-Dichloroethane	49.6	2.5	50	0	99	65	136	51.02	2.8(20)	
1,1,1-Trichloroethane	49.4	2.5	50	0	99	67	133	52.76	6.7(20)	
1,1-Dichloropropene	51.6	2.5	50	0	103	70	130	54.76	6.0(20)	
Carbon tetrachloride	49.7	2.5	50	0	99	61	142	52.86	6.1(20)	
Benzene	49.9	1.3	50	0	99.8	70	130	52.16	4.4(20)	
Dibromomethane	54.9	2.5	50	0	110	69	130	56.98	3.7(20)	
1,2-Dichloropropane	52.7	2.5	50	0	105	70	132	54.67	3.6(20)	
Trichloroethene	48.9	2.5	50	0	98	69	130	51.53	5.2(20)	
Bromodichloromethane	54	2.5	50	0	108	70	130	56.17	3.9(20)	
cis-1,3-Dichloropropene	43.9	2.5	50	0	88	66	130	45.58	3.8(20)	
trans-1,3-Dichloropropene	43.9	2.5	50	0	88	65	134	46.42	5.7(20)	
1,1,2-Trichloroethane	52.7	2.5	50	0	105	67	132	55.43	5.1(20)	
Toluene	45.7	1.3	50	0	91	67	130	48.38	5.6(20)	
1,3-Dichloropropane	50.6	2.5	50	0	101	70	130	51.59	2.0(20)	
Dibromochloromethane	48.4	2.5	50	0	97	66	130	49.46	2.3(20)	
1,2-Dibromoethane (EDB)	108	10	100	0	108	70	130	109.9	2.1(20)	
Tetrachloroethene	47.4	2.5	50	0	95	59	135	50.08	5.6(20)	
1,1,1,2-Tetrachloroethane	49.9	2.5	50	0	99.8	70	130	52.11	4.3(20)	
Chlorobenzene	48	2.5	50	0	96	70	130	49.87	3.8(20)	
Ethylbenzene	48.1	1.3	50	0	96	70	130	50.69	5.2(20)	
m,p-Xylene	51	1.3	50	0	102	69	130	53.42	4.7(20)	
Bromoform	52.3	2.5	50	0	105	57	132	54.36	3.9(20)	
Styrene	48.3	2.5	50	0	97	58	135	50.81	5.0(20)	
o-Xylene	48.1	1.3	50	0	96	70	130	50.59	5.1(20)	
1,1,2,2-Tetrachloroethane	46	2.5	50	0	92	65	137	47.17	2.6(20)	
1,2,3-Trichloropropane	91.6	10	100	0	92	67	132	94.87	3.5(20)	
Isopropylbenzene	48.5	2.5	50	0	97	70	130	51.23	5.4(20)	
Bromobenzene	47.8	2.5	50	0	96	70	130	49.6	3.7(20)	
n-Propylbenzene	48.6	2.5	50	0	97	70	130	51.74	6.3(20)	
4-Chlorotoluene	50.3	2.5	50	0	101	70	130	51.74	2.9(20)	
2-Chlorotoluene	49.6	2.5	50	0	99	70	130	51.97	4.7(20)	
1,3,5-Trimethylbenzene	49.1	2.5	50	0	98	68	141	51.33	4.5(20)	
tert-Butylbenzene	51.7	2.5	50	0	103	70	130	54.67	5.5(20)	
1,2,4-Trimethylbenzene	48.8	2.5	50	0	98	67	146	51.2	4.8(20)	
sec-Butylbenzene	49.1	2.5	50	0	98	70	130	52.47	6.6(20)	
1,3-Dichlorobenzene	46.9	2.5	50	0	94	70	130	48.7	3.7(20)	
1,4-Dichlorobenzene	46.9	2.5	50	0	94	70	130	48.62	3.6(20)	
4-Isopropyltoluene	49.4	2.5	50	0	99	70	133	52.39	5.9(20)	
1,2-Dichlorobenzene	44.5	2.5	50	0	89	70	130	45.95	3.2(20)	
n-Butylbenzene	51.1	2.5	50	0	102	66	145	54.03	5.7(20)	
1,2-Dibromo-3-chloropropane (DBCP)	224	15	250	0	90	57	137	225.2	0.3(20)	
1,2,4-Trichlorobenzene	48.9	10	50	0	98	39	157	49.85	2.0(20)	
Naphthalene	47.6	10	50	0	95	26	163	47.9	0.6(20)	
Hexachlorobutadiene	101	10	100	0	101	35	172	105.4	4.6(20)	
1,2,3-Trichlorobenzene	52.6	10	50	0	105	30	170	50.63	3.9(20)	
Surr: 1,2-Dichloroethane-d4	43.5		50		87	75	128			
Surr: Toluene-d8	47.6		50		95	80	120			
Surr: 4-Bromofluorobenzene	51.8		50		104	70	130			

Alpha Analytical, Inc.

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

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

Date: *06-Aug-08*

QC Summary Report

Work Order: 08072423

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
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026278 Job : G005862/JPL Groundwater Monitoring

CHAIN-OF-CUSTODY RECORD

CA AMENDED

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

WorkOrder : BMI08072423

Report Due By : 5:00 PM On : 07-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	24-Jul-08	24-Jul-08

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W					Sample Remarks
BMI08072423-01A	MW-17-4	AQ	07/23/08 09:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072423-02A	MW-17-3	AQ	07/23/08 09:50	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072423-03A	MW-17-2	AQ	07/23/08 10:19	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072423-04A	DUPE-3-3Q08	AQ	07/23/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072423-05A	EB-04-7/23/08	AQ	07/23/08 10:07	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072423-06A	TB-04-7/23/08	AQ	07/23/08 00:00	1	0	10				VOC by 524 Criteria					Reno Trip Blank 6/24/08. One voa rec'd only.

Comments: No security seals. Frozen ice. Level IV QC. Temp Blank #7697 rec'd @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Amended 7/24/08 14:30 to change Job Name, QC Level and VOC test description due to project : requirements.KM

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	7/24/08 1430

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017
Client's COC # : 026278 Job : G005862

CHAIN-OF-CUSTODY RECORD

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

CA

WorkOrder : BMI08072423

Report Due By : 5:00 PM On : 07-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	24-Jul-08	**24-Jul-08**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W	Sample Remarks
BMI08072423-01A	MW-17-4	AQ	07/23/08 09:00	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria	
BMI08072423-02A	MW-17-3	AQ	07/23/08 09:50	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria	
BMI08072423-03A	MW-17-2	AQ	07/23/08 10:19	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria	
BMI08072423-04A	DUPE-3-3Q08	AQ	07/23/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria	
BMI08072423-05A	EB-04-7/23/08	AQ	07/23/08 10:07	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria	
BMI08072423-06A	TB-04-7/23/08	AQ	07/23/08 00:00	1	0	10				8260 by 524 Criteria	Reno Trip Blank 6/24/08. One voa rec'd only.

Comments: No security seals. Frozen ice. Level IV QC. Temp Blank #7697 rec'd @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	**Alpha Analytical, Inc.**	7/24/08 1100

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

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

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

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

026278

Page # 1 of 1

Client Name DAVID CONNER | P.O. # 218017 | Job # 6005862
Address 3990 OLD TOWN AVE, C-205 | EMail Address
City, State, Zip SAN DIEGO, CA 92110 | Phone # 619-726-7311 | Fax #

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

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TOTAL Cr (200.8)	Cl04 - (314.0)					REMARKS
900	7/23/08	AQ	BM1080724 23-01	MW-17-4	NORM		5	X	X	X					
950			02	MW-17-3				X	X	X					
1019 ~~1007~~			03	MW-17-2				X	X	X					
—			04	DUPE-3-3Q08				X	X	X					DUPLICATE
1007			05	EB-04-7/23/08				X	X	X					EQUIP. BLANK
—			06	TB-04-7/23/08			2	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by	MARCO MENDOZA	INSIGHT ENG, INC	7/23/08	1400
Received by / Relinquished by	K Murray	AAI	7/24/08	1040
Received by				
Relinquished by				
Received by				

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

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

Alpha Analytical, Inc.

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

Date: *05-Aug-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08072444 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08072444-01A	MW-18-5	Aqueous
08072444-02A	MW-18-4	Aqueous
08072444-03A	MW-18-3	Aqueous
08072444-04A	MW-18-2	Aqueous
08072444-05A	DUPE-4-3Q08	Aqueous

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-18-5**						
Lab ID :	BMI08072444-01A	* * * None Found * * *	ND	2.0 µg/L	07/24/08	07/23/08	07/29/08
Client ID :	**MW-18-4**						
Lab ID :	BMI08072444-02A	* * * None Found * * *	ND	2.0 µg/L	07/24/08	07/23/08	07/29/08
Client ID :	**MW-18-3**						
Lab ID :	BMI08072444-03A	* * * None Found * * *	ND	2.0 µg/L	07/24/08	07/23/08	07/29/08
Client ID :	**MW-18-2**						
Lab ID :	BMI08072444-04A	* * * None Found * * *	ND	2.0 µg/L	07/24/08	07/23/08	07/29/08
Client ID :	**DUPE-4-3Q08**						
Lab ID :	BMI08072444-05A	* * * None Found * * *	ND	2.0 µg/L	07/24/08	07/23/08	07/29/08

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/6/08
Report Date

Page 1 of 1

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072444-01A
Client I.D. Number: MW-18-5

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/6/08
Report Date

Alpha Analytical, Inc.

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

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072444-02A
Client I.D. Number: MW-18-4

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit		
1	Dichlorodifluoromethane	ND	0.50	µg/L	
2	Chloromethane	ND	1.0	µg/L	
3	Vinyl chloride	ND	0.50	µg/L	
4	Chloroethane	ND	0.50	µg/L	
5	Bromomethane	ND	1.0	µg/L	
6	Trichlorofluoromethane	ND	0.50	µg/L	
7	1,1-Dichloroethene	ND	0.50	µg/L	
8	Dichloromethane	ND	1.0	µg/L	
9	Freon-113	ND	0.50	µg/L	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	
12	1,1-Dichloroethane	ND	0.50	µg/L	
13	2-Butanone (MEK)	ND	10	µg/L	
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	
15	Bromochloromethane	ND	0.50	µg/L	
16	Chloroform	1.9	0.50	µg/L	
17	2,2-Dichloropropane	ND	0.50	µg/L	
18	1,2-Dichloroethane	ND	0.50	µg/L	
19	1,1,1-Trichloroethane	ND	0.50	µg/L	
20	1,1-Dichloropropene	ND	0.50	µg/L	
21	Carbon tetrachloride	11	0.50	µg/L	
22	Benzene	ND	0.50	µg/L	
23	Dibromomethane	ND	0.50	µg/L	
24	1,2-Dichloropropane	ND	0.50	µg/L	
25	Trichloroethene	1.1	0.50	µg/L	
26	Bromodichloromethane	ND	0.50	µg/L	
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	
30	1,1,2-Trichloroethane	ND	0.50	µg/L	
31	Toluene	ND	0.50	µg/L	
32	1,3-Dichloropropane	ND	0.50	µg/L	
33	Dibromochloromethane	ND	0.50	µg/L	
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L	
35	Tetrachloroethene	ND	0.50	µg/L	
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	
37	Chlorobenzene	ND	0.50	µg/L	
38	Ethylbenzene	ND	0.50	µg/L	
39	m,p-Xylene	ND	0.50	µg/L	
40	Bromoform	ND	0.50	µg/L	
41	Styrene	ND	0.50	µg/L	
42	o-Xylene	ND	0.50	µg/L	
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	
44	1,2,3-Trichloropropane	ND	1.0	µg/L	
45	Isopropylbenzene	ND	0.50	µg/L	
46	Bromobenzene	ND	0.50	µg/L	
47	n-Propylbenzene	ND	0.50	µg/L	
48	4-Chlorotoluene	ND	0.50	µg/L	
49	2-Chlorotoluene	ND	0.50	µg/L	
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L	
51	tert-Butylbenzene	ND	0.50	µg/L	
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L	
53	sec-Butylbenzene	ND	0.50	µg/L	
54	1,3-Dichlorobenzene	ND	0.50	µg/L	
55	1,4-Dichlorobenzene	ND	0.50	µg/L	
56	4-Isopropyltoluene	ND	0.50	µg/L	
57	1,2-Dichlorobenzene	ND	0.50	µg/L	
58	n-Butylbenzene	ND	0.50	µg/L	
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L	
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L	
61	Naphthalene	ND	1.0	µg/L	
62	Hexachlorobutadiene	ND	1.0	µg/L	
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L	
64	Surr: 1,2-Dichloroethane-d4	96	(75-128)	%REC	
65	Surr: Toluene-d8	99	(80-120)	%REC	
66	Surr: 4-Bromofluorobenzene	103	(80-120)	%REC	

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/6/08

Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072444-03A
Client I.D. Number: MW-18-3

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	2.1	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	18	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.2	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/6/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072444-04A
Client I.D. Number: MW-18-2

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/29/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/6/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072444-05A
Client I.D. Number: DUPE-4-3Q08

Sampled: 07/23/08
Received: 07/24/08
Analyzed: 07/29/08

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L
3	Vinyl chloride	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L
9	Freon-113	ND	0.50	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L
16	Chloroform	2.2	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L
21	Carbon tetrachloride	20	0.50	µg/L
22	Benzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L
25	Trichloroethene	1.3	0.50	µg/L
26	Bromodichloromethane	ND	0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L
30	1,1,2-Trichloroethane	ND	0.50	µg/L
31	Toluene	ND	0.50	µg/L
32	1,3-Dichloropropane	ND	0.50	µg/L
33	Dibromochloromethane	ND	0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L
35	Tetrachloroethene	ND	0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
37	Chlorobenzene	ND	0.50	µg/L
38	Ethylbenzene	ND	0.50	µg/L
39	m,p-Xylene	ND	0.50	µg/L
40	Bromoform	ND	0.50	µg/L
41	Styrene	ND	0.50	µg/L
42	o-Xylene	ND	0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
44	1,2,3-Trichloropropane	ND	1.0	µg/L
45	Isopropylbenzene	ND	0.50	µg/L
46	Bromobenzene	ND	0.50	µg/L
47	n-Propylbenzene	ND	0.50	µg/L
48	4-Chlorotoluene	ND	0.50	µg/L
49	2-Chlorotoluene	ND	0.50	µg/L
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
51	tert-Butylbenzene	ND	0.50	µg/L
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
53	sec-Butylbenzene	ND	0.50	µg/L
54	1,3-Dichlorobenzene	ND	0.50	µg/L
55	1,4-Dichlorobenzene	ND	0.50	µg/L
56	4-Isopropyltoluene	ND	0.50	µg/L
57	1,2-Dichlorobenzene	ND	0.50	µg/L
58	n-Butylbenzene	ND	0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
61	Naphthalene	ND	1.0	µg/L
62	Hexachlorobutadiene	ND	1.0	µg/L
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	96	(75-128)	%REC
65	Surr: Toluene-d8	100	(80-120)	%REC
66	Surr: 4-Bromofluorobenzene	104	(80-120)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/6/08
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI08072444 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08072444-01A	MW-18-5	Aqueous	2
08072444-02A	MW-18-4	Aqueous	2
08072444-03A	MW-18-3	Aqueous	2
08072444-04A	MW-18-2	Aqueous	2
08072444-05A	DUPE-4-3Q08	Aqueous	2

8/6/08

Report Date

Alpha Analytical, Inc.

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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 : 07/24/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-18-4**					
Lab ID :	BMI08072444-02A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08
Client ID :	**MW-18-3**					
Lab ID :	BMI08072444-03A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08
Client ID :	**MW-18-2**					
Lab ID :	BMI08072444-04A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08
Client ID :	**DUPE-4-3Q08**					
Lab ID :	BMI08072444-05A	Chromium (Cr)	ND	0.0050 mg/L	07/23/08	07/31/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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8/6/08
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (626) 345-0598
Fax: (760) 385-4613
Date Received : 07/24/08

Job#: G005862/JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-18-5**					
Lab ID :	BMI08072444-01A	Specific Conductance (at 25°C)	290	10 µS/cm	07/23/08	07/24/08
Client ID :	**MW-18-4**					
Lab ID :	BMI08072444-02A	Specific Conductance (at 25°C)	520	10 µS/cm	07/23/08	07/24/08
Client ID :	**MW-18-3**					
Lab ID :	BMI08072444-03A	Specific Conductance (at 25°C)	420	10 µS/cm	07/23/08	07/24/08
Client ID :	**MW-18-2**					
Lab ID :	BMI08072444-04A	Specific Conductance (at 25°C)	520	10 µS/cm	07/23/08	07/24/08
Client ID :	**DUPE-4-3Q08**					
Lab ID :	BMI08072444-05A	Specific Conductance (at 25°C)	520	10 µS/cm	07/23/08	07/24/08

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

8/6/08
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (626) 345-0598
Fax: (760) 385-4613
Date Received : 07/24/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-18-5**					
Lab ID :	BMI08072444-01A	Perchlorate	ND	1.00 µg/L	07/23/08	07/25/08
Client ID :	**MW-18-4**					
Lab ID :	BMI08072444-02A	Perchlorate	29.5	1.00 µg/L	07/23/08	07/25/08
Client ID :	**MW-18-3**					
Lab ID :	BMI08072444-03A	Perchlorate	37.0	1.00 µg/L	07/23/08	07/25/08
Client ID :	**MW-18-2**					
Lab ID :	BMI08072444-04A	Perchlorate	ND	1.00 µg/L	07/23/08	07/25/08
Client ID :	**DUPE-4-3Q08**					
Lab ID :	BMI08072444-05A	Perchlorate	36.3	1.00 µg/L	07/23/08	07/25/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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8/6/08
Report Date

Alpha Analytical, Inc.

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

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

Date: *30-Jul-08*

QC Summary Report

Work Order: 08072444

Method Blank

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

File ID: **14** Batch ID: **20317** Analysis Date: **07/25/2008 15:03**

Sample ID: **MBLK-20317** Units : **µg/L** Run ID: **IC_3_080725A** Prep Date: **07/25/2008**

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

Laboratory Fortified Blank

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

File ID: **15** Batch ID: **20317** Analysis Date: **07/25/2008 15:21**

Sample ID: **LFB-20317** Units : **µg/L** Run ID: **IC_3_080725A** Prep Date: **07/25/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	23.2	2	25		93	85	115			

Sample Matrix Spike

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

File ID: **18** Batch ID: **20317** Analysis Date: **07/25/2008 16:16**

Sample ID: **08072444-01ALFM** Units : **µg/L** Run ID: **IC_3_080725A** Prep Date: **07/25/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	24	2	25	0	96	80	120			

Sample Matrix Spike Duplicate

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

File ID: **19** Batch ID: **20317** Analysis Date: **07/25/2008 16:35**

Sample ID: **08072444-01ALFMD** Units : **µg/L** Run ID: **IC_3_080725A** Prep Date: **07/25/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.9	2	25	0	91	80	120	23.97	4.7(15)	

Comments:

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

Alpha Analytical, Inc.

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

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

Date: *30-Jul-08*

QC Summary Report

Work Order: 08072444

Method Blank

Type **MBLK** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0724CN** Analysis Date: **07/24/2008 00:00**

Sample ID: **MBLK-W0724CN** Units : **µS/cm** Run ID: **WETLAB_080724C** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0724CN** Analysis Date: **07/24/2008 00:00**

Sample ID: **LCS-W0724CN** Units : **µS/cm** Run ID: **WETLAB_080724C** Prep Date: **07/24/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	1390	10	1410		98	98	102			

Comments:

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Alpha Analytical, Inc.

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Date: *05-Aug-08*

QC Summary Report

Work Order: 08072444

Method Blank

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

File ID: **073108.B\053SMPL.D** Batch ID: **20337K** Analysis Date: **07/31/2008 18:03**

Sample ID: **MB-20337** Units : **mg/L** Run ID: **ICP/MS_080731G** Prep Date: **07/30/2008**

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

Laboratory Control Spike

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

File ID: **080108.B\011_LCS.D** Batch ID: **20337K** Analysis Date: **08/01/2008 16:57**

Sample ID: **LCS-20337** Units : **mg/L** Run ID: **ICP/MS_080731G** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0483	0.005	0.05		97	85	115			

Sample Matrix Spike

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

File ID: **073108.B\057SMPL.D** Batch ID: **20337K** Analysis Date: **07/31/2008 18:25**

Sample ID: **08072444-02AMS** Units : **mg/L** Run ID: **ICP/MS_080731G** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0544	0.005	0.05	0	109	70	130			

Sample Matrix Spike Duplicate

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

File ID: **073108.B\058SMPL.D** Batch ID: **20337K** Analysis Date: **07/31/2008 18:31**

Sample ID: **08072444-02AMSD** Units : **mg/L** Run ID: **ICP/MS_080731G** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0534	0.005	0.05	0	107	70	130	0.05438	1.9(20)	

Comments:

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

Alpha Analytical, Inc.

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Date: 06-Aug-08

QC Summary Report

Work Order: 08072444

Method Blank Type **MBLK** Test Code: _____

File ID: **08072907.D** Batch ID: **MS15W0729K5** Analysis Date: **07/29/2008 10:53**

Sample ID: **MBLK MS15W0729K** Units : **µg/L** Run ID: **MSD_15_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9		10		90	70	130			
Surr: Toluene-d8	10		10		100	70	130			

Alpha Analytical, Inc.

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Date: 06-Aug-08

QC Summary Report

Work Order: 08072444

Surr: 4-Bromofluorobenzene	9.93		10	99	70	130			

Laboratory Control Spike Type **LCS** Test Code: _____

File ID: **08072905.D** Batch ID: **MS15W0729K5** Analysis Date: **07/29/2008 09:47**

Sample ID: **LCS MS15W0729K** Units : **µg/L** Run ID: **MSD_15_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	7.24	1	10		72	21	160			
Chloromethane	9.67	2	10		97	45	145			
Vinyl chloride	9.77	1	10		98	80	120			
Chloroethane	9.09	1	10		91	53	163			
Bromomethane	11.9	2	10		119	10	180			
Trichlorofluoromethane	9.73	1	10		97	50	160			
1,1-Dichloroethene	10.8	1	10		108	80	120			
Dichloromethane	10.4	2	10		104	70	130			
trans-1,2-Dichloroethene	11.3	1	10		113	70	130			
Methyl tert-butyl ether (MTBE)	12.1	0.5	10		121	68	134			
1,1-Dichloroethane	10.3	1	10		103	70	130			
cis-1,2-Dichloroethene	11.6	1	10		116	70	130			
Bromochloromethane	11.5	1	10		115	70	130			
Chloroform	9.88	1	10		99	80	120			
2,2-Dichloropropane	10.5	1	10		105	70	145			
1,2-Dichloroethane	10.1	1	10		101	69	136			
1,1,1-Trichloroethane	10.5	1	10		105	70	136			
1,1-Dichloropropene	11.2	1	10		112	70	130			
Carbon tetrachloride	10.6	1	10		106	64	150			
Benzene	10.7	0.5	10		107	70	130			
Dibromomethane	11.8	1	10		118	70	134			
1,2-Dichloropropane	11.2	1	10		112	80	120			
Trichloroethene	11.3	1	10		113	70	130			
Bromodichloromethane	11.2	1	10		112	70	134			
cis-1,3-Dichloropropene	10	1	10		100	70	130			
trans-1,3-Dichloropropene	9.81	1	10		98	70	130			
1,1,2-Trichloroethane	11.8	1	10		118	70	130			
Toluene	10.3	0.5	10		103	80	120			
1,3-Dichloropropane	11.4	1	10		114	70	130			
Dibromochloromethane	10.6	1	10		106	70	130			
1,2-Dibromoethane (EDB)	24.1	2	20		120	70	130			
Tetrachloroethene	11.1	1	10		111	70	130			
1,1,1,2-Tetrachloroethane	10.9	1	10		109	70	130			
Chlorobenzene	10.5	1	10		105	70	130			
Ethylbenzene	10.5	0.5	10		105	80	120			
m,p-Xylene	11.5	0.5	10		115	70	130			
Bromoform	11.8	1	10		118	70	131			
Styrene	10.7	1	10		107	70	130			
o-Xylene	10.7	0.5	10		107	70	130			
1,1,2,2-Tetrachloroethane	10.1	1	10		101	70	130			
1,2,3-Trichloropropane	20.9	2	20		105	70	130			
Isopropylbenzene	10.4	1	10		104	70	131			
Bromobenzene	9.99	1	10		99.9	70	130			
n-Propylbenzene	10.6	1	10		106	70	130			
4-Chlorotoluene	10.4	1	10		104	70	130			
2-Chlorotoluene	10.4	1	10		104	70	130			
1,3,5-Trimethylbenzene	10.2	1	10		102	70	131			
tert-Butylbenzene	10.9	1	10		109	70	131			
1,2,4-Trimethylbenzene	10.3	1	10		103	70	130			
sec-Butylbenzene	10.5	1	10		105	70	130			
1,3-Dichlorobenzene	9.86	1	10		99	70	130			
1,4-Dichlorobenzene	9.74	1	10		97	70	130			
4-Isopropyltoluene	10.5	1	10		105	70	133			
1,2-Dichlorobenzene	9.22	1	10		92	70	130			
n-Butylbenzene	10.5	1	10		105	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	47.9	3	50		96	70	130			
1,2,4-Trichlorobenzene	10.4	2	10		104	67	130			
Naphthalene	11.1	2	10		111	45	153			
Hexachlorobutadiene	19.9	2	20		100	64	133			
1,2,3-Trichlorobenzene	11.2	2	10		112	58	133			
Surr: 1,2-Dichloroethane-d4	8.23		10		82	70	130			
Surr: Toluene-d8	9.79		10		98	70	130			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Alpha Analytical, Inc.

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

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

Date: *06-Aug-08*

QC Summary Report

Work Order: 08072444

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
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026279

AMENDED #2
CHAIN-OF-CUSTODY RECORD

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

Report Attention	Phone Number	EMail Address
David Conner	(619) 574-4827 x	connerd@battelle.org

CA

WorkOrder : BMI08072444

Report Due By : 5:00 PM On : 07-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	24-Jul-08	**31-Jul-08**

Job : G005862/JPL Groundwater Monitoring

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_TIC_W	VOC_W				Sample Remarks
BMI08072444-01A	MW-18-5	AQ	07/23/08 11:34	4	0	10	Perchlorate	Perchlorate		VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072444-02A	MW-18-4	AQ	07/23/08 12:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072444-03A	MW-18-3	AQ	07/23/08 12:29	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072444-04A	MW-18-2	AQ	07/23/08 13:15	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072444-05A	DUPE-4-3Q08	AQ	07/23/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				

Comments: No security seals. Frozen ice. Level IV QC. Temp Blank #7697 rec'd @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Amended 7/25 8:00 to change Job Name, QC Level and VOC test description due to project requirements.TP : Amended 7/31/08 13:46 to add TICS per project requirements. TP

	Signature	Print Name	Company	Date/Time
Logged in by:	Tasha Pascal	Tasha Pascal	**Alpha Analytical, Inc.**	7/31/08 1400

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

AMENDED

CHAIN-OF-CUSTODY RECORD

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

CA

WorkOrder : BMI08072444

Report Due By : 5:00 PM On : 07-Aug-08

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218017

Client's COC # : 026279 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	24-Jul-08	**25-Jul-08**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W					Sample Remarks
BMI08072444-01A	MW-18-5	AQ	07/23/08 11:34	4	0	10	Perchlorate	Perchlorate		VOC by 524 Criteria					
BMI08072444-02A	MW-18-4	AQ	07/23/08 12:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072444-03A	MW-18-3	AQ	07/23/08 12:29	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072444-04A	MW-18-2	AQ	07/23/08 13:15	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072444-05A	DUPE-4-3Q08	AQ	07/23/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					

Comments: No security seals. Frozen ice. Level IV QC. Temp Blank #7697 rec'd @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Amended 7/25 8:00 to change Job Name, QC Level and VOC test description due to project requirements.TP :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tasha Pascal	Tasha Pascal	Alpha Analytical, Inc.	7/25/08 820

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026279 Job : G005862

CHAIN-OF-CUSTODY RECORD

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

CA

WorkOrder : BMI08072444

Report Due By : 5:00 PM On : 07-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	24-Jul-08	**24-Jul-08**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W					Sample Remarks
BMI08072444-01A	MW-18-5	AQ	07/23/08 11:34	4	0	10	Perchlorate	Perchlorate		8260 by 524 Criteria					
BMI08072444-02A	MW-18-4	AQ	07/23/08 12:00	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072444-03A	MW-18-3	AQ	07/23/08 12:29	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072444-04A	MW-18-2	AQ	07/23/08 13:15	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					
BMI08072444-05A	DUPE-4-3Q08	AQ	07/23/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	8260 by 524 Criteria					

Comments: No security seals. Frozen ice. Level IV QC. Temp Blank #7697 rec'd @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tasha Pascal	Tasha Pascal	Alpha Analytical, Inc.	7/24/08 1045

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

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

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

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

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

026279

Page # 1 of 1

Client Name	P.O. #	Job #
DAVID CONNER	218017	G005862
Address 3990 OLD TOWN AVE, C-205	EMail Address	
City, State, Zip SAN DIEGO, CA 92110	Phone # 619-726-7311	Fax #

Analyses Required: VOC (524.2) | TOTAL Cr (200.8) | Cl04 - (314.0)

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TOTAL Cr (200.8)	Cl04 - (314.0)	REMARKS
1134	7/23/08	AQ	BMI08072444-01	MW-18-5	NORM		4	X		X	
1200			-02	MW-18-4			5	X	X	X	
1229			-03	MW-18-3			5	X	X	X	
1315			-04	MW-18-2			5	X	X	X	
—			-05	DUPE - 4-3008			5	X	X	X	DUPLICATE

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by	MARCO MENDOZA	INSIGHT ECC, INC	7/23/08	1400
Received by Tasha Pascal	Tasha Pascal	AAI	7/24/08	1040
Relinquished by				
Received by				
Relinquished by				
Received by				

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

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

Alpha Analytical, Inc.

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

Date: *07-Aug-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08072904 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08072904-01A	MW-4-3	Aqueous
08072904-02A	MW-4-2	Aqueous
08072904-03A	MW-4-1	Aqueous
08072904-04A	DUPE-5-3Q08	Aqueous
08072904-05A	EB-06-7/28/08	Aqueous
08072904-06A	TB-06-7/28/08	Aqueous

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

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

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

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-4-3**						
Lab ID :	BMI08072904-01A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/30/08
Client ID :	**MW-4-2**						
Lab ID :	BMI08072904-02A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/30/08
Client ID :	**MW-4-1**						
Lab ID :	BMI08072904-03A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/30/08
Client ID :	**DUPE-5-3Q08**						
Lab ID :	BMI08072904-04A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/30/08
Client ID :	**EB-06-7/28/08**						
Lab ID :	BMI08072904-05A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/31/08
Client ID :	**TB-06-7/28/08**						
Lab ID :	BMI08072904-06A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/31/08

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/11/08
Report Date

Page 1 of 1

Alpha Analytical, Inc.

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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: BMI08072904-01A
Client I.D. Number: MW-4-3

Sampled: 07/28/08
Received: 07/29/08
Analyzed: 07/30/08

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	2.3	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	94	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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Report Date

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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: BMI08072904-02A
Client I.D. Number: MW-4-2

Sampled: 07/28/08
Received: 07/29/08
Analyzed: 07/30/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42 o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43 1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44 1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45 Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46 Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47 n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48 4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49 2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50 1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.1	0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	94	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65 Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66 Surr: 4-Bromofluorobenzene	101	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L				
33	Dibromochloromethane	ND	0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L				
35	Tetrachloroethene	0.59	0.50	µg/L				

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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Report Date

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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: BMI08072904-03A
Client I.D. Number: MW-4-1

Sampled: 07/28/08
Received: 07/29/08
Analyzed: 07/30/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072904-04A
Client I.D. Number: DUPE-5-3Q08

Sampled: 07/28/08
Received: 07/29/08
Analyzed: 07/30/08

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	2.3	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/11/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072904-05A
Client I.D. Number: EB-06-7/28/08

Sampled: 07/28/08
Received: 07/29/08
Analyzed: 07/31/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	99	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

Battelle Memorial Institute
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Job#: G005862/JPL Groundwater Monitoring

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Alpha Analytical Number: BMI08072904-06A
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Sampled: 07/28/08
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Volatile Organics by GC/MS

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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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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
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17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

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VOC Sample Preservation Report

Work Order: BMI08072904 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08072904-01A	MW-4-3	Aqueous	2
08072904-02A	MW-4-2	Aqueous	2
08072904-03A	MW-4-1	Aqueous	2
08072904-04A	DUPE-5-3Q08	Aqueous	2
08072904-05A	EB-06-7/28/08	Aqueous	2
08072904-06A	TB-06-7/28/08	Aqueous	2

8/11/08

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505 King Avenue
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Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-4-3**					
Lab ID :	BMI08072904-01A	Specific Conductance (at 25°C)	440	10 µS/cm	07/28/08	07/29/08
Client ID :	**MW-4-2**					
Lab ID :	BMI08072904-02A	Specific Conductance (at 25°C)	1,000	10 µS/cm	07/28/08	07/29/08
Client ID :	**MW-4-1**					
Lab ID :	BMI08072904-03A	Specific Conductance (at 25°C)	480	10 µS/cm	07/28/08	07/29/08
Client ID :	**DUPE-5-3Q08**					
Lab ID :	BMI08072904-04A	Specific Conductance (at 25°C)	450	10 µS/cm	07/28/08	07/29/08
Client ID :	**EB-06-7/28/08**					
Lab ID :	BMI08072904-05A	Specific Conductance (at 25°C)	ND	10 µS/cm	07/28/08	07/29/08

ND = Not Detected

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Date Received : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-4-3**					
Lab ID :	BMI08072904-01A	Perchlorate	ND	1.00 µg/L	07/28/08	07/29/08
Client ID :	**MW-4-2**					
Lab ID :	BMI08072904-02A	Perchlorate	1.69	1.00 µg/L	07/28/08	07/31/08
Client ID :	**MW-4-1**					
Lab ID :	BMI08072904-03A	Perchlorate	3.09	1.00 µg/L	07/28/08	07/29/08
Client ID :	**DUPE-5-3Q08**					
Lab ID :	BMI08072904-04A	Perchlorate	ND	1.00 µg/L	07/28/08	07/29/08
Client ID :	**EB-06-7/28/08**					
Lab ID :	BMI08072904-05A	Perchlorate	ND	1.00 µg/L	07/28/08	07/29/08

ND = Not Detected

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Date Received : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-4-3**					
Lab ID :	BMI08072904-01A	Chromium (Cr)	ND	0.0050 mg/L	07/28/08	08/01/08
Client ID :	**MW-4-2**					
Lab ID :	BMI08072904-02A	Chromium (Cr)	ND	0.0050 mg/L	07/28/08	08/01/08
Client ID :	**MW-4-1**					
Lab ID :	BMI08072904-03A	Chromium (Cr)	ND	0.0050 mg/L	07/28/08	08/01/08
Client ID :	**DUPE-5-3Q08**					
Lab ID :	BMI08072904-04A	Chromium (Cr)	ND	0.0050 mg/L	07/28/08	08/01/08
Client ID :	**EB-06-7/28/08**					
Lab ID :	BMI08072904-05A	Chromium (Cr)	ND	0.0050 mg/L	07/28/08	08/01/08

ND = Not Detected

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Date: *06-Aug-08*

QC Summary Report

Work Order: 08072904

Method Blank

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

File ID: **14** Batch ID: **20331** Analysis Date: **07/29/2008 15:22**

Sample ID: **MBLK-20331** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

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

Laboratory Fortified Blank

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

File ID: **15** Batch ID: **20331** Analysis Date: **07/29/2008 15:40**

Sample ID: **LFB-20331** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.8	2	25		91	85	115			

Sample Matrix Spike

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

File ID: **19** Batch ID: **20331** Analysis Date: **07/29/2008 16:54**

Sample ID: **08072921-02ALFM** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	48.5	2	25	24.18	97	80	120			

Sample Matrix Spike Duplicate

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

File ID: **20** Batch ID: **20331** Analysis Date: **07/29/2008 17:12**

Sample ID: **08072921-02ALFMD** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	47.3	2	25	24.18	92	80	120	48.47	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: *06-Aug-08*

QC Summary Report

Work Order: 08072904

Method Blank

Type **MBLK** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0729CN** Analysis Date: **07/29/2008 00:00**

Sample ID: **MBLK-W0729CN** Units : **µS/cm** Run ID: **WETLAB_080729H** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0729CN** Analysis Date: **07/29/2008 00:00**

Sample ID: **LCS-W0729CN** Units : **µS/cm** Run ID: **WETLAB_080729H** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	1430	10	1410		101	98	102			

Comments:

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Date: 07-Aug-08

QC Summary Report

Work Order: 08072904

Method Blank Type **MBLK** Test Code: _____

File ID: **08073038.D** Batch ID: **MS15W0730L5** Analysis Date: **07/30/2008 22:29**

Sample ID: **MBLK MS15W0730L** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.33		10		93	75	128			
Surr: Toluene-d8	10.2		10		102	80	120			

Alpha Analytical, Inc.

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

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Date: *07-Aug-08*

QC Summary Report

Work Order: 08072904

Surr: 4-Bromofluorobenzene	10.1		10	101	70	130

Laboratory Control Spike Type **LCS** Test Code: _____

File ID: **08073035.D** Batch ID: **MS15W0730L5** Analysis Date: **07/30/2008 21:22**

Sample ID: **LCS MS15W0730L** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	6.4	1	10		64	29	133			
Chloromethane	8.85	2	10		89	44	140			
Vinyl chloride	9.94	1	10		99	70	130			
Chloroethane	10.2	1	10		102	62	158			
Bromomethane	11.4	2	10		114	20	179			
Trichlorofluoromethane	11.7	1	10		117	63	156			
1,1-Dichloroethene	10.8	1	10		108	70	130			
Dichloromethane	10	2	10		100	70	130			
trans-1,2-Dichloroethene	11	1	10		110	70	130			
Methyl tert-butyl ether (MTBE)	11.2	0.5	10		112	70	130			
1,1-Dichloroethane	10.5	1	10		105	70	130			
cis-1,2-Dichloroethene	11.5	1	10		115	70	130			
Bromochloromethane	11.1	1	10		111	70	130			
Chloroform	10.1	1	10		101	80	120			
2,2-Dichloropropane	9.58	1	10		96	65	152			
1,2-Dichloroethane	10.2	1	10		102	70	130			
1,1,1-Trichloroethane	10.7	1	10		107	70	130			
1,1-Dichloropropene	11.1	1	10		111	70	130			
Carbon tetrachloride	10.7	1	10		107	70	130			
Benzene	10.6	0.5	10		106	70	130			
Dibromomethane	11.4	1	10		114	70	130			
1,2-Dichloropropane	10.9	1	10		109	70	130			
Trichloroethene	11.4	1	10		114	70	130			
Bromodichloromethane	11.3	1	10		113	70	130			
cis-1,3-Dichloropropene	9.57	1	10		96	70	130			
trans-1,3-Dichloropropene	9.2	1	10		92	68	134			
1,1,2-Trichloroethane	11.2	1	10		112	70	130			
Toluene	10.2	0.5	10		102	70	130			
1,3-Dichloropropane	10.8	1	10		108	70	130			
Dibromochloromethane	10.2	1	10		102	68	130			
1,2-Dibromoethane (EDB)	22.9	2	20		114	70	130			
Tetrachloroethene	10.7	1	10		107	70	130			
1,1,1,2-Tetrachloroethane	10.8	1	10		108	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10.5	0.5	10		105	70	130			
m,p-Xylene	11.3	0.5	10		113	70	130			
Bromoform	11.1	1	10		111	59	132			
Styrene	10.5	1	10		105	70	130			
o-Xylene	10.5	0.5	10		105	70	130			
1,1,2,2-Tetrachloroethane	8.65	1	10		87	65	135			
1,2,3-Trichloropropane	19.3	2	20		97	68	132			
Isopropylbenzene	10.5	1	10		105	70	130			
Bromobenzene	9.95	1	10		100	70	130			
n-Propylbenzene	10.6	1	10		106	70	130			
4-Chlorotoluene	10.5	1	10		105	70	130			
2-Chlorotoluene	10.5	1	10		105	70	130			
1,3,5-Trimethylbenzene	10.4	1	10		104	70	141			
tert-Butylbenzene	9.68	1	10		97	70	130			
1,2,4-Trimethylbenzene	10.4	1	10		104	67	146			
sec-Butylbenzene	10.5	1	10		105	70	130			
1,3-Dichlorobenzene	9.68	1	10		97	70	130			
1,4-Dichlorobenzene	9.69	1	10		97	70	130			
4-Isopropyltoluene	10.4	1	10		104	70	133			
1,2-Dichlorobenzene	9.12	1	10		91	70	130			
n-Butylbenzene	10.5	1	10		105	68	145			
1,2-Dibromo-3-chloropropane (DBCP)	44.4	3	50		89	57	133			
1,2,4-Trichlorobenzene	9.37	2	10		94	70	130			
Naphthalene	9.19	2	10		92	26	161			
Hexachlorobutadiene	19.1	2	20		96	39	172			
1,2,3-Trichlorobenzene	9.54	2	10		95	33	166			
Surr: 1,2-Dichloroethane-d4	8.43		10		84	75	128			
Surr: Toluene-d8	9.65		10		97	80	120			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Alpha Analytical, Inc.

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

Date: 07-Aug-08

QC Summary Report

Work Order: 08072904

Sample Matrix Spike Type **MS** Test Code: _____

File ID: **08073055.D** Batch ID: **MS15W0730L5** Analysis Date: **07/31/2008 04:48**

Sample ID: **08072923-01AMS** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	49	2.5	50	0	98	20	137			
Chloromethane	45.6	10	50	0	91	31	148			
Vinyl chloride	52.5	2.5	50	0	105	46	138			
Chloroethane	60.6	2.5	50	0	121	34	170			
Bromomethane	43.5	10	50	0	87	20	189			
Trichlorofluoromethane	87.2	2.5	50	0	174	51	156			M1
1,1-Dichloroethene	56.6	2.5	50	0	113	66	132			
Dichloromethane	51.5	10	50	0	103	48	145			
trans-1,2-Dichloroethene	53.6	2.5	50	0	107	68	132			
Methyl tert-butyl ether (MTBE)	57.5	1.3	50	0	115	62	139			
1,1-Dichloroethane	54.3	2.5	50	0	109	70	130			
cis-1,2-Dichloroethene	56.5	2.5	50	0	113	70	130			
Bromochloromethane	52.1	2.5	50	0	104	70	130			
Chloroform	53	2.5	50	0	106	70	130			
2,2-Dichloropropane	44.7	2.5	50	0	89	50	152			
1,2-Dichloroethane	57.9	2.5	50	0	116	65	136			
1,1,1-Trichloroethane	58.4	2.5	50	0	117	67	133			
1,1-Dichloropropene	58.7	2.5	50	0	117	70	130			
Carbon tetrachloride	58.6	2.5	50	0	117	61	142			
Benzene	54.7	1.3	50	0	109	70	130			
Dibromomethane	59.6	2.5	50	0	119	69	130			
1,2-Dichloropropane	57.6	2.5	50	0	115	70	132			
Trichloroethene	52.7	2.5	50	0	105	69	130			
Bromodichloromethane	60.2	2.5	50	0	120	70	130			
cis-1,3-Dichloropropene	44.5	2.5	50	0	89	66	130			
trans-1,3-Dichloropropene	48.2	2.5	50	0	96	65	134			
1,1,2-Trichloroethane	57.7	2.5	50	0	115	67	132			
Toluene	46.5	1.3	50	0	93	67	130			
1,3-Dichloropropane	50	2.5	50	0	100	70	130			
Dibromochloromethane	47.3	2.5	50	0	95	66	130			
1,2-Dibromoethane (EDB)	105	10	100	0	105	70	130			
Tetrachloroethene	47.3	2.5	50	0	95	59	135			
1,1,1,2-Tetrachloroethane	51.1	2.5	50	0	102	70	130			
Chlorobenzene	48.7	2.5	50	0	97	70	130			
Ethylbenzene	52.4	1.3	50	0.85	103	70	130			
m,p-Xylene	51.9	1.3	50	0	104	69	130			
Bromoform	53.3	2.5	50	0	107	57	132			
Styrene	50.5	2.5	50	0	101	58	135			
o-Xylene	49.5	1.3	50	0	99	70	130			
1,1,2,2-Tetrachloroethane	49.3	2.5	50	0	99	65	137			
1,2,3-Trichloropropane	100	10	100	0	100	67	132			
Isopropylbenzene	49.5	2.5	50	0	99	70	130			
Bromobenzene	47.5	2.5	50	0	95	70	130			
n-Propylbenzene	50	2.5	50	0	100	70	130			
4-Chlorotoluene	50.4	2.5	50	0	101	70	130			
2-Chlorotoluene	50	2.5	50	0	99.9	70	130			
1,3,5-Trimethylbenzene	50.8	2.5	50	0	102	68	141			
tert-Butylbenzene	53.7	2.5	50	0	107	70	130			
1,2,4-Trimethylbenzene	50.3	2.5	50	0	101	67	146			
sec-Butylbenzene	51.4	2.5	50	0	103	70	130			
1,3-Dichlorobenzene	47.1	2.5	50	0	94	70	130			
1,4-Dichlorobenzene	47.8	2.5	50	0	96	70	130			
4-Isopropyltoluene	51.1	2.5	50	0	102	70	133			
1,2-Dichlorobenzene	45.5	2.5	50	0	91	70	130			
n-Butylbenzene	53.6	2.5	50	0	107	66	145			
1,2-Dibromo-3-chloropropane (DBCP)	241	15	250	0	96	57	137			
1,2,4-Trichlorobenzene	47.2	10	50	0	94	39	157			
Naphthalene	47.3	10	50	0	95	26	163			
Hexachlorobutadiene	97.2	10	100	0	97	35	172			
1,2,3-Trichlorobenzene	50.7	10	50	0	101	30	170			
Surr: 1,2-Dichloroethane-d4	49.3		50		99	75	128			
Surr: Toluene-d8	44.1		50		88	80	120			
Surr: 4-Bromofluorobenzene	49.2		50		98	70	130			

Alpha Analytical, Inc.

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Date: 07-Aug-08

QC Summary Report

Work Order: 08072904

Sample Matrix Spike Duplicate Type **MSD** Test Code: _____

File ID: **08073056.D** Batch ID: **MS15W0730L5** Analysis Date: **07/31/2008 05:10**

Sample ID: **08072923-01AMSD** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	51.4	2.5	50	0	103	20	137	49.02	4.7(20)	
Chloromethane	52.8	10	50	0	106	31	148	45.61	14.7(20)	
Vinyl chloride	59.5	2.5	50	0	119	46	138	52.54	12.4(20)	
Chloroethane	60.1	2.5	50	0	120	34	170	60.64	1.0(20)	
Bromomethane	63.9	10	50	0	128	20	189	43.5	38.0(20)	R5
Trichlorofluoromethane	85.3	2.5	50	0	171	51	156	87.22	2.3(20)	M1
1,1-Dichloroethene	56.1	2.5	50	0	112	66	132	56.58	0.8(20)	
Dichloromethane	51	10	50	0	102	48	145	51.49	1.0(20)	
trans-1,2-Dichloroethene	55	2.5	50	0	110	68	132	53.64	2.6(20)	
Methyl tert-butyl ether (MTBE)	58.3	1.3	50	0	117	62	139	57.47	1.4(20)	
1,1-Dichloroethane	54.9	2.5	50	0	110	70	130	54.34	1.0(20)	
cis-1,2-Dichloroethene	56.8	2.5	50	0	114	70	130	56.46	0.5(20)	
Bromochloromethane	53.7	2.5	50	0	107	70	130	52.13	2.9(20)	
Chloroform	52.8	2.5	50	0	106	70	130	53.03	0.5(20)	
2,2-Dichloropropane	44	2.5	50	0	88	50	152	44.65	1.5(20)	
1,2-Dichloroethane	56	2.5	50	0	112	65	136	57.93	3.4(20)	
1,1,1-Trichloroethane	57.8	2.5	50	0	116	67	133	58.42	1.0(20)	
1,1-Dichloropropene	59.2	2.5	50	0	118	70	130	58.71	0.8(20)	
Carbon tetrachloride	58	2.5	50	0	116	61	142	58.6	1.1(20)	
Benzene	54.3	1.3	50	0	109	70	130	54.65	0.7(20)	
Dibromomethane	59.7	2.5	50	0	119	69	130	59.56	0.2(20)	
1,2-Dichloropropane	56.8	2.5	50	0	114	70	132	57.62	1.5(20)	
Trichloroethene	52.4	2.5	50	0	105	69	130	52.7	0.5(20)	
Bromodichloromethane	59.8	2.5	50	0	120	70	130	60.18	0.7(20)	
cis-1,3-Dichloropropene	44.8	2.5	50	0	90	66	130	44.52	0.6(20)	
trans-1,3-Dichloropropene	47.1	2.5	50	0	94	65	134	48.16	2.1(20)	
1,1,2-Trichloroethane	57.7	2.5	50	0	115	67	132	57.68	0.1(20)	
Toluene	48	1.3	50	0	96	67	130	46.47	3.3(20)	
1,3-Dichloropropane	52	2.5	50	0	104	70	130	50.01	3.8(20)	
Dibromochloromethane	48.5	2.5	50	0	97	66	130	47.27	2.6(20)	
1,2-Dibromoethane (EDB)	108	10	100	0	108	70	130	105.1	2.7(20)	
Tetrachloroethene	49.5	2.5	50	0	99	59	135	47.34	4.4(20)	
1,1,1,2-Tetrachloroethane	52.7	2.5	50	0	105	70	130	51.08	3.0(20)	
Chlorobenzene	50	2.5	50	0	100	70	130	48.72	2.6(20)	
Ethylbenzene	53.4	1.3	50	0.85	105	70	130	52.39	1.9(20)	
m,p-Xylene	53.6	1.3	50	0	107	69	130	51.91	3.2(20)	
Bromoform	54.7	2.5	50	0	109	57	132	53.26	2.7(20)	
Styrene	51.3	2.5	50	0	103	58	135	50.46	1.6(20)	
o-Xylene	50.4	1.3	50	0	101	70	130	49.47	1.8(20)	
1,1,2,2-Tetrachloroethane	48.6	2.5	50	0	97	65	137	49.3	1.5(20)	
1,2,3-Trichloropropane	99.7	10	100	0	99.7	67	132	100.4	0.7(20)	
Isopropylbenzene	51.3	2.5	50	0	103	70	130	49.5	3.6(20)	
Bromobenzene	48.6	2.5	50	0	97	70	130	47.46	2.3(20)	
n-Propylbenzene	51.4	2.5	50	0	103	70	130	50.02	2.8(20)	
4-Chlorotoluene	52.2	2.5	50	0	104	70	130	50.35	3.7(20)	
2-Chlorotoluene	52.1	2.5	50	0	104	70	130	49.96	4.1(20)	
1,3,5-Trimethylbenzene	52.2	2.5	50	0	104	68	141	50.8	2.8(20)	
tert-Butylbenzene	48.8	2.5	50	0	98	70	130	53.7	9.6(20)	
1,2,4-Trimethylbenzene	51.4	2.5	50	0	103	67	146	50.3	2.2(20)	
sec-Butylbenzene	52.9	2.5	50	0	106	70	130	51.38	2.8(20)	
1,3-Dichlorobenzene	48.5	2.5	50	0	97	70	130	47.08	3.0(20)	
1,4-Dichlorobenzene	48.8	2.5	50	0	98	70	130	47.77	2.0(20)	
4-Isopropyltoluene	52.8	2.5	50	0	106	70	133	51.11	3.2(20)	
1,2-Dichlorobenzene	46.3	2.5	50	0	93	70	130	45.5	1.7(20)	
n-Butylbenzene	54.4	2.5	50	0	109	66	145	53.56	1.5(20)	
1,2-Dibromo-3-chloropropane (DBCP)	239	15	250	0	96	57	137	240.9	0.7(20)	
1,2,4-Trichlorobenzene	49.8	10	50	0	99.6	39	157	47.19	5.3(20)	
Naphthalene	49.1	10	50	0	98	26	163	47.31	3.6(20)	
Hexachlorobutadiene	103	10	100	0	103	35	172	97.22	5.6(20)	
1,2,3-Trichlorobenzene	53	10	50	0	106	30	170	50.72	4.5(20)	
Surr: 1,2-Dichloroethane-d4	47.1		50		94	75	128			
Surr: Toluene-d8	45.7		50		91	80	120			
Surr: 4-Bromofluorobenzene	50		50		100	70	130			

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Date: *07-Aug-08*

QC Summary Report

Work Order: 08072904

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.

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

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

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Date: *07-Aug-08*

QC Summary Report

Work Order: 08072904

Method Blank

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

File ID: **073108.B\145SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 02:42**

Sample ID: **MB-20344** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

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

Laboratory Control Spike

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

File ID: **073108.B\149_LCS.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:05**

Sample ID: **LCS-20344** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.052	0.005	0.05		104	85	115			

Sample Matrix Spike

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

File ID: **073108.B\152SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:22**

Sample ID: **08072923-01AMS** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0518	0.005	0.05	0	104	70	130			

Sample Matrix Spike Duplicate

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

File ID: **073108.B\158SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:55**

Sample ID: **08072923-01AMSD** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0534	0.005	0.05	0	107	70	130	0.05184	2.9(20)	

Comments:

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026274 Job : G005862/JPL Groundwater Monitoring

CHAIN-OF-CUSTODY RECORD

AMENDED

CA

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

Report Attention	Phone Number	EMail Address
David Conner	(619) 574-4827 x	connerd@battelle.org

WorkOrder : BMI08072904

Report Due By : 5:00 PM On : 12-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	29-Jul-08	**31-Jul-08**

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_TIC_W	VOC_W				Sample Remarks
BMI08072904-01A	MW-4-3	AQ	07/28/08 08:23	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072904-02A	MW-4-2	AQ	07/28/08 09:15	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072904-03A	MW-4-1	AQ	07/28/08 09:50	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072904-04A	DUPE-5-3Q08	AQ	07/28/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072904-05A	EB-06-7/28/08	AQ	07/28/08 09:40	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072904-06A	TB-06-7/28/08	AQ	07/28/08 00:00	1	0	10				VOC by 524 Criteria	VOC by 524 Criteria				Reno Trip Blank 6/24/08

Comments: No security seals. Frozen ice. Client provided Temp Blank rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Amended 7/31/08 14:05 to add TICS per project requirements. ES :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Sauvageau	Elizabeth Sauvageau	**Alpha Analytical, Inc.**	7-31-08 1411

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

CHAIN-OF-CUSTODY RECORD

CA

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

WorkOrder : BMI08072904

Report Due By : 5:00 PM On : 12-Aug-08

EDD Required : **Yes**

Sampled by : Client

PO : 218017

Client's COC # : 026274 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	29-Jul-08	29-Jul-08

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W					Sample Remarks
BMI08072904-01A	MW-4-3	AQ	07/28/08 08:23	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072904-02A	MW-4-2	AQ	07/28/08 09:15	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072904-03A	MW-4-1	AQ	07/28/08 09:50	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072904-04A	DUPE-5-3Q08	AQ	07/28/08 00:00	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072904-05A	EB-06-7/28/08	AQ	07/28/08 09:40	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria					
BMI08072904-06A	TB-06-7/28/08	AQ	07/28/08 00:00	1	0	10				VOC by 524 Criteria					Reno Trip Blank 6/24/08

Comments: No security seals. Frozen ice. Client provided Temp Blank rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Sauvageau	Elizabeth Sauvageau	Alpha Analytical, Inc.	7-29-08 1036

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

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

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

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

026274

Page # 1 of 1

Client Name	P.O. #	Job #
DAVID CONNER	218017	G005862
Address: 3990 OLD TOWN AVE, C-205	EMail Address	
City, State, Zip: SAN DIEGO, CA 92110	Phone # 619-726-7311	Fax #

Analyses Required: VOC (624.2); TOTAL Cr (200.8); Cr6+ (314.0)

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (624.2)	TOTAL Cr (200.8)	Cr6+ (314.0)	REMARKS
0823	7/28/08	AQ	BMI08072904-01	MW-4-3	NORM		5	X	X	X	
0915			-02	MW-4-2			5	X	X	X	
0950			-03	MW-4-1			5	X	X	X	
—			-04	DUPE-5-3Q08			5	X	X	X	DUPLICATE
0940			-05	EB-06-7/28/08			5	X	X	X	EQUIP. BLANK
—			-06	TB-06-7/28/08			1	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROGDON	INSIGHT EECI	07/28/08	14:00
Received by	E. Sauvageau	E. Sauvageau	Alpha	7-29-08	1036
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *11-Aug-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08072921 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08072921-01A	MW-20-5	Aqueous
08072921-02A	MW-20-4	Aqueous
08072921-03A	MW-20-3	Aqueous
08072921-04A	MW-20-2	Aqueous
08072921-05A	MW-20-1	Aqueous
08072921-06A	EB-05-7/25/08	Aqueous
08072921-07A	TB-05-7/25/08	Aqueous

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-20-5**						
Lab ID :	BMI08072921-01A	Sulfur Dioxide	37	2.0 µg/L	07/29/08	07/25/08	07/31/08
Client ID :	**MW-20-4**						
Lab ID :	BMI08072921-02A	Sulfur Dioxide	32	2.0 µg/L	07/29/08	07/25/08	07/31/08
Client ID :	**MW-20-3**						
Lab ID :	BMI08072921-03A	Sulfur Dioxide	14	2.0 µg/L	07/29/08	07/25/08	07/31/08
Client ID :	**MW-20-2**						
Lab ID :	BMI08072921-04A	Sulfur Dioxide	8.7	2.0 µg/L	07/29/08	07/25/08	07/31/08
Client ID :	**MW-20-1**						
Lab ID :	BMI08072921-05A	Sulfur Dioxide	17	2.0 µg/L	07/29/08	07/25/08	07/31/08
Client ID :	**EB-05-7/25/08**						
Lab ID :	BMI08072921-06A	Sulfur Dioxide	5.9	2.0 µg/L	07/29/08	07/25/08	07/31/08
Client ID :	**TB-05-7/25/08**						
Lab ID :	BMI08072921-07A	Sulfur Dioxide	3.8	2.0 µg/L	07/29/08	07/25/08	07/31/08

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/11/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072921-01A
Client I.D. Number: MW-20-5

Sampled: 07/25/08
Received: 07/29/08
Analyzed: 07/31/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	105	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/11/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072921-02A
Client I.D. Number: MW-20-4

Sampled: 07/25/08
Received: 07/29/08
Analyzed: 07/31/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/11/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072921-03A
Client I.D. Number: MW-20-3

Sampled: 07/25/08
Received: 07/29/08
Analyzed: 07/31/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	97	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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8/11/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072921-04A
Client I.D. Number: MW-20-2

Sampled: 07/25/08
Received: 07/29/08
Analyzed: 07/31/08

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	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	0.65	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	97	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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Report Date

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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: BMI08072921-05A
Client I.D. Number: MW-20-1

Sampled: 07/25/08
Received: 07/29/08
Analyzed: 07/31/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	106	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	97	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

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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: BMI08072921-06A
Client I.D. Number: EB-05-7/25/08

Sampled: 07/25/08
Received: 07/29/08
Analyzed: 07/31/08

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	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	0.69	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	106	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	97	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072921-07A
Client I.D. Number: TB-05-7/25/08

Sampled: 07/25/08
Received: 07/29/08
Analyzed: 07/31/08

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	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
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
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21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	106	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	98	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	105	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

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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 : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5**					
Lab ID :	BMI08072921-01A	Specific Conductance (at 25°C)	280	10 µS/cm	07/25/08	07/29/08
Client ID :	**MW-20-4**					
Lab ID :	BMI08072921-02A	Specific Conductance (at 25°C)	320	10 µS/cm	07/25/08	07/29/08
Client ID :	**MW-20-3**					
Lab ID :	BMI08072921-03A	Specific Conductance (at 25°C)	470	10 µS/cm	07/25/08	07/29/08
Client ID :	**MW-20-2**					
Lab ID :	BMI08072921-04A	Specific Conductance (at 25°C)	390	10 µS/cm	07/25/08	07/29/08
Client ID :	**MW-20-1**					
Lab ID :	BMI08072921-05A	Specific Conductance (at 25°C)	620	10 µS/cm	07/25/08	07/29/08
Client ID :	**EB-05-7/25/08**					
Lab ID :	BMI08072921-06A	Specific Conductance (at 25°C)	13	10 µS/cm	07/25/08	07/29/08

Roger Scholl Randy Gardner Walter Hinchman

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Columbus, OH 43201

Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5**					
Lab ID :	BMI08072921-01A	Perchlorate	13.1	1.00 µg/L	07/25/08	07/29/08
Client ID :	**MW-20-4**					
Lab ID :	BMI08072921-02A	Perchlorate	24.2	1.00 µg/L	07/25/08	07/29/08
Client ID :	**MW-20-3**					
Lab ID :	BMI08072921-03A	Perchlorate	ND	1.00 µg/L	07/25/08	07/29/08
Client ID :	**MW-20-2**					
Lab ID :	BMI08072921-04A	Perchlorate	ND	1.00 µg/L	07/25/08	07/29/08
Client ID :	**MW-20-1**					
Lab ID :	BMI08072921-05A	Perchlorate	1.64	1.00 µg/L	07/25/08	07/29/08
Client ID :	**EB-05-7/25/08**					
Lab ID :	BMI08072921-06A	Perchlorate	ND	1.00 µg/L	07/25/08	07/29/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/11/08
Report Date

Alpha Analytical, Inc.

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

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

Date: *06-Aug-08*

QC Summary Report

Work Order: 08072921

Method Blank

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

File ID: **14** Batch ID: **20331** Analysis Date: **07/29/2008 15:22**

Sample ID: **MBLK-20331** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

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

Laboratory Fortified Blank

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

File ID: **15** Batch ID: **20331** Analysis Date: **07/29/2008 15:40**

Sample ID: **LFB-20331** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.8	2	25		91	85	115			

Sample Matrix Spike

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

File ID: **19** Batch ID: **20331** Analysis Date: **07/29/2008 16:54**

Sample ID: **08072921-02ALFM** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	48.5	2	25	24.18	97	80	120			

Sample Matrix Spike Duplicate

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

File ID: **20** Batch ID: **20331** Analysis Date: **07/29/2008 17:12**

Sample ID: **08072921-02ALFMD** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	47.3	2	25	24.18	92	80	120	48.47	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: *06-Aug-08*

QC Summary Report

Work Order: 08072921

Method Blank

Type **MBLK** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0729CNA** Analysis Date: **07/29/2008 00:00**

Sample ID: **MBLK-W0729CNA** Units : **µS/cm** Run ID: **WETLAB_080729I** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0729CNA** Analysis Date: **07/29/2008 00:00**

Sample ID: **LCS-W0729CNA** Units : **µS/cm** Run ID: **WETLAB_080729I** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	1430	10	1410		101	98	102			

Comments:

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

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5**					
Lab ID :	BMI08072921-01A	Chromium (Cr)	ND	0.0050 mg/L	07/25/08	08/01/08
Client ID :	**MW-20-4**					
Lab ID :	BMI08072921-02A	Chromium (Cr)	ND	0.0050 mg/L	07/25/08	08/01/08
Client ID :	**MW-20-3**					
Lab ID :	BMI08072921-03A	Chromium (Cr)	ND	0.0050 mg/L	07/25/08	08/01/08
Client ID :	**MW-20-2**					
Lab ID :	BMI08072921-04A	Chromium (Cr)	ND	0.0050 mg/L	07/25/08	08/01/08
Client ID :	**MW-20-1**					
Lab ID :	BMI08072921-05A	Chromium (Cr)	ND	0.0050 mg/L	07/25/08	08/01/08
Client ID :	**EB-05-7/25/08**					
Lab ID :	BMI08072921-06A	Chromium (Cr)	ND	0.0050 mg/L	07/25/08	08/01/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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8/11/08
Report Date

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Date: *07-Aug-08*

QC Summary Report

Work Order: 08072921

Method Blank

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

File ID: **073108.B\145SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 02:42**

Sample ID: **MB-20344** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

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

Laboratory Control Spike

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

File ID: **073108.B\149_LCS.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:05**

Sample ID: **LCS-20344** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.052	0.005	0.05		104	85	115			

Sample Matrix Spike

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

File ID: **073108.B\152SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:22**

Sample ID: **08072923-01AMS** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0518	0.005	0.05	0	104	70	130			

Sample Matrix Spike Duplicate

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

File ID: **073108.B\158SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:55**

Sample ID: **08072923-01AMSD** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0534	0.005	0.05	0	107	70	130	0.05184	2.9(20)	

Comments:

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Date: 11-Aug-08

QC Summary Report

Work Order: 08072921

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

File ID: **08073038.D** Batch ID: **MS15W0730L5** Analysis Date: **07/30/2008 22:29**

Sample ID: **MBLK MS15W0730L** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.33		10		93	75	128			
Surr: Toluene-d8	10.2		10		102	80	120			

Alpha Analytical, Inc.

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Date: *11-Aug-08*

QC Summary Report

Work Order: 08072921

Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

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

File ID: **08073035.D** Batch ID: **MS15W0730L5** Analysis Date: **07/30/2008 21:22**

Sample ID: **LCS MS15W0730L** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	6.4	1	10		64	29	133			
Chloromethane	8.85	2	10		89	44	140			
Vinyl chloride	9.94	1	10		99	70	130			
Chloroethane	10.2	1	10		102	62	158			
Bromomethane	11.4	2	10		114	20	179			
Trichlorofluoromethane	11.7	1	10		117	63	156			
1,1-Dichloroethene	10.8	1	10		108	70	130			
Dichloromethane	10	2	10		100	70	130			
trans-1,2-Dichloroethene	11	1	10		110	70	130			
Methyl tert-butyl ether (MTBE)	11.2	0.5	10		112	70	130			
1,1-Dichloroethane	10.5	1	10		105	70	130			
cis-1,2-Dichloroethene	11.5	1	10		115	70	130			
Bromochloromethane	11.1	1	10		111	70	130			
Chloroform	10.1	1	10		101	80	120			
2,2-Dichloropropane	9.58	1	10		96	65	152			
1,2-Dichloroethane	10.2	1	10		102	70	130			
1,1,1-Trichloroethane	10.7	1	10		107	70	130			
1,1-Dichloropropene	11.1	1	10		111	70	130			
Carbon tetrachloride	10.7	1	10		107	70	130			
Benzene	10.6	0.5	10		106	70	130			
Dibromomethane	11.4	1	10		114	70	130			
1,2-Dichloropropane	10.9	1	10		109	70	130			
Trichloroethene	11.4	1	10		114	70	130			
Bromodichloromethane	11.3	1	10		113	70	130			
cis-1,3-Dichloropropene	9.57	1	10		96	70	130			
trans-1,3-Dichloropropene	9.2	1	10		92	68	134			
1,1,2-Trichloroethane	11.2	1	10		112	70	130			
Toluene	10.2	0.5	10		102	70	130			
1,3-Dichloropropane	10.8	1	10		108	70	130			
Dibromochloromethane	10.2	1	10		102	68	130			
1,2-Dibromoethane (EDB)	22.9	2	20		114	70	130			
Tetrachloroethene	10.7	1	10		107	70	130			
1,1,1,2-Tetrachloroethane	10.8	1	10		108	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10.5	0.5	10		105	70	130			
m,p-Xylene	11.3	0.5	10		113	70	130			
Bromoform	11.1	1	10		111	59	132			
Styrene	10.5	1	10		105	70	130			
o-Xylene	10.5	0.5	10		105	70	130			
1,1,2,2-Tetrachloroethane	8.65	1	10		87	65	135			
1,2,3-Trichloropropane	19.3	2	20		97	68	132			
Isopropylbenzene	10.5	1	10		105	70	130			
Bromobenzene	9.95	1	10		100	70	130			
n-Propylbenzene	10.6	1	10		106	70	130			
4-Chlorotoluene	10.5	1	10		105	70	130			
2-Chlorotoluene	10.5	1	10		105	70	130			
1,3,5-Trimethylbenzene	10.4	1	10		104	70	141			
tert-Butylbenzene	9.68	1	10		97	70	130			
1,2,4-Trimethylbenzene	10.4	1	10		104	67	146			
sec-Butylbenzene	10.5	1	10		105	70	130			
1,3-Dichlorobenzene	9.68	1	10		97	70	130			
1,4-Dichlorobenzene	9.69	1	10		97	70	130			
4-Isopropyltoluene	10.4	1	10		104	70	133			
1,2-Dichlorobenzene	9.12	1	10		91	70	130			
n-Butylbenzene	10.5	1	10		105	68	145			
1,2-Dibromo-3-chloropropane (DBCP)	44.4	3	50		89	57	133			
1,2,4-Trichlorobenzene	9.37	2	10		94	70	130			
Naphthalene	9.19	2	10		92	26	161			
Hexachlorobutadiene	19.1	2	20		96	39	172			
1,2,3-Trichlorobenzene	9.54	2	10		95	33	166			
Surr: 1,2-Dichloroethane-d4	8.43		10		84	75	128			
Surr: Toluene-d8	9.65		10		97	80	120			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Alpha Analytical, Inc.

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Date: *11-Aug-08*

QC Summary Report

Work Order: 08072921

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

File ID: **08073055.D** Batch ID: **MS15W0730L5** Analysis Date: **07/31/2008 04:48**

Sample ID: **08072923-01AMS** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	49	2.5	50	0	98	20	137			
Chloromethane	45.6	10	50	0	91	31	148			
Vinyl chloride	52.5	2.5	50	0	105	46	138			
Chloroethane	60.6	2.5	50	0	121	34	170			
Bromomethane	43.5	10	50	0	87	20	189			
Trichlorofluoromethane	87.2	2.5	50	0	174	51	156			M1
1,1-Dichloroethene	56.6	2.5	50	0	113	66	132			
Dichloromethane	51.5	10	50	0	103	48	145			
trans-1,2-Dichloroethene	53.6	2.5	50	0	107	68	132			
Methyl tert-butyl ether (MTBE)	57.5	1.3	50	0	115	62	139			
1,1-Dichloroethane	54.3	2.5	50	0	109	70	130			
cis-1,2-Dichloroethene	56.5	2.5	50	0	113	70	130			
Bromochloromethane	52.1	2.5	50	0	104	70	130			
Chloroform	53	2.5	50	0	106	70	130			
2,2-Dichloropropane	44.7	2.5	50	0	89	50	152			
1,2-Dichloroethane	57.9	2.5	50	0	116	65	136			
1,1,1-Trichloroethane	58.4	2.5	50	0	117	67	133			
1,1-Dichloropropene	58.7	2.5	50	0	117	70	130			
Carbon tetrachloride	58.6	2.5	50	0	117	61	142			
Benzene	54.7	1.3	50	0	109	70	130			
Dibromomethane	59.6	2.5	50	0	119	69	130			
1,2-Dichloropropane	57.6	2.5	50	0	115	70	132			
Trichloroethene	52.7	2.5	50	0	105	69	130			
Bromodichloromethane	60.2	2.5	50	0	120	70	130			
cis-1,3-Dichloropropene	44.5	2.5	50	0	89	66	130			
trans-1,3-Dichloropropene	48.2	2.5	50	0	96	65	134			
1,1,2-Trichloroethane	57.7	2.5	50	0	115	67	132			
Toluene	46.5	1.3	50	0	93	67	130			
1,3-Dichloropropane	50	2.5	50	0	100	70	130			
Dibromochloromethane	47.3	2.5	50	0	95	66	130			
1,2-Dibromoethane (EDB)	105	10	100	0	105	70	130			
Tetrachloroethene	47.3	2.5	50	0	95	59	135			
1,1,1,2-Tetrachloroethane	51.1	2.5	50	0	102	70	130			
Chlorobenzene	48.7	2.5	50	0	97	70	130			
Ethylbenzene	52.4	1.3	50	0.85	103	70	130			
m,p-Xylene	51.9	1.3	50	0	104	69	130			
Bromoform	53.3	2.5	50	0	107	57	132			
Styrene	50.5	2.5	50	0	101	58	135			
o-Xylene	49.5	1.3	50	0	99	70	130			
1,1,2,2-Tetrachloroethane	49.3	2.5	50	0	99	65	137			
1,2,3-Trichloropropane	100	10	100	0	100	67	132			
Isopropylbenzene	49.5	2.5	50	0	99	70	130			
Bromobenzene	47.5	2.5	50	0	95	70	130			
n-Propylbenzene	50	2.5	50	0	100	70	130			
4-Chlorotoluene	50.4	2.5	50	0	101	70	130			
2-Chlorotoluene	50	2.5	50	0	99.9	70	130			
1,3,5-Trimethylbenzene	50.8	2.5	50	0	102	68	141			
tert-Butylbenzene	53.7	2.5	50	0	107	70	130			
1,2,4-Trimethylbenzene	50.3	2.5	50	0	101	67	146			
sec-Butylbenzene	51.4	2.5	50	0	103	70	130			
1,3-Dichlorobenzene	47.1	2.5	50	0	94	70	130			
1,4-Dichlorobenzene	47.8	2.5	50	0	96	70	130			
4-Isopropyltoluene	51.1	2.5	50	0	102	70	133			
1,2-Dichlorobenzene	45.5	2.5	50	0	91	70	130			
n-Butylbenzene	53.6	2.5	50	0	107	66	145			
1,2-Dibromo-3-chloropropane (DBCP)	241	15	250	0	96	57	137			
1,2,4-Trichlorobenzene	47.2	10	50	0	94	39	157			
Naphthalene	47.3	10	50	0	95	26	163			
Hexachlorobutadiene	97.2	10	100	0	97	35	172			
1,2,3-Trichlorobenzene	50.7	10	50	0	101	30	170			
Surr: 1,2-Dichloroethane-d4	49.3		50		99	75	128			
Surr: Toluene-d8	44.1		50		88	80	120			
Surr: 4-Bromofluorobenzene	49.2		50		98	70	130			

Alpha Analytical, Inc.

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

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

Date: *11-Aug-08*

QC Summary Report

Work Order: 08072921

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

File ID: **08073056.D** Batch ID: **MS15W0730L5** Analysis Date: **07/31/2008 05:10**

Sample ID: **08072923-01AMSD** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	51.4	2.5	50	0	103	20	137	49.02	4.7(20)	
Chloromethane	52.8	10	50	0	106	31	148	45.61	14.7(20)	
Vinyl chloride	59.5	2.5	50	0	119	46	138	52.54	12.4(20)	
Chloroethane	60.1	2.5	50	0	120	34	170	60.64	1.0(20)	
Bromomethane	63.9	10	50	0	128	20	189	43.5	38.0(20)	R5
Trichlorofluoromethane	85.3	2.5	50	0	171	51	156	87.22	2.3(20)	M1
1,1-Dichloroethene	56.1	2.5	50	0	112	66	132	56.58	0.8(20)	
Dichloromethane	51	10	50	0	102	48	145	51.49	1.0(20)	
trans-1,2-Dichloroethene	55	2.5	50	0	110	68	132	53.64	2.6(20)	
Methyl tert-butyl ether (MTBE)	58.3	1.3	50	0	117	62	139	57.47	1.4(20)	
1,1-Dichloroethane	54.9	2.5	50	0	110	70	130	54.34	1.0(20)	
cis-1,2-Dichloroethene	56.8	2.5	50	0	114	70	130	56.46	0.5(20)	
Bromochloromethane	53.7	2.5	50	0	107	70	130	52.13	2.9(20)	
Chloroform	52.8	2.5	50	0	106	70	130	53.03	0.5(20)	
2,2-Dichloropropane	44	2.5	50	0	88	50	152	44.65	1.5(20)	
1,2-Dichloroethane	56	2.5	50	0	112	65	136	57.93	3.4(20)	
1,1,1-Trichloroethane	57.8	2.5	50	0	116	67	133	58.42	1.0(20)	
1,1-Dichloropropene	59.2	2.5	50	0	118	70	130	58.71	0.8(20)	
Carbon tetrachloride	58	2.5	50	0	116	61	142	58.6	1.1(20)	
Benzene	54.3	1.3	50	0	109	70	130	54.65	0.7(20)	
Dibromomethane	59.7	2.5	50	0	119	69	130	59.56	0.2(20)	
1,2-Dichloropropane	56.8	2.5	50	0	114	70	132	57.62	1.5(20)	
Trichloroethene	52.4	2.5	50	0	105	69	130	52.7	0.5(20)	
Bromodichloromethane	59.8	2.5	50	0	120	70	130	60.18	0.7(20)	
cis-1,3-Dichloropropene	44.8	2.5	50	0	90	66	130	44.52	0.6(20)	
trans-1,3-Dichloropropene	47.1	2.5	50	0	94	65	134	48.16	2.1(20)	
1,1,2-Trichloroethane	57.7	2.5	50	0	115	67	132	57.68	0.1(20)	
Toluene	48	1.3	50	0	96	67	130	46.47	3.3(20)	
1,3-Dichloropropane	52	2.5	50	0	104	70	130	50.01	3.8(20)	
Dibromochloromethane	48.5	2.5	50	0	97	66	130	47.27	2.6(20)	
1,2-Dibromoethane (EDB)	108	10	100	0	108	70	130	105.1	2.7(20)	
Tetrachloroethene	49.5	2.5	50	0	99	59	135	47.34	4.4(20)	
1,1,1,2-Tetrachloroethane	52.7	2.5	50	0	105	70	130	51.08	3.0(20)	
Chlorobenzene	50	2.5	50	0	100	70	130	48.72	2.6(20)	
Ethylbenzene	53.4	1.3	50	0.85	105	70	130	52.39	1.9(20)	
m,p-Xylene	53.6	1.3	50	0	107	69	130	51.91	3.2(20)	
Bromoform	54.7	2.5	50	0	109	57	132	53.26	2.7(20)	
Styrene	51.3	2.5	50	0	103	58	135	50.46	1.6(20)	
o-Xylene	50.4	1.3	50	0	101	70	130	49.47	1.8(20)	
1,1,2,2-Tetrachloroethane	48.6	2.5	50	0	97	65	137	49.3	1.5(20)	
1,2,3-Trichloropropane	99.7	10	100	0	99.7	67	132	100.4	0.7(20)	
Isopropylbenzene	51.3	2.5	50	0	103	70	130	49.5	3.6(20)	
Bromobenzene	48.6	2.5	50	0	97	70	130	47.46	2.3(20)	
n-Propylbenzene	51.4	2.5	50	0	103	70	130	50.02	2.8(20)	
4-Chlorotoluene	52.2	2.5	50	0	104	70	130	50.35	3.7(20)	
2-Chlorotoluene	52.1	2.5	50	0	104	70	130	49.96	4.1(20)	
1,3,5-Trimethylbenzene	52.2	2.5	50	0	104	68	141	50.8	2.8(20)	
tert-Butylbenzene	48.8	2.5	50	0	98	70	130	53.7	9.6(20)	
1,2,4-Trimethylbenzene	51.4	2.5	50	0	103	67	146	50.3	2.2(20)	
sec-Butylbenzene	52.9	2.5	50	0	106	70	130	51.38	2.8(20)	
1,3-Dichlorobenzene	48.5	2.5	50	0	97	70	130	47.08	3.0(20)	
1,4-Dichlorobenzene	48.8	2.5	50	0	98	70	130	47.77	2.0(20)	
4-Isopropyltoluene	52.8	2.5	50	0	106	70	133	51.11	3.2(20)	
1,2-Dichlorobenzene	46.3	2.5	50	0	93	70	130	45.5	1.7(20)	
n-Butylbenzene	54.4	2.5	50	0	109	66	145	53.56	1.5(20)	
1,2-Dibromo-3-chloropropane (DBCP)	239	15	250	0	96	57	137	240.9	0.7(20)	
1,2,4-Trichlorobenzene	49.8	10	50	0	99.6	39	157	47.19	5.3(20)	
Naphthalene	49.1	10	50	0	98	26	163	47.31	3.6(20)	
Hexachlorobutadiene	103	10	100	0	103	35	172	97.22	5.6(20)	
1,2,3-Trichlorobenzene	53	10	50	0	106	30	170	50.72	4.5(20)	
Surr: 1,2-Dichloroethane-d4	47.1		50		94	75	128			
Surr: Toluene-d8	45.7		50		91	80	120			
Surr: 4-Bromofluorobenzene	50		50		100	70	130			

Alpha Analytical, Inc.

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

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

Date: *11-Aug-08*

QC Summary Report

Work Order: 08072921

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.

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

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026282 Job : G005862/JPL Groundwater Monitoring

CHAIN-OF-CUSTODY RECORD

CA AMENDED

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

Report Attention	Phone Number	EMail Address
David Conner	(619) 574-4827 x	connerd@battelle.org

WorkOrder : BMI08072921

Report Due By : 5:00 PM On : 12-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	29-Jul-08	31-Jul-08

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_TIC_W	VOC_W				Sample Remarks
BMI08072921-01A	MW-20-5	AQ	07/25/08 07:47	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072921-02A	MW-20-4	AQ	07/25/08 08:26	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				Level IV QC.
BMI08072921-03A	MW-20-3	AQ	07/25/08 08:56	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072921-04A	MW-20-2	AQ	07/25/08 09:23	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072921-05A	MW-20-1	AQ	07/25/08 09:50	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072921-06A	EB-05-7/25/08	AQ	07/25/08 09:38	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria				
BMI08072921-07A	TB-05-7/25/08	AQ	07/25/08 00:00	1	0	10				VOC by 524 Criteria	VOC by 524 Criteria				Reno Trip Blank 6/24/08. One voa rec'd only.

Comments: No security seals. Frozen ice. Client provided Temp Blank rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Amended 7/31/08 13:50 to add TICs due to project requirements.KM :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	7/31/08 1350

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

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026282 Job : G005862/JPL Groundwater Monitoring

CHAIN-OF-CUSTODY RECORD

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

CA

WorkOrder : BMI08072921

Report Due By : 5:00 PM On : 12-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	29-Jul-08	**29-Jul-08**

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W	Sample Remarks
BMI08072921-01A	MW-20-5	AQ	07/25/08 07:47	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	
BMI08072921-02A	MW-20-4	AQ	07/25/08 08:26	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	Level IV QC.
BMI08072921-03A	MW-20-3	AQ	07/25/08 08:56	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	
BMI08072921-04A	MW-20-2	AQ	07/25/08 09:23	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	
BMI08072921-05A	MW-20-1	AQ	07/25/08 09:50	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	
BMI08072921-06A	EB-05-7/25/08	AQ	07/25/08 09:38	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	
BMI08072921-07A	TB-05-7/25/08	AQ	07/25/08 00:00	1	0	10				VOC by 524 Criteria	Reno Trip Blank 6/24/08. One voa rec'd only.

Comments: No security seals. Frozen ice. Client provided Temp Blank rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	**Alpha Analytical, Inc.**	7/29/08 1025

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

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

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

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

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

026282

Page # 1 of 1

Client Name	P.O. #	Job #
DAVID CONNER	218017	G005862
Address: 3990 OLD TOWN AVE C-205	EMail Address	
City, State, Zip: SAN DIEGO, CA 92110	Phone # 619-726-7311	Fax #

Analyses Required: VOC (624.2); TOTAL Cr (200.8); Cl04 - (314.0)

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (624.2)	TOTAL Cr (200.8)	Cl04 - (314.0)	REMARKS
747	7/25/08	AQ	BM108072921-01	MW-20-5	NORM		5	X	X	X	
826			02	MW-20-4				X	X	X	QC LEVEL III
856			03	MW-20-3				X	X	X	
923			04	MW-20-2				X	X	X	
950			05	MW-20-1				X	X	X	
938			06	EB-05-7/25/08				X	X	X	EQUIP. BLANK
—			07	TB-05-7/25/08			2	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by	MARCO MENDOZA	INSIGHT EEI	7/25/08	1300
Received by	K Murray	AAI	7/29/08	0950
Relinquished by				
Received by				
Relinquished by				
Received by				

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

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

Alpha Analytical, Inc.

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

Date: *07-Aug-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08072923 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08072923-01A	MW-3-4	Aqueous
08072923-02A	MW-3-3	Aqueous
08072923-03A	MW-3-2	Aqueous

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-3-4**						
Lab ID :	BMI08072923-01A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/31/08
Client ID :	**MW-3-3**						
Lab ID :	BMI08072923-02A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/31/08
Client ID :	**MW-3-2**						
Lab ID :	BMI08072923-03A	* * * None Found * * *	ND	2.0 µg/L	07/29/08	07/28/08	07/31/08

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/11/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072923-01A
Client I.D. Number: MW-3-4

Sampled: 07/28/08
Received: 07/29/08
Analyzed: 07/31/08

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	0.85	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	J	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	108	(75-128)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(80-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(80-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

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

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/11/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08072923-02A
Client I.D. Number: MW-3-3

Sampled: 07/28/08
Received: 07/29/08
Analyzed: 07/31/08

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	J	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	110	(75-128)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	96	(80-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(80-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

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

Roger Scholl Randy Gardner Walter Hinchman

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

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8/11/08
Report Date

Alpha Analytical, Inc.

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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: BMI08072923-03A
Client I.D. Number: MW-3-2

Sampled: 07/28/08
Received: 07/29/08
Analyzed: 07/31/08

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	J	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	0.72		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	0.86		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	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	109	(75-128)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(80-120)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	106	(80-120)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

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

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8/11/08
Report Date

Alpha Analytical, Inc.

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

VOC Sample Preservation Report

Work Order: BMI08072923 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08072923-01A	MW-3-4	Aqueous	2
08072923-02A	MW-3-3	Aqueous	2
08072923-03A	MW-3-2	Aqueous	2

8/11/08

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 : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-3-4**					
Lab ID :	BMI08072923-01A	Specific Conductance (at 25°C)	450	10 µS/cm	07/28/08	07/29/08
Client ID :	**MW-3-3**					
Lab ID :	BMI08072923-02A	Specific Conductance (at 25°C)	410	10 µS/cm	07/28/08	07/29/08
Client ID :	**MW-3-2**					
Lab ID :	BMI08072923-03A	Specific Conductance (at 25°C)	520	10 µS/cm	07/28/08	07/29/08

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

8/11/08
Report Date

Alpha Analytical, Inc.

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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 : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-3-4**					
Lab ID :	BMI08072923-01A	Perchlorate	ND	1.00 µg/L	07/28/08	07/29/08
Client ID :	**MW-3-3**					
Lab ID :	BMI08072923-02A	Perchlorate	ND	1.00 µg/L	07/28/08	07/29/08
Client ID :	**MW-3-2**					
Lab ID :	BMI08072923-03A	Perchlorate	206	5.00 µg/L	07/28/08	07/31/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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8/11/08
Report Date

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

Date: 07-Aug-08

QC Summary Report

Work Order: 08072923

Method Blank Type **MBLK** Test Code: _____

File ID: **08073038.D** Batch ID: **MS15W0730L5** Analysis Date: **07/30/2008 22:29**

Sample ID: **MBLK MS15W0730L** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.33		10		93	75	128			
Surr: Toluene-d8	10.2		10		102	80	120			

Alpha Analytical, Inc.

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

Date: 07-Aug-08

QC Summary Report

Work Order: 08072923

Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Laboratory Control Spike Type **LCS** Test Code: _____

File ID: **08073035.D** Batch ID: **MS15W0730L5** Analysis Date: **07/30/2008 21:22**

Sample ID: **LCS MS15W0730L** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/30/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	6.4	1	10		64	29	133			
Chloromethane	8.85	2	10		89	44	140			
Vinyl chloride	9.94	1	10		99	70	130			
Chloroethane	10.2	1	10		102	62	158			
Bromomethane	11.4	2	10		114	20	179			
Trichlorofluoromethane	11.7	1	10		117	63	156			
1,1-Dichloroethene	10.8	1	10		108	70	130			
Dichloromethane	10	2	10		100	70	130			
trans-1,2-Dichloroethene	11	1	10		110	70	130			
Methyl tert-butyl ether (MTBE)	11.2	0.5	10		112	70	130			
1,1-Dichloroethane	10.5	1	10		105	70	130			
cis-1,2-Dichloroethene	11.5	1	10		115	70	130			
Bromochloromethane	11.1	1	10		111	70	130			
Chloroform	10.1	1	10		101	80	120			
2,2-Dichloropropane	9.58	1	10		96	65	152			
1,2-Dichloroethane	10.2	1	10		102	70	130			
1,1,1-Trichloroethane	10.7	1	10		107	70	130			
1,1-Dichloropropene	11.1	1	10		111	70	130			
Carbon tetrachloride	10.7	1	10		107	70	130			
Benzene	10.6	0.5	10		106	70	130			
Dibromomethane	11.4	1	10		114	70	130			
1,2-Dichloropropane	10.9	1	10		109	70	130			
Trichloroethene	11.4	1	10		114	70	130			
Bromodichloromethane	11.3	1	10		113	70	130			
cis-1,3-Dichloropropene	9.57	1	10		96	70	130			
trans-1,3-Dichloropropene	9.2	1	10		92	68	134			
1,1,2-Trichloroethane	11.2	1	10		112	70	130			
Toluene	10.2	0.5	10		102	70	130			
1,3-Dichloropropane	10.8	1	10		108	70	130			
Dibromochloromethane	10.2	1	10		102	68	130			
1,2-Dibromoethane (EDB)	22.9	2	20		114	70	130			
Tetrachloroethene	10.7	1	10		107	70	130			
1,1,1,2-Tetrachloroethane	10.8	1	10		108	70	130			
Chlorobenzene	10.4	1	10		104	70	130			
Ethylbenzene	10.5	0.5	10		105	70	130			
m,p-Xylene	11.3	0.5	10		113	70	130			
Bromoform	11.1	1	10		111	59	132			
Styrene	10.5	1	10		105	70	130			
o-Xylene	10.5	0.5	10		105	70	130			
1,1,2,2-Tetrachloroethane	8.65	1	10		87	65	135			
1,2,3-Trichloropropane	19.3	2	20		97	68	132			
Isopropylbenzene	10.5	1	10		105	70	130			
Bromobenzene	9.95	1	10		100	70	130			
n-Propylbenzene	10.6	1	10		106	70	130			
4-Chlorotoluene	10.5	1	10		105	70	130			
2-Chlorotoluene	10.5	1	10		105	70	130			
1,3,5-Trimethylbenzene	10.4	1	10		104	70	141			
tert-Butylbenzene	9.68	1	10		97	70	130			
1,2,4-Trimethylbenzene	10.4	1	10		104	67	146			
sec-Butylbenzene	10.5	1	10		105	70	130			
1,3-Dichlorobenzene	9.68	1	10		97	70	130			
1,4-Dichlorobenzene	9.69	1	10		97	70	130			
4-Isopropyltoluene	10.4	1	10		104	70	133			
1,2-Dichlorobenzene	9.12	1	10		91	70	130			
n-Butylbenzene	10.5	1	10		105	68	145			
1,2-Dibromo-3-chloropropane (DBCP)	44.4	3	50		89	57	133			
1,2,4-Trichlorobenzene	9.37	2	10		94	70	130			
Naphthalene	9.19	2	10		92	26	161			
Hexachlorobutadiene	19.1	2	20		96	39	172			
1,2,3-Trichlorobenzene	9.54	2	10		95	33	166			
Surr: 1,2-Dichloroethane-d4	8.43		10		84	75	128			
Surr: Toluene-d8	9.65		10		97	80	120			
Surr: 4-Bromofluorobenzene	10.1		10		101	70	130			

Alpha Analytical, Inc.

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

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

Date: 07-Aug-08

QC Summary Report

Work Order: 08072923

Sample Matrix Spike Type **MS** Test Code: _____

File ID: **08073055.D** Batch ID: **MS15W0730L5** Analysis Date: **07/31/2008 04:48**

Sample ID: **08072923-01AMS** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	49	2.5	50	0	98	20	137			
Chloromethane	45.6	10	50	0	91	31	148			
Vinyl chloride	52.5	2.5	50	0	105	46	138			
Chloroethane	60.6	2.5	50	0	121	34	170			
Bromomethane	43.5	10	50	0	87	20	189			
Trichlorofluoromethane	87.2	2.5	50	0	174	51	156			M1
1,1-Dichloroethene	56.6	2.5	50	0	113	66	132			
Dichloromethane	51.5	10	50	0	103	48	145			
trans-1,2-Dichloroethene	53.6	2.5	50	0	107	68	132			
Methyl tert-butyl ether (MTBE)	57.5	1.3	50	0	115	62	139			
1,1-Dichloroethane	54.3	2.5	50	0	109	70	130			
cis-1,2-Dichloroethene	56.5	2.5	50	0	113	70	130			
Bromochloromethane	52.1	2.5	50	0	104	70	130			
Chloroform	53	2.5	50	0	106	70	130			
2,2-Dichloropropane	44.7	2.5	50	0	89	50	152			
1,2-Dichloroethane	57.9	2.5	50	0	116	65	136			
1,1,1-Trichloroethane	58.4	2.5	50	0	117	67	133			
1,1-Dichloropropene	58.7	2.5	50	0	117	70	130			
Carbon tetrachloride	58.6	2.5	50	0	117	61	142			
Benzene	54.7	1.3	50	0	109	70	130			
Dibromomethane	59.6	2.5	50	0	119	69	130			
1,2-Dichloropropane	57.6	2.5	50	0	115	70	132			
Trichloroethene	52.7	2.5	50	0	105	69	130			
Bromodichloromethane	60.2	2.5	50	0	120	70	130			
cis-1,3-Dichloropropene	44.5	2.5	50	0	89	66	130			
trans-1,3-Dichloropropene	48.2	2.5	50	0	96	65	134			
1,1,2-Trichloroethane	57.7	2.5	50	0	115	67	132			
Toluene	46.5	1.3	50	0	93	67	130			
1,3-Dichloropropane	50	2.5	50	0	100	70	130			
Dibromochloromethane	47.3	2.5	50	0	95	66	130			
1,2-Dibromoethane (EDB)	105	10	100	0	105	70	130			
Tetrachloroethene	47.3	2.5	50	0	95	59	135			
1,1,1,2-Tetrachloroethane	51.1	2.5	50	0	102	70	130			
Chlorobenzene	48.7	2.5	50	0	97	70	130			
Ethylbenzene	52.4	1.3	50	0.85	103	70	130			
m,p-Xylene	51.9	1.3	50	0	104	69	130			
Bromoform	53.3	2.5	50	0	107	57	132			
Styrene	50.5	2.5	50	0	101	58	135			
o-Xylene	49.5	1.3	50	0	99	70	130			
1,1,2,2-Tetrachloroethane	49.3	2.5	50	0	99	65	137			
1,2,3-Trichloropropane	100	10	100	0	100	67	132			
Isopropylbenzene	49.5	2.5	50	0	99	70	130			
Bromobenzene	47.5	2.5	50	0	95	70	130			
n-Propylbenzene	50	2.5	50	0	100	70	130			
4-Chlorotoluene	50.4	2.5	50	0	101	70	130			
2-Chlorotoluene	50	2.5	50	0	99.9	70	130			
1,3,5-Trimethylbenzene	50.8	2.5	50	0	102	68	141			
tert-Butylbenzene	53.7	2.5	50	0	107	70	130			
1,2,4-Trimethylbenzene	50.3	2.5	50	0	101	67	146			
sec-Butylbenzene	51.4	2.5	50	0	103	70	130			
1,3-Dichlorobenzene	47.1	2.5	50	0	94	70	130			
1,4-Dichlorobenzene	47.8	2.5	50	0	96	70	130			
4-Isopropyltoluene	51.1	2.5	50	0	102	70	133			
1,2-Dichlorobenzene	45.5	2.5	50	0	91	70	130			
n-Butylbenzene	53.6	2.5	50	0	107	66	145			
1,2-Dibromo-3-chloropropane (DBCP)	241	15	250	0	96	57	137			
1,2,4-Trichlorobenzene	47.2	10	50	0	94	39	157			
Naphthalene	47.3	10	50	0	95	26	163			
Hexachlorobutadiene	97.2	10	100	0	97	35	172			
1,2,3-Trichlorobenzene	50.7	10	50	0	101	30	170			
Surr: 1,2-Dichloroethane-d4	49.3		50		99	75	128			
Surr: Toluene-d8	44.1		50		88	80	120			
Surr: 4-Bromofluorobenzene	49.2		50		98	70	130			

Alpha Analytical, Inc.

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

Date: 07-Aug-08

QC Summary Report

Work Order: 08072923

Sample Matrix Spike Duplicate Type **MSD** Test Code: _____

File ID: **08073056.D** Batch ID: **MS15W0730L5** Analysis Date: **07/31/2008 05:10**

Sample ID: **08072923-01AMSD** Units : **µg/L** Run ID: **MSD_15_080730A** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	51.4	2.5	50	0	103	20	137	49.02	4.7(20)	
Chloromethane	52.8	10	50	0	106	31	148	45.61	14.7(20)	
Vinyl chloride	59.5	2.5	50	0	119	46	138	52.54	12.4(20)	
Chloroethane	60.1	2.5	50	0	120	34	170	60.64	1.0(20)	
Bromomethane	63.9	10	50	0	128	20	189	43.5	38.0(20)	R5
Trichlorofluoromethane	85.3	2.5	50	0	171	51	156	87.22	2.3(20)	M1
1,1-Dichloroethene	56.1	2.5	50	0	112	66	132	56.58	0.8(20)	
Dichloromethane	51	10	50	0	102	48	145	51.49	1.0(20)	
trans-1,2-Dichloroethene	55	2.5	50	0	110	68	132	53.64	2.6(20)	
Methyl tert-butyl ether (MTBE)	58.3	1.3	50	0	117	62	139	57.47	1.4(20)	
1,1-Dichloroethane	54.9	2.5	50	0	110	70	130	54.34	1.0(20)	
cis-1,2-Dichloroethene	56.8	2.5	50	0	114	70	130	56.46	0.5(20)	
Bromochloromethane	53.7	2.5	50	0	107	70	130	52.13	2.9(20)	
Chloroform	52.8	2.5	50	0	106	70	130	53.03	0.5(20)	
2,2-Dichloropropane	44	2.5	50	0	88	50	152	44.65	1.5(20)	
1,2-Dichloroethane	56	2.5	50	0	112	65	136	57.93	3.4(20)	
1,1,1-Trichloroethane	57.8	2.5	50	0	116	67	133	58.42	1.0(20)	
1,1-Dichloropropene	59.2	2.5	50	0	118	70	130	58.71	0.8(20)	
Carbon tetrachloride	58	2.5	50	0	116	61	142	58.6	1.1(20)	
Benzene	54.3	1.3	50	0	109	70	130	54.65	0.7(20)	
Dibromomethane	59.7	2.5	50	0	119	69	130	59.56	0.2(20)	
1,2-Dichloropropane	56.8	2.5	50	0	114	70	132	57.62	1.5(20)	
Trichloroethene	52.4	2.5	50	0	105	69	130	52.7	0.5(20)	
Bromodichloromethane	59.8	2.5	50	0	120	70	130	60.18	0.7(20)	
cis-1,3-Dichloropropene	44.8	2.5	50	0	90	66	130	44.52	0.6(20)	
trans-1,3-Dichloropropene	47.1	2.5	50	0	94	65	134	48.16	2.1(20)	
1,1,2-Trichloroethane	57.7	2.5	50	0	115	67	132	57.68	0.1(20)	
Toluene	48	1.3	50	0	96	67	130	46.47	3.3(20)	
1,3-Dichloropropane	52	2.5	50	0	104	70	130	50.01	3.8(20)	
Dibromochloromethane	48.5	2.5	50	0	97	66	130	47.27	2.6(20)	
1,2-Dibromoethane (EDB)	108	10	100	0	108	70	130	105.1	2.7(20)	
Tetrachloroethene	49.5	2.5	50	0	99	59	135	47.34	4.4(20)	
1,1,1,2-Tetrachloroethane	52.7	2.5	50	0	105	70	130	51.08	3.0(20)	
Chlorobenzene	50	2.5	50	0	100	70	130	48.72	2.6(20)	
Ethylbenzene	53.4	1.3	50	0.85	105	70	130	52.39	1.9(20)	
m,p-Xylene	53.6	1.3	50	0	107	69	130	51.91	3.2(20)	
Bromoform	54.7	2.5	50	0	109	57	132	53.26	2.7(20)	
Styrene	51.3	2.5	50	0	103	58	135	50.46	1.6(20)	
o-Xylene	50.4	1.3	50	0	101	70	130	49.47	1.8(20)	
1,1,2,2-Tetrachloroethane	48.6	2.5	50	0	97	65	137	49.3	1.5(20)	
1,2,3-Trichloropropane	99.7	10	100	0	99.7	67	132	100.4	0.7(20)	
Isopropylbenzene	51.3	2.5	50	0	103	70	130	49.5	3.6(20)	
Bromobenzene	48.6	2.5	50	0	97	70	130	47.46	2.3(20)	
n-Propylbenzene	51.4	2.5	50	0	103	70	130	50.02	2.8(20)	
4-Chlorotoluene	52.2	2.5	50	0	104	70	130	50.35	3.7(20)	
2-Chlorotoluene	52.1	2.5	50	0	104	70	130	49.96	4.1(20)	
1,3,5-Trimethylbenzene	52.2	2.5	50	0	104	68	141	50.8	2.8(20)	
tert-Butylbenzene	48.8	2.5	50	0	98	70	130	53.7	9.6(20)	
1,2,4-Trimethylbenzene	51.4	2.5	50	0	103	67	146	50.3	2.2(20)	
sec-Butylbenzene	52.9	2.5	50	0	106	70	130	51.38	2.8(20)	
1,3-Dichlorobenzene	48.5	2.5	50	0	97	70	130	47.08	3.0(20)	
1,4-Dichlorobenzene	48.8	2.5	50	0	98	70	130	47.77	2.0(20)	
4-Isopropyltoluene	52.8	2.5	50	0	106	70	133	51.11	3.2(20)	
1,2-Dichlorobenzene	46.3	2.5	50	0	93	70	130	45.5	1.7(20)	
n-Butylbenzene	54.4	2.5	50	0	109	66	145	53.56	1.5(20)	
1,2-Dibromo-3-chloropropane (DBCP)	239	15	250	0	96	57	137	240.9	0.7(20)	
1,2,4-Trichlorobenzene	49.8	10	50	0	99.6	39	157	47.19	5.3(20)	
Naphthalene	49.1	10	50	0	98	26	163	47.31	3.6(20)	
Hexachlorobutadiene	103	10	100	0	103	35	172	97.22	5.6(20)	
1,2,3-Trichlorobenzene	53	10	50	0	106	30	170	50.72	4.5(20)	
Surr: 1,2-Dichloroethane-d4	47.1		50		94	75	128			
Surr: Toluene-d8	45.7		50		91	80	120			
Surr: 4-Bromofluorobenzene	50		50		100	70	130			

Alpha Analytical, Inc.

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

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

Date: *07-Aug-08*

QC Summary Report

Work Order: 08072923

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.

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

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

Alpha Analytical, Inc.

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Date: *06-Aug-08*

QC Summary Report

Work Order: 08072923

Method Blank

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

File ID: **14** Batch ID: **20331** Analysis Date: **07/29/2008 15:22**

Sample ID: **MBLK-20331** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

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

Laboratory Fortified Blank

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

File ID: **15** Batch ID: **20331** Analysis Date: **07/29/2008 15:40**

Sample ID: **LFB-20331** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	22.8	2	25		91	85	115			

Sample Matrix Spike

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

File ID: **19** Batch ID: **20331** Analysis Date: **07/29/2008 16:54**

Sample ID: **08072921-02ALFM** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	48.5	2	25	24.18	97	80	120			

Sample Matrix Spike Duplicate

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

File ID: **20** Batch ID: **20331** Analysis Date: **07/29/2008 17:12**

Sample ID: **08072921-02ALFMD** Units : **µg/L** Run ID: **IC_3_080729A** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Perchlorate	47.3	2	25	24.18	92	80	120	48.47	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.

Alpha Analytical, Inc.

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Date: *06-Aug-08*

QC Summary Report

Work Order: 08072923

Method Blank

Type **MBLK** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0729CNA** Analysis Date: **07/29/2008 00:00**

Sample ID: **MBLK-W0729CNA** Units : **µS/cm** Run ID: **WETLAB_080729I** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 120.1 / SM2510B / SW9050A**

File ID: Batch ID: **W0729CNA** Analysis Date: **07/29/2008 00:00**

Sample ID: **LCS-W0729CNA** Units : **µS/cm** Run ID: **WETLAB_080729I** Prep Date: **07/29/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Specific Conductance (at 25°C)	1430	10	1410		101	98	102			

Comments:

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

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/29/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-3-4**					
Lab ID :	BMI08072923-01A	Chromium (Cr)	ND	0.0050 mg/L	07/28/08	08/01/08
Client ID :	**MW-3-3**					
Lab ID :	BMI08072923-02A	Chromium (Cr)	ND	0.0050 mg/L	07/28/08	08/01/08
Client ID :	**MW-3-2**					
Lab ID :	BMI08072923-03A	Chromium (Cr)	ND	0.0050 mg/L	07/28/08	08/01/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / 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.

8/11/08
Report Date

Alpha Analytical, Inc.

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

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

Date: *07-Aug-08*

QC Summary Report

Work Order: 08072923

Method Blank

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

File ID: **073108.B\145SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 02:42**

Sample ID: **MB-20344** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

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

Laboratory Control Spike

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

File ID: **073108.B\149_LCS.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:05**

Sample ID: **LCS-20344** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.052	0.005	0.05		104	85	115			

Sample Matrix Spike

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

File ID: **073108.B\152SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:22**

Sample ID: **08072923-01AMS** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0518	0.005	0.05	0	104	70	130			

Sample Matrix Spike Duplicate

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

File ID: **073108.B\158SMPL.D** Batch ID: **20344K** Analysis Date: **08/01/2008 03:55**

Sample ID: **08072923-01AMSD** Units : **mg/L** Run ID: **ICP/MS_080731E** Prep Date: **07/31/2008**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Chromium (Cr)	0.0534	0.005	0.05	0	107	70	130	0.05184	2.9(20)	

Comments:

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218017

Client's COC # : 026273 Job : G005862/JPL Groundwater Monitoring

CHAIN-OF-CUSTODY RECORD

CA AMENDED

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

Report Attention	Phone Number	EMail Address
David Conner	(619) 574-4827 x	connerd@battelle.org

WorkOrder : BMI08072923

Report Due By : 5:00 PM On : 12-Aug-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	29-Jul-08	31-Jul-08

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_TIC_W	VOC_W	Sample Remarks
BMI08072923-01A	MW-3-4	AQ	07/28/08 11:12	10	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria	MS/MSD
BMI08072923-02A	MW-3-3	AQ	07/28/08 11:59	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria	
BMI08072923-03A	MW-3-2	AQ	07/28/08 12:28	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria	

Comments: No security seals. Frozen ice. Client provided Temp Blank rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Amended 7/31/08 13:50 to add TICs due to project requirements.KM :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	Alpha Analytical, Inc.	7/31/08 1350

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

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

CHAIN-OF-CUSTODY RECORD

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

Report Attention	Phone Number	EMail Address
David Conner	(626) 345-0598 x	connerd@battelle.org

CA

WorkOrder : BMI08072923

Report Due By : 5:00 PM On : 12-Aug-08

EDD Required : **Yes**

Sampled by : Client

PO : 218017

Client's COC # : 026273 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	29-Jul-08	**29-Jul-08**

QC Level : S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 314_W	CONDUCTIVITY	METALS_DW	VOC_W	Sample Remarks
BMI08072923-01A	MW-3-4	AQ	07/28/08 11:12	10	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	MS/MSD
BMI08072923-02A	MW-3-3	AQ	07/28/08 11:59	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	
BMI08072923-03A	MW-3-2	AQ	07/28/08 12:28	5	0	10	Perchlorate	Perchlorate	Cr	VOC by 524 Criteria	

Comments: No security seals. Frozen ice. Client provided Temp Blank rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	**Alpha Analytical, Inc.**	7/29/08 1115

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

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

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

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

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

026275

Page # 1 of 1

Client Name	P.O. #	Job #
DAVID CONNER	218017	G005862
Address 3990 OLD TOWN AVE, C-205	**EMail Address**	
City, State, Zip SAN DIEGO, CA 92110	**Phone #** 619-726-7311	**Fax #**

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TOTAL Cr (200.8)	ClO4 - (314.0)					REMARKS
1112	7/28/08	AQ	BM108072923-01	MW-3-4	NORM		~~5~~ 10 (VOA)	X	X	X					MS/MSD
1159			02	MW-3-3			5	X	X	X					
1228			03	MW-3-2			5	X	X	X					

Analyses Required

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROGDON	INSIGHT ECC	07/28/08	1400
Received by	Kmurray	K Murray	AAI	7/29/08	1100
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *11-Aug-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08073040 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08073040-01A	MW-23-4	Aqueous
08073040-02A	MW-23-3	Aqueous
08073040-03A	MW-23-2	Aqueous
08073040-04A	MW-23-1	Aqueous
08073040-05A	EB-07-07/29/08	Aqueous
08073040-06A	TB-07-07/29/08	Aqueous

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-23-3**						
Lab ID :	BMI08073040-02A	* * * None Found * * *	ND	2.0 µg/L	07/30/08	07/29/08	08/05/08
Client ID :	**MW-23-2**						
Lab ID :	BMI08073040-03A	* * * None Found * * *	ND	2.0 µg/L	07/30/08	07/29/08	08/05/08
Client ID :	**MW-23-1**						
Lab ID :	BMI08073040-04A	* * * None Found * * *	ND	2.0 µg/L	07/30/08	07/29/08	08/05/08
Client ID :	**EB-07-07/29/08**						
Lab ID :	BMI08073040-05A	* * * None Found * * *	ND	2.0 µg/L	07/30/08	07/29/08	08/05/08
Client ID :	**TB-07-07/29/08**						
Lab ID :	BMI08073040-06A	* * * None Found * * *	ND	2.0 µg/L	07/30/08	07/29/08	08/05/08

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

Roger Scholl Randy Gardner Walter Hinchman

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

8/12/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08073040-02A
Client I.D. Number: MW-23-3

Sampled: 07/29/08
Received: 07/30/08
Analyzed: 08/05/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	117	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	97	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

8/12/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08073040-03A
Client I.D. Number: MW-23-2

Sampled: 07/29/08
Received: 07/30/08
Analyzed: 08/05/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.51	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.72	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	117	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	98	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

8/12/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08073040-04A
Client I.D. Number: MW-23-1

Sampled: 07/29/08
Received: 07/30/08
Analyzed: 08/05/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	0.60	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.3	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	119	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	97	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	0.93	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

8/12/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08073040-05A
Client I.D. Number: EB-07-07/29/08

Sampled: 07/29/08
Received: 07/30/08
Analyzed: 08/05/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	109	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

8/12/08
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

Battelle Memorial Institute
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: BMI08073040-06A
Client I.D. Number: TB-07-07/29/08

Sampled: 07/29/08
Received: 07/30/08
Analyzed: 08/05/08

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	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	107	(75-128)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(80-120)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(80-120)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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VOC Sample Preservation Report

Work Order: BMI08073040 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08073040-02A	MW-23-3	Aqueous	2
08073040-03A	MW-23-2	Aqueous	2
08073040-04A	MW-23-1	Aqueous	2
08073040-05A	EB-07-07/29/08	Aqueous	2
08073040-06A	TB-07-07/29/08	Aqueous	2

8/12/08

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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 : 07/30/08

Job#: G005862/JPL Groundwater Monitoring

Specific Conductance at 25°C
EPA Method 120.1 / SM2510B / SW9050A

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-23-3**					
Lab ID :	BMI08073040-02A	Specific Conductance (at 25°C)	370	10 µS/cm	07/29/08	07/30/08
Client ID :	**MW-23-2**					
Lab ID :	BMI08073040-03A	Specific Conductance (at 25°C)	940	10 µS/cm	07/29/08	07/30/08
Client ID :	**MW-23-1**					
Lab ID :	BMI08073040-04A	Specific Conductance (at 25°C)	1,300	10 µS/cm	07/29/08	07/30/08
Client ID :	**EB-07-07/29/08**					
Lab ID :	BMI08073040-05A	Specific Conductance (at 25°C)	ND	10 µS/cm	07/29/08	07/30/08

ND = Not Detected

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

8/12/08
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 : 07/30/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-23-3**					
Lab ID :	BMI08073040-02A	Perchlorate	ND	1.00 µg/L	07/29/08	07/31/08
Client ID :	**MW-23-2**					
Lab ID :	BMI08073040-03A	Perchlorate	3.77	1.00 µg/L	07/29/08	07/31/08
Client ID :	**MW-23-1**					
Lab ID :	BMI08073040-04A	Perchlorate	2.16	1.00 µg/L	07/29/08	07/31/08
Client ID :	**EB-07-07/29/08**					
Lab ID :	BMI08073040-05A	Perchlorate	ND	1.00 µg/L	07/29/08	07/31/08

ND = Not Detected

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ANALYTICAL REPORT

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Columbus, OH 43201

Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 07/30/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-23-4**					
Lab ID :	BMI08073040-01A	Chromium (Cr)	ND	0.0050 mg/L	07/29/08	08/07/08
Client ID :	**MW-23-3**					
Lab ID :	BMI08073040-02A	Chromium (Cr)	ND	0.0050 mg/L	07/29/08	08/07/08
Client ID :	**MW-23-2**					
Lab ID :	BMI08073040-03A	Chromium (Cr)	ND	0.0050 mg/L	07/29/08	08/07/08
Client ID :	**MW-23-1**					
Lab ID :	BMI08073040-04A	Chromium (Cr)	ND	0.0050 mg/L	07/29/08	08/07/08
Client ID :	**EB-07-07/29/08**					
Lab ID :	BMI08073040-05A	Chromium (Cr)	ND	0.0050 mg/L	07/29/08	08/07/08

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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