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 X NV ___ WA ___ ID ___ OR ___ OTHER ___

026303

Page # 1 of 1

Client Name	P.O. #	Job #
DAVID CONNER	218013	6005862
Address	**EMail Address**	
3990 OLD TOWN AVE. C-205		
City, State, Zip	**Phone #**	**Fax #**
SAN DIEGO, CA 92110	619-726-7311	

Analyses Required: LOC (524.2); TOTAL Cr (200.8); ClO4 (314.0)

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	LOC (524.2)	TOTAL Cr (200.8)	ClO4 (314.0)	REMARKS
0840	11/06/08	AQ	BMI0811075K-01	MW-25-5			5	X	X	X	
0913			-02	MW-25-4				X	X	X	one vca vial broken
0945			-03	MW-25-3				X	X	X	
1015			-04	MW-25-2				X	X	X	
1044			-05	MW-25-1				X	X	X	
1035			-06	EB-13-11/06/08				X	X	X	EQUIPMENT BLANK
—			-07	TB-13-11/06/08			1	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BRODDON	INSIGHT	11/06/08	1300
Received by	Jane Dickinson	Jane Dickinson	Alpha	11/7/08	1122
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: *21-Nov-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08111104 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08111104-01A	MW-26-2	Aqueous
08111104-02A	MW-26-1	Aqueous
08111104-03A	EB-14-11/07/08	Aqueous
08111104-04A	TB-14-11/07/08	Aqueous
08111104-05A	MW-23-5	Aqueous
08111104-06A	MW-23-4	Aqueous
08111104-07A	MW-23-3	Aqueous
08111104-08A	MW-23-2	Aqueous
08111104-09A	MW-23-1	Aqueous
08111104-10A	EB-15-11/10/08	Aqueous
08111104-11A	TB-15-11/10/08	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-26-2**						
Lab ID :	BMI08111104-01A	*** None Found ***	ND	2.0 µg/L	11/11/08	11/07/08	11/18/08
Client ID :	**MW-26-1**						
Lab ID :	BMI08111104-02A	*** None Found ***	ND	2.0 µg/L	11/11/08	11/07/08	11/18/08
Client ID :	**EB-14-11/07/08**						
Lab ID :	BMI08111104-03A	*** None Found ***	ND	2.0 µg/L	11/11/08	11/07/08	11/17/08
Client ID :	**TB-14-11/07/08**						
Lab ID :	BMI08111104-04A	*** None Found ***	ND	2.0 µg/L	11/11/08	11/07/08	11/17/08
Client ID :	**MW-23-5**						
Lab ID :	BMI08111104-05A	Sulfur Dioxide	18	2.0 µg/L	11/11/08	11/10/08	11/18/08
Client ID :	**MW-23-4**						
Lab ID :	BMI08111104-06A	Sulfur Dioxide	9.4	2.0 µg/L	11/11/08	11/10/08	11/18/08
Client ID :	**MW-23-3**						
Lab ID :	BMI08111104-07A	Sulfur Dioxide	7.2	2.0 µg/L	11/11/08	11/10/08	11/18/08
Client ID :	**MW-23-2**						
Lab ID :	BMI08111104-08A	Sulfur Dioxide	2.7	2.0 µg/L	11/11/08	11/10/08	11/18/08
Client ID :	**MW-23-1**						
Lab ID :	BMI08111104-09A	*** None Found ***	ND	2.0 µg/L	11/11/08	11/10/08	11/18/08
Client ID :	**EB-15-11/10/08**						
Lab ID :	BMI08111104-10A	*** None Found ***	ND	2.0 µg/L	11/11/08	11/10/08	11/17/08
Client ID :	**TB-15-11/10/08**						
Lab ID :	BMI08111104-11A	*** None Found ***	ND	2.0 µg/L	11/11/08	11/10/08	11/17/08

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.

11/24/08
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: BMI08111104-01A
Client I.D. Number: MW-26-2

Sampled: 11/07/08
Received: 11/11/08
Analyzed: 11/18/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	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: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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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11/24/08
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: BMI08111104-02A
Client I.D. Number: MW-26-1

Sampled: 11/07/08
Received: 11/11/08
Analyzed: 11/18/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65 Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66 Surr: 4-Bromofluorobenzene	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: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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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11/24/08
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: BMI08111104-03A
Client I.D. Number: EB-14-11/07/08

Sampled: 11/07/08
Received: 11/11/08
Analyzed: 11/17/08

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	92		(70-130)	%REC
65	Surr: Toluene-d8	101		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	103		(70-130)	%REC

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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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11/24/08
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: BMI08111104-04A
Client I.D. Number: TB-14-11/07/08

Sampled: 11/07/08
Received: 11/11/08
Analyzed: 11/17/08

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	92		(70-130)	%REC
65	Surr: Toluene-d8	102		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	100		(70-130)	%REC

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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

11/24/08
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: BMI08111104-05A
Client I.D. Number: MW-23-5

Sampled: 11/10/08
Received: 11/11/08
Analyzed: 11/18/08

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	89		(70-130)	%REC
65	Surr: Toluene-d8	102		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	102		(70-130)	%REC

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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.

11/24/08
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: BMI08111104-06A
Client I.D. Number: MW-23-4

Sampled: 11/10/08
Received: 11/11/08
Analyzed: 11/18/08

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		2.5	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND		1.0	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			
64	Surr: 1,2-Dichloroethane-d4	90		(70-130)	%REC
65	Surr: Toluene-d8	101		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	99		(70-130)	%REC

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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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11/24/08
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: BMI08111104-07A
Client I.D. Number: MW-23-3

Sampled: 11/10/08
Received: 11/11/08
Analyzed: 11/18/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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.

11/24/08
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: BMI08111104-08A
Client I.D. Number: MW-23-2

Sampled: 11/10/08
Received: 11/11/08
Analyzed: 11/18/08

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	0.75		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	92	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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

11/24/08
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: BMI08111104-09A
Client I.D. Number: MW-23-1

Sampled: 11/10/08
Received: 11/11/08
Analyzed: 11/18/08

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	1.1		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	0.92		0.50	µg/L

	Compound	Concentration	Reporting Limit	
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	(70-130)	%REC
65	Surr: Toluene-d8	102	(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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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11/24/08
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: BMI08111104-10A
Client I.D. Number: EB-15-11/10/08

Sampled: 11/10/08
Received: 11/11/08
Analyzed: 01/17/08

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	0.67		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

	Compound	Concentration	Reporting Limit	
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
37	Chlorobenzene	ND	0.50	µg/L
38	Ethylbenzene	ND	0.50	µg/L
39	m,p-Xylene	ND	0.50	µg/L
40	Bromoform	ND	0.50	µg/L
41	Styrene	ND	0.50	µg/L
42	o-Xylene	ND	0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
44	1,2,3-Trichloropropane	ND	1.0	µg/L
45	Isopropylbenzene	ND	0.50	µg/L
46	Bromobenzene	ND	0.50	µg/L
47	n-Propylbenzene	ND	0.50	µg/L
48	4-Chlorotoluene	ND	0.50	µg/L
49	2-Chlorotoluene	ND	0.50	µg/L
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
51	tert-Butylbenzene	ND	0.50	µg/L
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
53	sec-Butylbenzene	ND	0.50	µg/L
54	1,3-Dichlorobenzene	ND	0.50	µg/L
55	1,4-Dichlorobenzene	ND	0.50	µg/L
56	4-Isopropyltoluene	ND	0.50	µg/L
57	1,2-Dichlorobenzene	ND	0.50	µg/L
58	n-Butylbenzene	ND	0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
61	Naphthalene	ND	1.0	µg/L
62	Hexachlorobutadiene	ND	1.0	µg/L
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	91	(70-130)	%REC
65	Surr: Toluene-d8	103	(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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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11/24/08
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: BMI08111104-11A
Client I.D. Number: TB-15-11/10/08

Sampled: 11/10/08
Received: 11/11/08
Analyzed: 11/17/08

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	92		(70-130)	%REC
65	Surr: Toluene-d8	102		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	101		(70-130)	%REC

*Note: Bromomethane & 2,2-dichloropropane failed the method CV criteria of 70-130% @ 64% and 68%, respectively.

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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11/24/08
Report Date

Alpha Analytical, Inc.

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VOC Sample Preservation Report

Work Order: BMI08111104 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08111104-01A	MW-26-2	Aqueous	2
08111104-02A	MW-26-1	Aqueous	2
08111104-03A	EB-14-11/07/08	Aqueous	2
08111104-04A	TB-14-11/07/08	Aqueous	2
08111104-05A	MW-23-5	Aqueous	2
08111104-06A	MW-23-4	Aqueous	2
08111104-07A	MW-23-3	Aqueous	2
08111104-08A	MW-23-2	Aqueous	2
08111104-09A	MW-23-1	Aqueous	2
08111104-10A	EB-15-11/10/08	Aqueous	2
08111104-11A	TB-15-11/10/08	Aqueous	2

11/24/08

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 : 11/11/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : **MW-26-2**					
Lab ID : BMI08111104-01A	Chromium (Cr)	ND	0.0050 mg/L	11/07/08	11/21/08
Client ID : **MW-26-1**					
Lab ID : BMI08111104-02A	Chromium (Cr)	ND	0.0050 mg/L	11/07/08	11/21/08
Client ID : **EB-14-11/07/08**					
Lab ID : BMI08111104-03A	Chromium (Cr)	ND	0.0050 mg/L	11/07/08	11/21/08
Client ID : **MW-23-5**					
Lab ID : BMI08111104-05A	Chromium (Cr)	ND	0.0050 mg/L	11/10/08	11/21/08
Client ID : **MW-23-4**					
Lab ID : BMI08111104-06A	Chromium (Cr)	ND	0.0050 mg/L	11/10/08	11/21/08
Client ID : **MW-23-3**					
Lab ID : BMI08111104-07A	Chromium (Cr)	ND	0.0050 mg/L	11/10/08	11/21/08
Client ID : **MW-23-2**					
Lab ID : BMI08111104-08A	Chromium (Cr)	ND	0.0050 mg/L	11/10/08	11/21/08
Client ID : **MW-23-1**					
Lab ID : BMI08111104-09A	Chromium (Cr)	ND	0.0050 mg/L	11/10/08	11/21/08
Client ID : **EB-15-11/10/08**					
Lab ID : BMI08111104-10A	Chromium (Cr)	ND	0.0050 mg/L	11/10/08	11/21/08

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.

11/24/08
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 : 11/11/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : **MW-26-2**					
Lab ID : BMI08111104-01A	Perchlorate	ND	1.00 µg/L	11/07/08	11/14/08
Client ID : **MW-26-1**					
Lab ID : BMI08111104-02A	Perchlorate	1.70	1.00 µg/L	11/07/08	11/21/08
Client ID : **EB-14-11/07/08**					
Lab ID : BMI08111104-03A	Perchlorate	ND	1.00 µg/L	11/07/08	11/14/08
Client ID : **MW-23-5**					
Lab ID : BMI08111104-05A	Perchlorate	ND	1.00 µg/L	11/10/08	11/14/08
Client ID : **MW-23-4**					
Lab ID : BMI08111104-06A	Perchlorate	ND	1.00 µg/L	11/10/08	11/14/08
Client ID : **MW-23-3**					
Lab ID : BMI08111104-07A	Perchlorate	ND	1.00 µg/L	11/10/08	11/14/08
Client ID : **MW-23-2**					
Lab ID : BMI08111104-08A	Perchlorate	3.69	1.00 µg/L	11/10/08	11/14/08
Client ID : **MW-23-1**					
Lab ID : BMI08111104-09A	Perchlorate	2.14	1.00 µg/L	11/10/08	11/14/08
Client ID : **EB-15-11/10/08**					
Lab ID : BMI08111104-10A	Perchlorate	ND	1.00 µg/L	11/10/08	11/14/08

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.

11/24/08
Report Date

Billing Information :
Battelle
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

CA

WorkOrder : BMI08111104

Report Due By : 5:00 PM On : 25-Nov-08

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
Betsy Cutie	(619) 574-4827 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 026309, 026306 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	11-Nov-08	11-Nov-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	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI08111104-01A	MW-26-2	AQ	11/07/08 07:50	10	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					MS/MSD
BMI08111104-02A	MW-26-1	AQ	11/07/08 08:30	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111104-03A	EB-14-11/07/08	AQ	11/07/08 08:17	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					Equipment Blank
BMI08111104-04A	TB-14-11/07/08	AQ	11/07/08 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 9/30/08
BMI08111104-05A	MW-23-5	AQ	11/10/08 08:00	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111104-06A	MW-23-4	AQ	11/10/08 08:24	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111104-07A	MW-23-3	AQ	11/10/08 08:52	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111104-08A	MW-23-2	AQ	11/10/08 09:18	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111104-09A	MW-23-1	AQ	11/10/08 09:43	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111104-10A	EB-15-11/10/08	AQ	11/10/08 09:09	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					Equipment Blank

Comments: No security seals. Frozen ice. Temp Blank #7348 rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Perchlorate RL of 1.0 ug/L. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	11-11-08 1104

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

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMI08111104

Report Due By : 5:00 PM On : 25-Nov-08

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
Betsy Cutie	(619) 574-4827 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 026309, 026306 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	11-Nov-08	**11-Nov-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	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI08111104-11A	TB-15-11/10/08	AQ	11/10/08 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 9/30/08

Comments: No security seals. Frozen ice. Temp Blank #7348 rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Perchlorate RL of 1.0 ug/L. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	11-11-08 1104

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 605 KING AVE
City, State, Zip COLUMBUS, OH 43201
Phone Number ______ Fax ______

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

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

026300

Page # 1 of 1

Client Name: DAVID CONNER	P.O. # 213013	Job # 6025862
Address: 370 OLD TOWN AVE C-225	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 (7200)	ClO4 (314.0)				REMARKS
0750	11/07/08	W	BMI08111104-01	MW-26-2			10	X	X	X				MS/MSD
0830	↓	↓	-02	MW-26-1			5	X	X	X				
0317	↓	↓	-03	EB-14-11/07/08			5	X	X	X				EQUIPMENT BLANK
—	↓	↓	-04	TB-14-11/07/08			1	X						TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHASE BROTEN	INSIGHT CEC	11/07/08	
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	11-11-08	1104
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.

Billing Information:

Name GERALD TOMPKIN

Address 5055 KING AVE.

City, State, Zip COLUMBUS OH 43221

Phone Number ______ Fax ______

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

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

02630

Page # 1 *of* 1

Client Name DAVID CONNER

Address 3990 OLD TOWN AVE. C-200

City, State, Zip SAN DIEGO, CA 92110

P.O. # 218013

Job # 6005862

EMail Address

Phone # 619-726-7311

Fax #

Sampled by

Report Attention

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # ___

Analyses Required: VOC (5242), TOTAL Cr (200.8), ClO4 (314.0)

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TOTAL Cr (200.8)	ClO4 (314.0)					REMARKS
0800	11/10/08	AQ	-05	MW-23-5			5	X	X	X					
0824	|	|	-06	MW-23-4			|	X	X	X					
0852	|	|	-07	MW-23-3			|	X	X	X					
0916	|	|	-08	MW-23-2			|	X	X	X					
0942	|	|	-09	MW-23-1			|	X	X	X					
0907	|	|	-10	EB-19-11/10/08			5	X	X	X					EQUIPMENT BLANK
—	|	|	-11	TB-[illegible]			1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHASE BROWN	INSIGHT ECCI	11/10/08	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	11-11-08	1104
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: *25-Nov-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08111255 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08111255-01A	MW-7	Aqueous
08111255-02A	MW-16	Aqueous
08111255-03A	TB-16-11/11/08	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 : 11/12/08

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-7**	Nitrite (NO2) - N	ND	0.25 mg/L	11/11/08 09:29	11/12/08 13:34
Lab ID : BMI08111255-01A	Nitrate (NO3) - N	1.0	0.25 mg/L	11/11/08 09:29	11/12/08 13:34
	Phosphate, ortho - P	ND	0.25 mg/L	11/11/08 09:29	11/12/08 13:34
Client ID : **MW-16**	Nitrite (NO2) - N	ND	0.25 mg/L	11/11/08 11:14	11/12/08 14:29
Lab ID : BMI08111255-02A	Nitrate (NO3) - N	1.1	0.25 mg/L	11/11/08 11:14	11/12/08 14:29
	Phosphate, ortho - P	ND	0.25 mg/L	11/11/08 11:14	11/12/08 14:29

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

11/25/08
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: (619) 574-4827
Fax: (614) 458-6641
Date Received : 11/12/08

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-7**					
Lab ID :	BMI08111255-01A	Chloride	77	0.50 mg/L	11/11/08	11/12/08
		Sulfate (SO4)	51	0.50 mg/L	11/11/08	11/12/08
Client ID :	**MW-16**					
Lab ID :	BMI08111255-02A	Chloride	78	0.50 mg/L	11/11/08	11/12/08
		Sulfate (SO4)	53	0.50 mg/L	11/11/08	11/12/08

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11/25/08
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 : 11/12/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-7**					
Lab ID :	BMI08111255-01A	Chromium (Cr)	0.0076	0.0050 mg/L	11/11/08	11/21/08
Client ID :	**MW-16**					
Lab ID :	BMI08111255-02A	Chromium (Cr)	0.0058	0.0050 mg/L	11/11/08	11/21/08

Roger Scholl Randy Gardner Walter Hinchman

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11/25/08
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: (619) 574-4827
Fax: (614) 458-6641
Date Received : 11/12/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : **MW-7**					
Lab ID : BMI08111255-01A	Perchlorate	ND	1.00 µg/L	11/11/08	11/14/08
Client ID : **MW-16**					
Lab ID : BMI08111255-02A	Perchlorate	ND	1.00 µg/L	11/11/08	11/14/08

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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11/25/08
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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-7**						
Lab ID :	BMI08111255-01A	* * * None Found * * *	ND	2.0 µg/L	11/12/08	11/11/08	11/14/08
Client ID :	**MW-16**						
Lab ID :	BMI08111255-02A	* * * None Found * * *	ND	2.0 µg/L	11/12/08	11/11/08	11/14/08
Client ID :	**TB-16-11/11/08**						
Lab ID :	BMI08111255-03A	* * * None Found * * *	ND	2.0 µg/L	11/12/08	11/11/08	11/14/08

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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11/25/08
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: BMI08111255-01A
Client I.D. Number: MW-7

Sampled: 11/11/08
Received: 11/12/08
Analyzed: 11/14/08

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	5.1	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	ND	0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	1.3	0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	96	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65 Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	1.3	0.50	µg/L	66 Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L				
33	Dibromochloromethane	ND	0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L				
35	Tetrachloroethene	ND	0.50	µg/L				

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.

11/25/08
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: BMI08111255-02A
Client I.D. Number: MW-16

Sampled: 11/11/08
Received: 11/12/08
Analyzed: 11/14/08

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	3.4	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	1.7	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	3.7	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	0.71	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

11/25/08
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: BMI08111255-03A
Client I.D. Number: TB-16-11/11/08

Sampled: 11/11/08
Received: 11/12/08
Analyzed: 11/14/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

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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11/25/08
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: BMI08111255 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08111255-01A	MW-7	Aqueous	2
08111255-02A	MW-16	Aqueous	2
08111255-03A	TB-16-11/11/08	Aqueous	2

11/25/08

Report Date

CHAIN-OF-CUSTODY RECORD

CA

Billing Information :
Battelle
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

WorkOrder : BMI08111255

Report Due By : 5:00 PM On : 26-Nov-08

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
Betsy Cutie	(619) 574-4827 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 026295 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	12-Nov-08	**12-Nov-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 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	METALS_D W	VOC_TIC_W	VOC_W		Sample Remarks
BMI08111255-01A	MW-7	AQ	11/11/08 09:29	5	0	10	NO2, NO3, SO4, Cl, Ortho-P	NO2, NO3, SO4, Cl, Ortho-P	NO2, NO3, SO4, Cl, Ortho-P	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria		
BMI08111255-02A	MW-16	AQ	11/11/08 11:14	5	0	10	NO2, NO3, SO4, Cl, Ortho-P	NO2, NO3, SO4, Cl, Ortho-P	NO2, NO3, SO4, Cl, Ortho-P	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria		
BMI08111255-03A	TB-16-11/11/08	AQ	11/11/08 00:00	1	0	10						VOC by 524 Criteria	VOC by 524 Criteria		Reno TB, 9/30/08.

Comments: No security seals. Frozen ice. Temp Blank #4980 rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Perchlorate RL of 1.0 ug/L. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Tara Dickinson	Tara Dickinson	**Alpha Analytical, Inc.**	11/12/08 1200

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? 026295
AZ ___ CA X NV ___ WA ___
ID ___ OR ___ OTHER _____ Page # 1 of 1

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

Analyses Required: VOC (524.2); TOTAL Cr (200.8); Cl04 (314.0); Cl, SO4, NO3, NO2, PO4 (300.0)

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	TOTAL Cr	Cl04	Cl, SO4, NO3, NO2, PO4	REMARKS
0929	11/11/08	AQ	BMJT0811155-01	MW-7			5	X	X	X	X	
1114	"	"	-02	MW-16			5	X	X	X	X	
—	"	"	-03	TB-16-11/11/08			1	X				TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROWDON	INSIGHT ECO.	11/11/08	1300
Received by		Tara Jackson	Alpha	11/12/08	1200
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: *25-Nov-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08111304 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08111304-01A	MW-10	Aqueous
08111304-02A	MW-15	Aqueous
08111304-03A	TB-17-11/12/08	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

Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 11/13/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-10**					
Lab ID :	BMI08111304-01A	Perchlorate	2.77	1.00 µg/L	11/12/08	11/14/08
Client ID :	**MW-15**					
Lab ID :	BMI08111304-02A	Perchlorate	ND	1.00 µg/L	11/12/08	11/14/08

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.

11/26/08
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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-10**						
Lab ID :	BMI08111304-01A	* * * None Found * * *	ND	2.0 µg/L	11/13/08	11/12/08	11/17/08
Client ID :	**MW-15**						
Lab ID :	BMI08111304-02A	* * * None Found * * *	ND	2.0 µg/L	11/13/08	11/12/08	11/17/08
Client ID :	**TB-17-11/12/08**						
Lab ID :	BMI08111304-03A	* * * None Found * * *	ND	2.0 µg/L	11/13/08	11/12/08	11/17/08

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

Roger Scholl Randy Gardner Walter Hinchman

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Page 1 of 1

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI08111304-01A
Client I.D. Number: MW-10

Sampled: 11/12/08
Received: 11/13/08
Analyzed: 11/17/08

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	0.50		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	2.6		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	1.2		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	1.2		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	92		(70-130)	%REC
65	Surr: Toluene-d8	101		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	101		(70-130)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

*Bromomethane failed the method CV criteria of 70-130% recovery @ 58%.

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

11/26/08
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: BMI08111304-02A
Client I.D. Number: MW-15

Sampled: 11/12/08
Received: 11/13/08
Analyzed: 11/17/08

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	0.76		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	92		(70-130)	%REC
65	Surr: Toluene-d8	102		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	100		(70-130)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

*Bromomethane failed the method CV criteria of 70-130% recovery @ 58%.

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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11/26/08
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: BMI08111304-03A
Client I.D. Number: TB-17-11/12/08

Sampled: 11/12/08
Received: 11/13/08
Analyzed: 11/17/08

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	95		(70-130)	%REC
65	Surr: Toluene-d8	100		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	100		(70-130)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

*Bromomethane failed the method CV criteria of 70-130% recovery @ 58%.

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.

11/26/08
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: BMI08111304 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08111304-01A	MW-10	Aqueous	2
08111304-02A	MW-15	Aqueous	2
08111304-03A	TB-17-11/12/08	Aqueous	2

11/26/08
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 : 11/13/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-10**					
Lab ID :	BMI08111304-01A	Chromium (Cr)	0.022	0.0050 mg/L	11/12/08	11/21/08
Client ID :	**MW-15**					
Lab ID :	BMI08111304-02A	Chromium (Cr)	0.0076	0.0050 mg/L	11/12/08	11/21/08

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.

11/26/08
Report Date

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218013

Client's COC # : 026294 Job : G005862/JPL Groundwater Monitoring

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMI08111304

Report Due By : 5:00 PM On : 28-Nov-08

Report Attention	Phone Number	EMail Address
David Conner	(619) 574-4827 x	connerd@battelle.org
Betsy Cutie	(619) 574-4827 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	13-Nov-08	**13-Nov-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	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI08111304-01A	MW-10	AQ	11/12/08 09:13	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111304-02A	MW-15	AQ	11/12/08 10:36	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111304-03A	TB-17-11/12/08	AQ	11/12/08 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 9/30/08

Comments: No security seals. Frozen ice. Temp Blank #8264 rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Perchlorate RL of 1.0 ug/L. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	11-13-08 1258

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 X NV ___ WA ___
ID ___ OR ___ OTHER ___

026294

Page # 1 of 1

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

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
0913	11/12/08	AQ	BMI08111304-01	MW-10			5	X	X	X					
1036	↓	↓	-02	MW-15			5	X	X	X					
—	↓	↓	-03	TB-17-11/12/08			1	X							TRIP BLANK

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 BRADDON	INSIGHT ECCI	11/14/08	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	11-13-08	1258
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: *26-Nov-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08111425 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08111425-01A	MW-13	Aqueous
08111425-02A	MW-8	Aqueous
08111425-03A	TB-18-11/13/08	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-13**						
Lab ID :	BMI08111425-01A	* * * None Found * * *	ND	2.0 µg/L	11/14/08	11/13/08	11/18/08
Client ID :	**MW-8**						
Lab ID :	BMI08111425-02A	* * * None Found * * *	ND	2.0 µg/L	11/14/08	11/13/08	11/18/08
Client ID :	**TB-18-11/13/08**						
Lab ID :	BMI08111425-03A	Sulfur dioxide	2.6	2.0 µg/L	11/14/08	11/13/08	11/18/08

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.

11/28/08
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: BMI08111425-01A
Client I.D. Number: MW-13

Sampled: 11/13/08
Received: 11/14/08
Analyzed: 11/18/08

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	0.76		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	93	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	3.4		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	0.51		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Bromomethane failed the method CV criteria of 70-130% recovery @ 56.1%.

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.

11/28/08
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: BMI08111425-02A
Client I.D. Number: MW-8

Sampled: 11/13/08
Received: 11/14/08
Analyzed: 11/18/08

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	0.87	0.50	µg/L
6	Trichlorofluoromethane	0.96		0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND		0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	1.1		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	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	1.3		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	94	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	2.5		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	1.3		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.

*Bromomethane failed the method CV criteria of 70-130% recovery @ 56.1%.

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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11/28/08
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: BMI08111425-03A
Client I.D. Number: TB-18-11/13/08

Sampled: 11/13/08
Received: 11/14/08
Analyzed: 11/18/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	104	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Bromomethane failed the method CV criteria of 70-130% recovery @ 56.1%.

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

11/28/08
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: BMI08111425 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08111425-01A	MW-13	Aqueous	2
08111425-02A	MW-8	Aqueous	2
08111425-03A	TB-18-11/13/08	Aqueous	2

11/28/08

Report Date

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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: (619) 574-4827
Fax: (614) 458-6641
Date Received : 11/14/08

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-13**	Nitrite (NO2) - N	ND	0.25 mg/L	11/13/08 09:09	11/14/08 14:39
	Nitrate (NO3) - N	6.6	0.25 mg/L	11/13/08 09:09	11/14/08 14:39
Lab ID : BMI08111425-01A	Phosphate, ortho - P	ND	0.25 mg/L	11/13/08 09:09	11/14/08 14:39
Client ID : **MW-8**	Nitrite (NO2) - N	ND	0.25 mg/L	11/13/08 10:59	11/14/08 15:34
	Nitrate (NO3) - N	3.7	0.25 mg/L	11/13/08 10:59	11/14/08 15:34
Lab ID : BMI08111425-02A	Phosphate, ortho - P	ND	0.25 mg/L	11/13/08 10:59	11/14/08 15:34

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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11/28/08
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 : 11/14/08

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-13**					
Lab ID :	BMI08111425-01A	Chloride	37	0.50 mg/L	11/13/08	11/14/08
		Sulfate (SO4)	54	2.5 mg/L	11/13/08	11/14/08
Client ID :	**MW-8**					
Lab ID :	BMI08111425-02A	Chloride	44	0.50 mg/L	11/13/08	11/14/08
		Sulfate (SO4)	65	2.5 mg/L	11/13/08	11/14/08

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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 : 11/14/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-13**					
Lab ID :	BMI08111425-01A	Chromium (Cr)	0.088	0.0050 mg/L	11/13/08	11/21/08
Client ID :	**MW-8**					
Lab ID :	BMI08111425-02A	Chromium (Cr)	0.013	0.0050 mg/L	11/13/08	11/21/08

Roger Scholl Randy Gardner Walter Hinchman

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11/28/08
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 : 11/14/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-13**					
Lab ID :	BMI08111425-01A	Perchlorate	431	10.0 µg/L	11/13/08	11/21/08
Client ID :	**MW-8**					
Lab ID :	BMI08111425-02A	Perchlorate	257	10.0 µg/L	11/13/08	11/21/08

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11/28/08
Report Date

CHAIN-OF-CUSTODY RECORD

CA

Billing Information :
Battelle
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

WorkOrder : BMI08111425
Report Due By : 5:00 PM On : 01-Dec-08

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
Betsy Cutie	(619) 574-4827 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 026293 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	14-Nov-08	**14-Nov-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 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	METALS_D W	VOC_TIC_W	VOC_W		Sample Remarks
BMI08111425-01A	MW-13	AQ	11/13/08 09:09	5	0	10	Cl,NO2,NO3,PO4,SO4	Cl,NO2,NO3,PO4,SO4	Cl,NO2,NO3,PO4,SO4	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria		
BMI08111425-02A	MW-8	AQ	11/13/08 10:59	6	0	10	Cl,NO2,NO3,PO4,SO4	Cl,NO2,NO3,PO4,SO4	Cl,NO2,NO3,PO4,SO4	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria		
BMI08111425-03A	TB-18-11/13/08	AQ	11/13/08 00:00	1	0	10						VOC by 524 Criteria	VOC by 524 Criteria		Reno Trip Blank 9/30/08

Comments: No security seals. Frozen ice. Temp Blank #7682 rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Perchlorate RL of 1.0 ug/L. :

	Signature	Print Name	Company	Date/Time
Logged in by:	K Murray	K Murray	**Alpha Analytical, Inc.**	11/14/08 1230

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 K NV ___ WA ___ ID ___ OR ___ OTHER ___

026293

Page # 1 of 1

Client Name	P.O. #	Job #
DAVID CONNER	218013	6005862
Address	**EMail Address**	
3990 OLD TOWN AVE, C-205		
City, State, Zip	**Phone #**	**Fax #**
SAN DIEGO, CA 92110	619-726-7311	

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	Analyses Required: VOC (524.2)	TOTAL Cr (200.8)	ClO4 - (314.0)	a1 - 504 - NO3 - NO2 - 224 - 3 (300.0)				REMARKS
0909	11/13/08	AQ	BM10811425-01	MW-13			5	X	X	X	X				
1059	↓	↓	02	MW-8			6	X	X	X	X				
—	↓	↓	03	TB-18-11/13/08			1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROGDON	INSIGHT ECCI	11/13/08	1300
Received by		IC Murray	AAI	11/14/08	1225
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: *01-Dec-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08111803 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08111803-01A	MW-5	Aqueous
08111803-02A	MW-6	Aqueous
08111803-03A	TB-19-11/14/08	Aqueous
08111803-04A	MW-01	Aqueous
08111803-05A	MW-09	Aqueous
08111803-06A	TB-20-11/17/08	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-5**						
Lab ID :	BMI08111803-01A	* * * None Found * * *	ND	2.0 µg/L	11/18/08	11/14/08	11/21/08
Client ID :	**MW-6**						
Lab ID :	BMI08111803-02A	* * * None Found * * *	ND	2.0 µg/L	11/18/08	11/14/08	11/21/08
Client ID :	**TB-19-11/14/08**						
Lab ID :	BMI08111803-03A	* * * None Found * * *	ND	2.0 µg/L	11/18/08	11/14/08	11/21/08
Client ID :	**MW-01**						
Lab ID :	BMI08111803-04A	* * * None Found * * *	ND	2.0 µg/L	11/18/08	11/17/08	11/21/08
Client ID :	**MW-09**						
Lab ID :	BMI08111803-05A	* * * None Found * * *	ND	2.0 µg/L	11/18/08	11/17/08	11/21/08
Client ID :	**TB-20-11/17/08**						
Lab ID :	BMI08111803-06A	* * * None Found * * *	ND	2.0 µg/L	11/18/08	11/17/08	11/21/08

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.

12/2/08
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: BMI08111803-01A
Client I.D. Number: MW-5

Sampled: 11/14/08
Received: 11/18/08
Analyzed: 11/21/08

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	0.53	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	94	(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.

Note: 2,2-dichloropropane failed the method CV criteria of 70-130% recovery @ 67%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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12/2/08
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: BMI08111803-02A
Client I.D. Number: MW-6

Sampled: 11/14/08
Received: 11/18/08
Analyzed: 11/21/08

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	1.9	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	0.99	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	1.2	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	(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.

Note: 2,2-dichloropropane failed the method CV criteria of 70-130% recovery @ 67%.

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: BMI08111803-03A
Client I.D. Number: TB-19-11/14/08

Sampled: 11/14/08
Received: 11/18/08
Analyzed: 11/21/08

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	96	(70-130)	%REC
65	Surr: Toluene-d8	98	(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

Note: 2,2-dichloropropane failed the method CV criteria of 70-130% recovery @ 67%.

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: BMI08111803-04A
Client I.D. Number: MW-01

Sampled: 11/17/08
Received: 11/18/08
Analyzed: 11/21/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

Note: 2,2-dichloropropane failed the method CV criteria of 70-130% recovery @ 67%.

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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12/2/08
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: BMI08111803-05A
Client I.D. Number: MW-09

Sampled: 11/17/08
Received: 11/18/08
Analyzed: 11/21/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

Note: 2,2-dichloropropane failed the method CV criteria of 70-130% recovery @ 67%.

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

12/2/08
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: BMI08111803-06A
Client I.D. Number: TB-20-11/17/08

Sampled: 11/17/08
Received: 11/18/08
Analyzed: 11/21/08

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	95	(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.

Note: 2,2-dichloropropane failed the method CV criteria of 70-130% recovery @ 67%.

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

12/2/08
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: BMI08111803 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08111803-01A	MW-5	Aqueous	2
08111803-02A	MW-6	Aqueous	2
08111803-03A	TB-19-11/14/08	Aqueous	2
08111803-04A	MW-01	Aqueous	2
08111803-05A	MW-09	Aqueous	2
08111803-06A	TB-20-11/17/08	Aqueous	2

12/2/08

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 : 11/18/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

	Parameter		Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-5**					
Lab ID :	BMI08111803-01A	Chromium (Cr)	ND	0.0050 mg/L	11/14/08	11/21/08
Client ID :	**MW-6**					
Lab ID :	BMI08111803-02A	Chromium (Cr)	0.014	0.0050 mg/L	11/14/08	11/21/08
Client ID :	**MW-01**					
Lab ID :	BMI08111803-04A	Chromium (Cr)	ND	0.0050 mg/L	11/17/08	11/21/08
Client ID :	**MW-09**					
Lab ID :	BMI08111803-05A	Chromium (Cr)	ND	0.0050 mg/L	11/17/08	11/21/08

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.

12/2/08
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 : 11/18/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-5**					
Lab ID :	BMI08111803-01A	Perchlorate	7.53	1.00 µg/L	11/14/08	11/21/08
Client ID :	**MW-6**					
Lab ID :	BMI08111803-02A	Perchlorate	1.87	1.00 µg/L	11/14/08	11/21/08
Client ID :	**MW-01**					
Lab ID :	BMI08111803-04A	Perchlorate	ND	1.00 µg/L	11/17/08	11/21/08
Client ID :	**MW-09**					
Lab ID :	BMI08111803-05A	Perchlorate	ND	1.00 µg/L	11/17/08	11/21/08

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.

12/2/08
Report Date

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218013

Client's COC # : 026311, 026312 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	(619) 574-4827 x	connerd@battelle.org
Betsy Cutie	(619) 574-4827 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

CA

WorkOrder : BMI08111803

Report Due By : 5:00 PM On : 03-Dec-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	18-Nov-08	**18-Nov-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	METALS_DW	VOC_TIC_W	VOC_W					Sample Remarks
BMI08111803-01A	MW-5	AQ	11/14/08 08:13	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111803-02A	MW-6	AQ	11/14/08 09:54	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111803-03A	TB-19-11/14/08	AQ	11/14/08 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 9/30/08
BMI08111803-04A	MW-01	AQ	11/17/08 09:06	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					Level IV QC
BMI08111803-05A	MW-09	AQ	11/17/08 10:23	5	0	10	Perchlorate	Cr	VOC by 524 Criteria	VOC by 524 Criteria					
BMI08111803-06A	TB-20-11/17/08	AQ	11/17/08 00:00	1	0	10			VOC by 524 Criteria	VOC by 524 Criteria					Reno Trip Blank 9/30/08

Comments: No security seals. Frozen ice. Temp Blanks #7848 and #7280 rec'd @ 4°. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Perchlorate RL of 1.0 ug/L. :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabath Adcox	Elizabath Adcox	**Alpha Analytical, Inc.**	11-18-08 9:57

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 X NV ___ WA ___ ID ___ OR ___ OTHER ___

026311

Page # 1 of 1

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

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
0813	11/14/08	AQ	BMI08111803-01	MW-5			5	X	X	X					
0954	↓	↓	-02	MW-6			5	X	X	X					
—	↓	↓	-03	TB-19-11/14/08			2	X							TRIP BLANK

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Analyses Required

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROGDON	INSIGHT ECCI	11/14/08	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	11-18-08	9:57
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.

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 X NV ___ WA ___ ID ___ OR ___ OTHER ___

026312

Page # 1 of 1

Client Name	P.O. #	Job #
DAVID CONVER	218013	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)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)	TOTAL Cr (200.8)	Cl04 - (314.0)	REMARKS
0900	11/17/08	AQ	-04	MW-01			5	X	X	X	QC LEVEL III
1023	↓	↓	-05	MW-09			5	X	X	X	
—	↓	↓	-06	TB-20-11/17/08			1	X			TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BRADDON	INSIGHT	11/17/08	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	11-18-08	9:57
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: *02-Dec-08*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI08111956 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
08111956-01A	MW-20-5RS	Aqueous
08111956-02A	MW-20-4RS	Aqueous
08111956-03A	MW-20-3RS	Aqueous
08111956-04A	MW-20-2RS	Aqueous
08111956-05A	MW-20-1RS	Aqueous
08111956-06A	EB-16-11/18/08	Aqueous
08111956-07A	TB-21-11/18/08	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
Job#: G005862/JPL Groundwater Monitoring

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

Alpha Analytical Number: BMI08111956-01A
Client I.D. Number: MW-20-5RS

Sampled: 11/18/08
Received: 11/19/08

Analyte	Result	Reporting Limit	Qual	Units	Date Analyzed	Analytical Method
Iron (Fe)	ND	0.10		mg/L	11/21/2008	EPA Method 200.8
Iron, Ferrous (+2)	ND	0.050		mg/L	11/19/2008	SM3500-Fe D
Iron, Ferric (+3) (by calculation)	ND	0.10		mg/L	11/21/2008	SM3500-Fe D / EPA Method 6020A

Ferric iron concentrations are based off of raw (non-rounded ferrous and total iron) data. Therefore, hand calculated ferric iron values may differ slightly.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

12/3/08
Report Date

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

Alpha Analytical, Inc.

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: BMI08111956-02A
Client I.D. Number: MW-20-4RS

Sampled: 11/18/08
Received: 11/19/08

Analyte	Result	Reporting Limit	Qual	Units	Date Analyzed	Analytical Method
Iron (Fe)	0.12	0.10		mg/L	12/03/2008	EPA Method 200.8
Iron, Ferrous (+2)	ND	0.050		mg/L	11/19/2008	SM3500-Fe D
Iron, Ferric (+3) (by calculation)	0.12	0.10		mg/L	12/03/2008	SM3500-Fe D / EPA Method 6020A

Ferric iron concentrations are based off of raw (non-rounded ferrous and total iron) data. Therefore, hand calculated ferric iron values may differ slightly.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

12/3/08
Report Date

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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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: BMI08111956-03A
Client I.D. Number: MW-20-3RS

Sampled: 11/18/08
Received: 11/19/08

Analyte	Result	Reporting Limit	Qual	Units	Date Analyzed	Analytical Method
Iron (Fe)	ND	0.10		mg/L	11/21/2008	EPA Method 200.8
Iron, Ferrous (+2)	ND	0.050		mg/L	11/19/2008	SM3500-Fe D
Iron, Ferric (+3) (by calculation)	ND	0.10		mg/L	11/21/2008	SM3500-Fe D / EPA Method 6020A

Ferric iron concentrations are based off of raw (non-rounded ferrous and total iron) data. Therefore, hand calculated ferric iron values may differ slightly.

ND = Not Detected

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505 King Avenue
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Job#: G005862/JPL Groundwater Monitoring

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

Alpha Analytical Number: BMI08111956-04A
Client I.D. Number: MW-20-2RS

Sampled: 11/18/08
Received: 11/19/08

Analyte	Result	Reporting Limit	Qual	Units	Date Analyzed	Analytical Method
Iron (Fe)	0.55	0.10		mg/L	11/21/2008	EPA Method 200.8
Iron, Ferrous (+2)	ND	0.050		mg/L	11/19/2008	SM3500-Fe D
Iron, Ferric (+3) (by calculation)	0.55	0.10		mg/L	11/21/2008	SM3500-Fe D / EPA Method 6020A

Ferric iron concentrations are based off of raw (non-rounded ferrous and total iron) data. Therefore, hand calculated ferric iron values may differ slightly.

ND = Not Detected

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505 King Avenue
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Job#: G005862/JPL Groundwater Monitoring

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

Alpha Analytical Number: BMI08111956-05A
Client I.D. Number: MW-20-1RS

Sampled: 11/18/08
Received: 11/19/08

Analyte	Result	Reporting Limit	Qual	Units	Date Analyzed	Analytical Method
Iron (Fe)	0.52	0.10		mg/L	11/21/2008	EPA Method 200.8
Iron, Ferrous (+2)	ND	0.050		mg/L	11/19/2008	SM3500-Fe D
Iron, Ferric (+3) (by calculation)	0.52	0.10		mg/L	11/21/2008	SM3500-Fe D / EPA Method 6020A

Ferric iron concentrations are based off of raw (non-rounded ferrous and total iron) data. Therefore, hand calculated ferric iron values may differ slightly.

ND = Not Detected

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Date Received : 11/19/08

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5RS**					
Lab ID :	BMI08111956-01A	Sodium (Na)	51	0.50 mg/L	11/18/08	11/21/08
		Magnesium (Mg)	1.1	0.50 mg/L	11/18/08	11/21/08
		Potassium (K)	1.0	0.50 mg/L	11/18/08	11/21/08
		Calcium (Ca)	4.7	0.50 mg/L	11/18/08	11/21/08
		Chromium (Cr)	ND	0.0050 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Sodium (Na)	60	0.50 mg/L	11/18/08	12/03/08
		Magnesium (Mg)	3.5	0.50 mg/L	11/18/08	12/03/08
		Potassium (K)	0.84	0.50 mg/L	11/18/08	12/03/08
		Calcium (Ca)	13	0.50 mg/L	11/18/08	12/03/08
		Chromium (Cr)	ND	0.0050 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Sodium (Na)	51	0.50 mg/L	11/18/08	11/21/08
		Magnesium (Mg)	12	0.50 mg/L	11/18/08	11/21/08
		Potassium (K)	2.1	0.50 mg/L	11/18/08	11/21/08
		Calcium (Ca)	20	0.50 mg/L	11/18/08	11/21/08
		Chromium (Cr)	ND	0.0050 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Sodium (Na)	14	0.50 mg/L	11/18/08	11/21/08
		Magnesium (Mg)	21	0.50 mg/L	11/18/08	11/21/08
		Potassium (K)	2.1	0.50 mg/L	11/18/08	11/21/08
		Calcium (Ca)	73	0.50 mg/L	11/18/08	11/21/08
		Chromium (Cr)	ND	0.0050 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Sodium (Na)	15	0.50 mg/L	11/18/08	11/21/08
		Magnesium (Mg)	18	0.50 mg/L	11/18/08	11/21/08
		Potassium (K)	2.5	0.50 mg/L	11/18/08	11/21/08
		Calcium (Ca)	65	0.50 mg/L	11/18/08	11/21/08
		Chromium (Cr)	ND	0.0050 mg/L	11/18/08	11/21/08
Client ID :	**EB-16-11/18/08**					
Lab ID :	BMI08111956-06A	Chromium (Cr)	ND	0.0050 mg/L	11/18/08	11/21/08
		Iron (Fe)	ND	0.10 mg/L	11/18/08	11/21/08

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ND = Not Detected

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ANALYTICAL REPORT

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Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 11/19/08

Job#: G005862/JPL Groundwater Monitoring

Sulfide
SM4500-S D

	Parameter		Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5RS**					
Lab ID :	BMI08111956-01A	Sulfide	0.67	0.10 mg/L	11/18/08	11/19/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Sulfide	0.94	0.10 mg/L	11/18/08	11/19/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Sulfide	0.24	0.10 mg/L	11/18/08	11/19/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Sulfide	ND	0.10 mg/L	11/18/08	11/19/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Sulfide	ND	0.10 mg/L	11/18/08	11/19/08

ND = Not Detected

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Job#: G005862/JPL Groundwater Monitoring

Total Dissolved Solids (TDS)
SM2540C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5RS**					
Lab ID :	BMI08111956-01A	Solids, Total Dissolved (TDS)	63	10 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Solids, Total Dissolved (TDS)	170	10 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Solids, Total Dissolved (TDS)	250	10 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Solids, Total Dissolved (TDS)	360	10 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Solids, Total Dissolved (TDS)	340	10 mg/L	11/18/08	11/21/08

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Date Received : 11/19/08

Job#: G005862/JPL Groundwater Monitoring

Total Organic Carbon as NonPurgeable Organic Carbon
EPA Method SW9060 / SM5310C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5RS**					
Lab ID :	BMI08111956-01A	Total Organic Carbon	ND	1.0 mg/L	11/18/08	11/20/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Total Organic Carbon	ND	1.0 mg/L	11/18/08	11/20/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Total Organic Carbon	ND	1.0 mg/L	11/18/08	11/20/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Total Organic Carbon	ND	1.0 mg/L	11/18/08	11/20/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Total Organic Carbon	ND	1.0 mg/L	11/18/08	11/20/08

ND = Not Detected

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Date Received : 11/19/08

Job#: G005862/JPL Groundwater Monitoring

Dissolved Organic Carbon as NonPurgeable Organic Carbon
EPA Method SW9060/415.1/SM-5310C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5RS**					
Lab ID :	BMI08111956-01A	Dissolved Organic Carbon	ND	1.0 mg/L	11/18/08	11/24/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Dissolved Organic Carbon	ND	1.0 mg/L	11/18/08	11/24/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Dissolved Organic Carbon	1.1	1.0 mg/L	11/18/08	11/24/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Dissolved Organic Carbon	1.1	1.0 mg/L	11/18/08	11/24/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Dissolved Organic Carbon	1.1	1.0 mg/L	11/18/08	11/24/08

ND = Not Detected

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Anions by IC
EPA Method 300.0 / 9056

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-20-5RS**	Nitrite (NO2) - N	ND	0.25 mg/L	11/18/08 08:24	11/19/08 14:27
Lab ID : BMI08111956-01A	Nitrate (NO3) - N	ND	0.25 mg/L	11/18/08 08:24	11/19/08 14:27
Client ID : **MW-20-4RS**	Nitrite (NO2) - N	ND	0.25 mg/L	11/18/08 09:46	11/19/08 14:45
Lab ID : BMI08111956-02A	Nitrate (NO3) - N	ND	0.25 mg/L	11/18/08 09:46	11/19/08 14:45
Client ID : **MW-20-3RS**	Nitrite (NO2) - N	ND	0.25 mg/L	11/18/08 10:57	11/19/08 15:04
Lab ID : BMI08111956-03A	Nitrate (NO3) - N	ND	0.25 mg/L	11/18/08 10:57	11/19/08 15:04
Client ID : **MW-20-2RS**	Nitrite (NO2) - N	ND	0.25 mg/L	11/18/08 11:53	11/19/08 15:22
Lab ID : BMI08111956-04A	Nitrate (NO3) - N	6.8	0.25 mg/L	11/18/08 11:53	11/19/08 15:22
Client ID : **MW-20-1RS**	Nitrite (NO2) - N	ND	0.25 mg/L	11/18/08 12:54	11/19/08 15:41
Lab ID : BMI08111956-05A	Nitrate (NO3) - N	3.6	0.25 mg/L	11/18/08 12:54	11/19/08 15:41

ND = Not Detected

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Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5RS**					
Lab ID :	BMI08111956-01A	Chloride	9.5	0.50 mg/L	11/18/08	11/19/08
		Sulfate (SO4)	3.2	0.50 mg/L	11/18/08	11/19/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Chloride	11	0.50 mg/L	11/18/08	11/19/08
		Sulfate (SO4)	17	0.50 mg/L	11/18/08	11/19/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Chloride	41	0.50 mg/L	11/18/08	11/19/08
		Sulfate (SO4)	24	0.50 mg/L	11/18/08	11/19/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Chloride	40	0.50 mg/L	11/18/08	11/19/08
		Sulfate (SO4)	68	0.50 mg/L	11/18/08	11/19/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Chloride	24	0.50 mg/L	11/18/08	11/19/08
		Sulfate (SO4)	83	0.50 mg/L	11/18/08	11/19/08

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Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5RS**					
Lab ID :	BMI08111956-01A	Alkalinity, Total (As CaCO3 at pH 4.5)	130	1.0 mg/L	11/18/08	12/01/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Alkalinity, Total (As CaCO3 at pH 4.5)	140	1.0 mg/L	11/18/08	12/01/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Alkalinity, Total (As CaCO3 at pH 4.5)	160	1.0 mg/L	11/18/08	12/01/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Alkalinity, Total (As CaCO3 at pH 4.5)	190	1.0 mg/L	11/18/08	12/01/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Alkalinity, Total (As CaCO3 at pH 4.5)	170	1.0 mg/L	11/18/08	12/01/08

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Ammonia as Nitrogen
SM4500-NH3D

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-20-5RS**					
Lab ID :	BMI08111956-01A	Nitrogen, Ammonia (As N)	ND	0.10 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Nitrogen, Ammonia (As N)	ND	0.10 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Nitrogen, Ammonia (As N)	ND	0.10 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Nitrogen, Ammonia (As N)	ND	0.10 mg/L	11/18/08	11/21/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Nitrogen, Ammonia (As N)	ND	0.10 mg/L	11/18/08	11/21/08

ND = Not Detected

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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 : 11/19/08

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-20-5RS**					
Lab ID :	BMI08111956-01A	Specific Conductance (at 25°C)	280	10 µS/cm	11/18/08	11/19/08
Client ID :	**MW-20-4RS**					
Lab ID :	BMI08111956-02A	Specific Conductance (at 25°C)	330	10 µS/cm	11/18/08	11/19/08
Client ID :	**MW-20-3RS**					
Lab ID :	BMI08111956-03A	Specific Conductance (at 25°C)	470	10 µS/cm	11/18/08	11/19/08
Client ID :	**MW-20-2RS**					
Lab ID :	BMI08111956-04A	Specific Conductance (at 25°C)	620	10 µS/cm	11/18/08	11/19/08
Client ID :	**MW-20-1RS**					
Lab ID :	BMI08111956-05A	Specific Conductance (at 25°C)	560	10 µS/cm	11/18/08	11/19/08
Client ID :	**EB-16-11/18/08**					
Lab ID :	BMI08111956-06A	Specific Conductance (at 25°C)	ND	10 µS/cm	11/18/08	11/19/08

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.

12/3/08
Report Date

Alpha Analytical, Inc.

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Attn: David Conner
Phone: (619) 574-4827
Fax: (614) 458-6641
Date Received : 11/19/08

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : **MW-20-5RS**					
Lab ID : BMI08111956-01A	Perchlorate	16.2	1.00 µg/L	11/18/08	11/21/08
Client ID : **MW-20-4RS**					
Lab ID : BMI08111956-02A	Perchlorate	42.4	1.00 µg/L	11/18/08	11/21/08
Client ID : **MW-20-3RS**					
Lab ID : BMI08111956-03A	Perchlorate	ND	1.00 µg/L	11/18/08	11/21/08
Client ID : **MW-20-2RS**					
Lab ID : BMI08111956-04A	Perchlorate	2.59	1.00 µg/L	11/18/08	11/21/08
Client ID : **MW-20-1RS**					
Lab ID : BMI08111956-05A	Perchlorate	ND	1.00 µg/L	11/18/08	11/21/08
Client ID : **EB-16-11/18/08**					
Lab ID : BMI08111956-06A	Perchlorate	ND	1.00 µg/L	11/18/08	11/21/08

ND = Not Detected

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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-20-5RS**						
Lab ID :	BMI08111956-01A	Carbon disulfide	2.2	2.0 µg/L	11/19/08	11/18/08	11/21/08
		Sulfur Dioxide	33	2.0 µg/L	11/19/08	11/18/08	11/21/08
Client ID :	**MW-20-4RS**						
Lab ID :	BMI08111956-02A	Sulfur Dioxide	35	2.0 µg/L	11/19/08	11/18/08	11/21/08
Client ID :	**MW-20-3RS**						
Lab ID :	BMI08111956-03A	Sulfur Dioxide	24	2.0 µg/L	11/19/08	11/18/08	11/21/08
Client ID :	**MW-20-2RS**						
Lab ID :	BMI08111956-04A	Sulfur Dioxide	18	2.0 µg/L	11/19/08	11/18/08	11/21/08
Client ID :	**MW-20-1RS**						
Lab ID :	BMI08111956-05A	Sulfur Dioxide	19	2.0 µg/L	11/19/08	11/18/08	11/21/08
Client ID :	**EB-16-11/18/08**						
Lab ID :	BMI08111956-06A	* * * None Found * * *	ND	2.0 µg/L	11/19/08	11/18/08	11/21/08
Client ID :	**TB-21-11/18/08**						
Lab ID :	BMI08111956-07A	* * * None Found * * *	ND	2.0 µg/L	11/19/08	11/18/08	11/21/08

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

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Page 1 of 1

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI08111956-01A
Client I.D. Number: MW-20-5RS

Sampled: 11/18/08
Received: 11/19/08
Analyzed: 11/21/08

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	96		(70-130)	%REC
65	Surr: Toluene-d8	99		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	99		(70-130)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

*No Carbon tetrachloride was observed above an estimated reporting limit of 0.25 µg/L.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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12/3/08
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: BMI08111956-02A
Client I.D. Number: MW-20-4RS

Sampled: 11/18/08
Received: 11/19/08
Analyzed: 11/21/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*No Carbon tetrachloride was observed above an estimated reporting limit of 0.25 µg/L.

ND = Not Detected

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12/3/08
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: BMI08111956-03A
Client I.D. Number: MW-20-3RS

Sampled: 11/18/08
Received: 11/19/08
Analyzed: 11/21/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*No Carbon tetrachloride was observed above an estimated reporting limit of 0.25 µg/L.

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: BMI08111956-04A
Client I.D. Number: MW-20-2RS

Sampled: 11/18/08
Received: 11/19/08
Analyzed: 11/21/08

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	95	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*No Carbon tetrachloride was observed above an estimated reporting limit of 0.25 µg/L.

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

12/3/08
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: BMI08111956-05A
Client I.D. Number: MW-20-1RS

Sampled: 11/18/08
Received: 11/19/08
Analyzed: 11/21/08

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	95	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	97	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*No Carbon tetrachloride was observed above an estimated reporting limit of 0.25 µg/L.

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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12/3/08
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: BMI08111956-06A
Client I.D. Number: EB-16-11/18/08

Sampled: 11/18/08
Received: 11/19/08
Analyzed: 11/21/08

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	98	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	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.

*No Carbon tetrachloride was observed above an estimated reporting limit of 0.25 µg/L.

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

12/3/08
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: BMI08111956-07A
Client I.D. Number: TB-21-11/18/08

Sampled: 11/18/08
Received: 11/19/08
Analyzed: 11/21/08

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	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*No Carbon tetrachloride was observed above an estimated reporting limit of 0.25 µg/L.

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

12/3/08
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: BMI08111956 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
08111956-01A	MW-20-5RS	Aqueous	2
08111956-02A	MW-20-4RS	Aqueous	2
08111956-03A	MW-20-3RS	Aqueous	2
08111956-04A	MW-20-2RS	Aqueous	2
08111956-05A	MW-20-1RS	Aqueous	2
08111956-06A	EB-16-11/18/08	Aqueous	2
08111956-07A	TB-21-11/18/08	Aqueous	2

12/3/08

Report Date

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

PO : 218013

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
Betsy Cutie	(619) 574-4827 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

CA

WorkOrder : BMI08111956

Report Due By : 5:00 PM On : 04-Dec-08

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	19-Nov-08	**19-Nov-08**

Client's COC # : 026292, 25192 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 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	3500FE_2O S_W	3500FE_3IC _W	ALKALINITY_W	AMMONIA_W	Sample Remarks
BMI08111956-01A	MW-20-5RS	AQ	11/18/08 08:24	14	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	FE+2	FE+3	Alk	NH3	
BMI08111956-02A	MW-20-4RS	AQ	11/18/08 09:46	14	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	FE+2	FE+3	Alk	NH3	
BMI08111956-03A	MW-20-3RS	AQ	11/18/08 10:57	14	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	FE+2	FE+3	Alk	NH3	
BMI08111956-04A	MW-20-2RS	AQ	11/18/08 11:53	14	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	FE+2	FE+3	Alk	NH3	
BMI08111956-05A	MW-20-1RS	AQ	11/18/08 12:54	14	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	FE+2	FE+3	Alk	NH3	
BMI08111956-06A	EB-16-11/18/08	AQ	11/18/08 12:33	5	0	10				Perchlorate					Equipment Blank
BMI08111956-07A	TB-21-11/18/08	AQ	11/18/08 00:00	2	0	10									Reno TB, (2) 11/5/08.

Comments: No security seals. Frozen ice. TOC pH=2. Temp. Blank #8597 rec'd @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Perchlorate RL of 1.0 ug/L. J Flag Carbontetrachloride down to 0.25. : Ok to use Fe by 200.8 instead of by 6020 for Ferric Iron calculation, per Walter.

	Signature	Print Name	Company	Date/Time
Logged in by:	Dave Dickinson	Dave Dickinson	Alpha Analytical, Inc.	11/19/08 1145

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

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMI08111956

Report Due By : 5:00 PM On : 04-Dec-08

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
Betsy Cutie	(619) 574-4827 x	cutiee@batelle.org
Shane Walton	(614) 424-4117 x	waltons@battelle.org

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 026292, 25192 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	19-Nov-08	19-Nov-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: CONDUCTIVITY	DOC_W	METALS_DW	SULFIDE	TDS	TOC_W	VOC_TIC_W	VOC_W	Sample Remarks
BMI08111956-01A	MW-20-5RS	AQ	11/18/08 08:24	14	0	10	Conductivity	DOC	Fe, Cr, Ca, Na, K, Mg	Sulfide	TDS	TOC	VOC by 524 Criteria	VOC by 524 Criteria	
BMI08111956-02A	MW-20-4RS	AQ	11/18/08 09:46	14	0	10	Conductivity	DOC	Fe, Cr, Ca, Na, K, Mg	Sulfide	TDS	TOC	VOC by 524 Criteria	VOC by 524 Criteria	
BMI08111956-03A	MW-20-3RS	AQ	11/18/08 10:57	14	0	10	Conductivity	DOC	Fe, Cr, Ca, Na, K, Mg	Sulfide	TDS	TOC	VOC by 524 Criteria	VOC by 524 Criteria	
BMI08111956-04A	MW-20-2RS	AQ	11/18/08 11:53	14	0	10	Conductivity	DOC	Fe, Cr, Ca, Na, K, Mg	Sulfide	TDS	TOC	VOC by 524 Criteria	VOC by 524 Criteria	
BMI08111956-05A	MW-20-1RS	AQ	11/18/08 12:54	14	0	10	Conductivity	DOC	Fe, Cr, Ca, Na, K, Mg	Sulfide	TDS	TOC	VOC by 524 Criteria	VOC by 524 Criteria	
BMI08111956-06A	EB-16-11/18/08	AQ	11/18/08 12:33	5	0	10	Conductivity		Fe, Cr				VOC by 524 Criteria	VOC by 524 Criteria	Equipment Blank
BMI08111956-07A	TB-21-11/18/08	AQ	11/18/08 00:00	2	0	10							VOC by 524 Criteria	VOC by 524 Criteria	Reno TB, (2) 11/5/08.

Comments: No security seals. Frozen ice. TOC pH=2. Temp. Blank #8597 rec'd @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Perchlorate RL of 1.0 ug/L. J Flag Carbontetrachloride down to 0.25. : Ok to use Fe by 200.8 instead of by 6020 for Ferric Iron calculation, per Walter.

	Signature	Print Name	Company	Date/Time
Logged in by:	Jane Dickinson	Jane Dickinson	Alpha Analytical, Inc.	11/19/08 1148

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? 026292

AZ ___ CA X NV ___ WA ___
ID ___ OR ___ OTHER ___

Page # 1 of 2

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

Sampled by: ______ Report Attention: ______

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # ______

Analyses Required: VOC (524.2)* | TOTAL IRON, TOTAL Cr (200.8) | CONDUCTIVITY, Cl_4^- (314.0) | FERROUS IRON (SM3500), FERRIC IRON | DOC, TOC (415.1) | NO_2-N, NO_3-N, Cl^-, SO_4- (300.0) | TDS (160.1)

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC (524.2)*	TOTAL IRON TOTAL Cr (200.8)	CONDUCTIVITY Cl_4^- (314.0)	FERROUS IRON (SM3500) FERRIC IRON	DOC, TOC (415.1)	NO_2-N, NO_3-N, Cl^-, SO_4- (300.0)	TDS (160.1)	REMARKS
0824	11/18/08	AQ	BMI081119[illegible]6-01	MW-20-5RS			14	X	X	X	X	X	X	X	
0946	↓	↓	-02	MW-20-4RS			↓	X	X	X	X	X	X	X	
1057			-03	MW-20-3RS				X	X	X	X	X	X	X	
1153			-04	MW-20-2RS				X	X	X	X	X	X	X	
1254			-05	MW-20-1RS				X	X	X	X	X	X	X	
1233			-06	EB-16-11/18/08			5	X	X	X					EQUIPMENT BLANK
–			-07	TB-21-11/18/08			2	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS: * (J FLAG Ctct to 0.25)

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHASE BIGDON	INSIGHT	11/18/08	1430
Received by	[signature]	Jane Dickinson	alpha	11/19/08	1140
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.

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

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

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

25192

Page # 2 of 2

Client Name	P.O. #	Job #
DAVID CONNER	218013	6005862
Address	**EMail Address**	
3990 OLD TOWN AVE, C205		
City, State, Zip	**Phone #**	**Fax #**
SAN DIEGO, CA 92110	619-296-7311	

Analyses Required: ALKALINITY (310.1); SULFIDE (376.2); CALCIUM, SODIUM, POTASSIUM, MAGNESIUM (200.8); AMMONIA (350.3)

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	ALKALINITY	SULFIDE	CALCIUM, SODIUM, POTASSIUM, MAGNESIUM	AMMONIA	REMARKS
0824	11/18/08	AQ	BMI0811PS6-01	MW-20-5 RS			14	X	X	X	X	
0946			-02	MW-20-4 RS				X	X	X	X	
1057			-03	MW-20-3 RS				X	X	X	X	
1153			-04	MW-20-2 RS				X	X	X	X	
1254			-05	MW-20-1 RS				X	X	X	X	
1233			-06	EB-16-11/18/08			5					EQUIPMENT BLANK
—			-07	TB-21-11/18/08			2					TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHASE BROGDON	INSIGHT	11/18/08	1430
Received by	[signature]	[illegible]	[illegible]	11/19/08	1146
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.

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

CAS SR #P0803489

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2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

October 30, 2008

David Conner
Battelle
3990 Old Town Ave., Suite C-205
San Diego, CA 92110

RE: JPL Groundwater Monitoring 4Q08 / G486090

Dear David:

Enclosed are the results of the samples submitted to our laboratory on October 21, 2008. For your reference, these analyses have been assigned our service request number P0803489.

All Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 25 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

Client: Battelle CAS Project No: P0803489
Project: JPL Groundwater Monitoring 4Q08 / G486090

CASE NARRATIVE

The samples were received intact under chain of custody on October 21, 2008 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q08/G486090

Service Request: P0803489

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
P0803489-001	MW-21-5	10/21/08	08:35
P0803489-002	MW-21-4	10/21/08	09:15
P0803489-003	MW-21-3	10/21/08	10:09
P0803489-004	MW-21-2	10/21/08	10:43
P0803489-005	MW-21-1	10/21/08	11:17
P0803489-006	DUPE-01-4Q08	10/21/08	00:00
P0803489-007	EB-01-10/21/08	10/21/08	11:05

Acronyms

CA LUFT	California DHS LUFT Method
ASTM	American Society for Testing and Materials
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CRDL	Contract Required Detection Limit
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOH or DHS	Department of Health Services
EPA	U.S. Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified Method
MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl *tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 19th Ed., 1995.
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)
VOC	Volatile Organic Compound(s)

Qualifiers

U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
J	The result is an estimated concentration that is less than the MRL (PQL), but greater than or equal to the MDL.
B	Analyte detected in the method blank above MRL (PQL).
E	Estimated; result based on response which exceeded the instrument calibration range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
D	The reported result is from a dilution.
X	See case narrative.

Water & Soil - Chain of Custody Record & Analytical Service Request

Columbia Analytical Services INC.
An Employee - Owned Company

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P0803489
CAS Contact:

Company Name & Address (Reporting Information)	BATTELLE 3990 OLD TOWN AVE., C-205 SAN DIEGO, CA 92110
Project Name	JPL GW MON 4Q08
Project Number	G486090
Project Manager	DAVID CONNER
P.O. # / Billing Information	214319 / BATTELLE ATTN: GERALD TOMPKINS 505 KING AVE. COLUMBUS, OH 43201
Phone	619-726-7311
Fax	
Email Address for Result Reporting	
Sampler (Print & Sign)	

Analysis Method and/or Analytes — Preservative Code

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	Volatile Organics GC/MS 624 ☐ 8260B ☐ Oxygenates ☐ TPH Gas ☐	TPH Gas 8015B ☐ BTEX 8021B ☐ MTBE 8021B ☐	TPH Diesel 8015B ☐ (Subcontracted) TPH Diesel Low Level 8015B ☐ (Subcontracted)	TPH FC ☐ 8015M (Subcontracted)	Semi-Volatile Organics GC/MS 625 ☐ 8270C ☐ (Subcontracted)	Cr VI (7196) — Preservative 0	Remarks
MW-21-5	1	10/21/08	0835	W	1						X	
MW-21-4	2	|	0915	|	2						X	MS/MSD, QC LEVEL IV
MW-21-3	3	|	1009	|	1						X	
MW-21-2	4	|	1043	|	|						X	
MW-21-1	5	|	1117	|	|						X	
DUPE-01-4Q08	6	|	—	|	|						X	DUPLICATE
EB-01-10/21/08	7	|	1105	|	2						X	EQUIPMENT BLANK

Preservative Key
0 None
1 HCL
2 HNO3
3 H2SO4
4 NaOH
5 Zn Acetate
6 Asc Acid
7 Other

Report Tier Levels - please select
Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) X

MRL required Yes / No
MDL / PQL / J required Yes / No

EDD required Yes / No
Type: geotracker

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	10/21/08	1230	[signature]	10/21/08	12:30
[signature]	10/21/08	13:15	[signature]	10/21/08	1315

Cooler / Blank / Ice / No Ice
Temperature 3 °C

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q08
Project Number : G486090
Sample Matrix : WATER

Service Request : P0803489
Date Collected : 10/21/08
Date Received : 10/21/08

Chromium, Hexavalent

Prep Method : None
Analysis Method : 7196A
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-21-5	P0803489-001	0.010	0.006	1	NA	10/21/08 15:40	ND	
MW-21-4	P0803489-002	0.010	0.006	1	NA	10/21/08 15:40	ND	
MW-21-3	P0803489-003	0.010	0.006	1	NA	10/21/08 15:40	ND	
MW-21-2	P0803489-004	0.010	0.006	1	NA	10/21/08 15:40	ND	
MW-21-1	P0803489-005	0.010	0.006	1	NA	10/21/08 15:40	ND	
DUPE-01-4Q08	P0803489-006	0.010	0.006	1	NA	10/21/08 15:40	ND	
EB-01-10/21/08	P0803489-007	0.010	0.006	1	NA	10/21/08 15:40	ND	
Method Blank	P0803489-MB	0.010	0.006	1	NA	10/21/08 15:40	ND	

Approved By Sue Anderson Date : 10/30/08

Report By:NFallahi

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

CAS SR #P0803507

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2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

October 31, 2008

David Conner
Battelle
3990 Old Town Ave., Suite C-205
San Diego, CA 92110

RE: JPL Groundwater Monitoring 4Q08 / G486090

Dear David:

Enclosed are the results of the samples submitted to our laboratory on October 22, 2008. For your reference, these analyses have been assigned our service request number P0803507.

All Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 25 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson

Sue Anderson
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

Client: Battelle
Project: JPL Groundwater Monitoring 4Q08 / G486090

Project No: P0803507

CASE NARRATIVE

The samples were received intact under chain of custody on October 22, 2008 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q08/G486090

Service Request: P0803507

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
P0803507-001	MW-19-5	10/22/08	08:20
P0803507-002	MW-19-4	10/22/08	08:49
P0803507-003	MW-19-3	10/22/08	09:17
P0803507-004	MW-19-2	10/22/08	09:45
P0803507-005	MW-19-1	10/22/08	10:13
P0803507-006	EB-02-10/22/08	10/22/08	10:03

Columbia Analytical Services, Inc.

Acronyms

CA LUFT	California DHS LUFT Method
ASTM	American Society for Testing and Materials
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CRDL	Contract Required Detection Limit
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOH or DHS	Department of Health Services
EPA	U.S. Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified Method
MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl *tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 19th Ed., 1995.
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)
VOC	Volatile Organic Compound(s)

Qualifiers

U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
J	The result is an estimated concentration that is less than the MRL (PQL), but greater than or equal to the MDL.
B	Analyte detected in the method blank above MRL (PQL).
E	Estimated; result based on response which exceeded the instrument calibration range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
D	The reported result is from a dilution.
X	See case narrative.

Water & Soil - Chain of Custody Record & Analytical Service Request

Columbia Analytical Services INC.
An Employee - Owned Company

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P0803507

CAS Contact:

Company Name & Address (Reporting Information)
BATTELLE
3990 OLD TOWN AVE., C-205
SAN DIEGO, CA 92110

Project Name: JPL GW MON 4Q08

Project Number: G446090

Project Manager: DAVID CONNER

P.O. # / Billing Information: 214319 / BATTELLE ATTN: GERALD TOMPKINS 505 KING AVE. COLUMBUS, OH 43201

Phone: 619-726-7311

Fax:

Email Address for Result Reporting

Sampler (Print & Sign)

Analysis Method and/or Analytes

Preservative Code

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	Volatile Organics GC/MS 624 ☐ 8260B ☐ Oxygenates ☐ TPH Gas ☐	TPH Gas 8015B ☐ BTEX 8021B ☐ MTBE 8021B ☐	TPH Diesel 8015B ☐ (Subcontracted)	TPH Diesel Low Level 8015B ☐ (Subcontracted)	TPH FC ☐ 8015M (Subcontracted)	Semi-Volatile Organics GC/MS 625 ☐ 8270C ☐ (Subcontracted)	0 Cr VI (7196)											Remarks
MW-19-5	1	10/22/08	0820	W	1							X											
MW-19-4	2		0849									X											QC LEVEL III
MW-19-3	3		0917									X											
MW-19-2	4		0945									X											
MW-19-1	5		1013									X											
EB-02-10/22/08	6		1003		1							X											EQUIPMENT BLANK

Preservative Key

0	None
1	HCL
2	HNO3
3	H2SO4
4	NaOH
5	Zn Acetate
6	Asc Acid
7	Other

Report Tier Levels - please select

Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) X

MRL required Yes / No
MDL / PQL / J required Yes / No

EDD required Yes / No
Type: Electronic

Project Requirements (MRLs, QAPP)

	Date	Time		Date	Time
Relinquished by: (Signature)	10/22/08	1700	Received by: (Signature)		
Relinquished by: (Signature)	10/22/08	1237	Received by: (Signature)	10/22/08	1237
Relinquished by: (Signature)			Received by: (Signature)		

Cooler / Blank / Ice / No Ice

Temperature 3 °C

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q08
Project Number : G486090
Sample Matrix : WATER

Service Request : P0803507
Date Collected : 10/22/08
Date Received : 10/22/08

Chromium, Hexavalent

Prep Method : None
Analysis Method : 7196A
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-19-5	P0803507-001	0.010	0.006	1	NA	10/22/08 15:45	ND	
MW-19-4	P0803507-002	0.010	0.006	1	NA	10/22/08 15:45	ND	
MW-19-3	P0803507-003	0.010	0.006	1	NA	10/22/08 15:45	ND	
MW-19-2	P0803507-004	0.010	0.006	1	NA	10/22/08 15:45	ND	
MW-19-1	P0803507-005	0.010	0.006	1	NA	10/22/08 15:45	ND	
EB-02-10/22/08	P0803507-006	0.010	0.006	1	NA	10/22/08 15:45	ND	
Method Blank	P0803507-MB	0.010	0.006	1	NA	10/22/08 15:45	ND	

Approved By Sue Anderson Date : 10/31/08

Report By:NFallahi

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

CAS SR #P0803530

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2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

November 3, 2008

David Conner
Battelle
3990 Old Town Ave., Suite C-205
San Diego, CA 92110

RE: JPL Groundwater Monitoring 4Q08 / G486090

Dear David:

Enclosed are the results of the samples submitted to our laboratory on October 23, 2008. For your reference, these analyses have been assigned our service request number P0803530.

All Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 24 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

Client: Battelle CAS Project No: P0803530
Project: JPL Groundwater Monitoring 4Q08 / G486090

CASE NARRATIVE

The samples were received intact under chain of custody on October 23, 2008 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q08/G486090

Service Request: P0803530

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
P0803530-001	MW-20-5	10/23/08	08:34
P0803530-002	MW-20-4	10/23/08	09:07
P0803530-003	MW-20-3	10/23/08	09:38
P0803530-004	MW-20-2	10/23/08	10:09
P0803530-005	MW-20-1	10/23/08	11:08
P0803530-006	EB-03-10/23/08	10/23/08	10:54

Acronyms

CA LUFT	California DHS LUFT Method
ASTM	American Society for Testing and Materials
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CRDL	Contract Required Detection Limit
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOH or DHS	Department of Health Services
EPA	U.S. Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified Method
MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl *tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 19th Ed., 1995.
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)
VOC	Volatile Organic Compound(s)

Qualifiers

U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
J	The result is an estimated concentration that is less than the MRL (PQL), but greater than or equal to the MDL.
B	Analyte detected in the method blank above MRL (PQL).
E	Estimated; result based on response which exceeded the instrument calibration range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
D	The reported result is from a dilution.
X	See case narrative.

Columbia Analytical Services INC.
An Employee - Owned Company

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Water & Soil - Chain of Custody Record & Analytical Service Request

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P0803530

CAS Contact:

Company Name & Address (Reporting Information): Battelle, 3990 Old Town Ave. C-?, San Diego, CA 92110

Project Name: JSY GW Nov 2008

Project Number: G456090

Project Manager: David Conner

P.O. # / Billing Information: 214391 / Battelle, Attn: Gerald Tompkins, 505 King Ave., Columbus OH 43201

Phone: 619-726-7311

Fax:

Email Address for Result Reporting:

Sampler (Print & Sign):

Analysis Method and/or Analytes

Preservative Code

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	Volatile Organics GC/MS 624 ☐ 8260B ☐ Oxygenates ☐ TPH Gas ☐	TPH Gas 8015B ☐ BTEX 8021B ☐ MTBE 8021B ☐	TPH Diesel 8015B ☐ (Subcontracted) TPH Diesel Low Level 8015B ☐ (Subcontracted)	TPH FC ☐ 8015M (Subcontracted)	Semi-Volatile Organics GC/MS 625 ☐ 8270C ☐ (Subcontracted)	Cr VI (7196)	Remarks
Preservative Code											0	
MW-20-5	1	10/23/08	0634	W	1						X	
MW-20-4	2	|	0907	|	1						X	
MW-20-3	3	|	0936	|	1						X	
MW-20-2	4	|	1009	|	2						X	MS/MSD
MW-20-1	5	|	1105	|	1						X	
EB-03-10/23/08	6	|	1054	|	1						X	Equipment Blank

Preservative Key
0 None
1 HCL
2 HNO3
3 H2SO4
4 NaOH
5 Zn Acetate
6 Asc Acid
7 Other

Report Tier Levels - please select
Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ✓
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) ____

MRL required Yes / No
MDL / PQL / J required Yes / No

EDD required Yes / No
Type: ____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
[signature]	10/23/08	1200	[signature]	10/23/08	1201
[signature]	10/23/08	12:47	[signature]	10/23/08	1247

Cooler / Blank / Ice / No Ice
Temperature ____ °C

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q08
Project Number : G486090
Sample Matrix : WATER

Service Request : P0803530
Date Collected : 10/23/08
Date Received : 10/23/08

Chromium, Hexavalent

Prep Method : None
Analysis Method : 7196A
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-20-5	P0803530-001	0.010	0.006	1	NA	10/23/08 14:50	ND	
MW-20-4	P0803530-002	0.010	0.006	1	NA	10/23/08 14:50	ND	
MW-20-3	P0803530-003	0.010	0.006	1	NA	10/23/08 14:50	ND	
MW-20-2	P0803530-004	0.010	0.006	1	NA	10/23/08 14:50	ND	
MW-20-1	P0803530-005	0.010	0.006	1	NA	10/23/08 14:50	ND	
EB-03-10/23/08	P0803530-006	0.010	0.006	1	NA	10/23/08 14:50	ND	
Method Blank	P0803530-MB	0.010	0.006	1	NA	10/23/08 14:50	ND	

Approved By _____ Date : 11/3/08

Report By:NFallahi

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

CAS SR #P0803553

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2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

November 10, 2008

David Conner
Battelle
3990 Old Town Ave., Suite C-205
San Diego, CA 92110

RE: JPL Groundwater Monitoring 4Q08 / G486090

Dear David:

Enclosed are the results of the samples submitted to our laboratory on October 24, 2008. For your reference, these analyses have been assigned our service request number P0803553.

All Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 25 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

Client: Battelle CAS Project No: P0803553
Project: JPL Groundwater Monitoring 4Q08 / G486090

CASE NARRATIVE

The samples were received intact under chain of custody on October 24, 2008 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q08/G486090

Service Request: P0803553

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
P0803553-001	MW-18-5	10/24/08	08:31
P0803553-002	MW-18-4	10/24/08	09:09
P0803553-003	MW-18-3	10/24/08	10:00
P0803553-004	MW-18-2	10/24/08	10:43
P0803553-005	MW-18-1	10/24/08	11:27
P0803553-006	DUPE-02-4Q08	10/24/08	00:00
P0803553-007	EB-04-10/24/08	10/24/08	11:07

3

Acronyms

CA LUFT	California DHS LUFT Method
ASTM	American Society for Testing and Materials
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CRDL	Contract Required Detection Limit
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOH or DHS	Department of Health Services
EPA	U.S. Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified Method
MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl *tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 19th Ed., 1995.
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)
VOC	Volatile Organic Compound(s)

Qualifiers

U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
J	The result is an estimated concentration that is less than the MRL (PQL), but greater than or equal to the MDL.
B	Analyte detected in the method blank above MRL (PQL).
E	Estimated; result based on response which exceeded the instrument calibration range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
D	The reported result is from a dilution.
X	See case narrative.

Water & Soil - Chain of Custody Record & Analytical Service Request

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Columbia Analytical Services INC.
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Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P080355 3

CAS Contact:

Company Name & Address (Reporting Information)	Project Name
BATTELLE 3990 OLD TOWN AVE., C-205 SAN DIEGO, CA 92110	JPL GW MON. 4Q08
	Project Number G486090
Project Manager DAVID CONNER	P.O. # / Billing Information 214319/ BATTELLE ATTN: GERALD TOMPKINS 505 KING AVE. COLUMBUS, OH 43201
Phone 619-726-7311 / Fax	
Email Address for Result Reporting	Sampler (Print & Sign)

Analysis Method and/or Analytes

Preservative Code

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	Volatile Organics GC/MS 624 ☐ 8260B ☐ Oxygenates ☐ TPH Gas ☐	TPH Gas 8015B ☐ BTEX 8021B ☐ MTBE 8021B ☐	TPH Diesel 8015B ☐ (Subcontracted)	TPH Diesel Low Level 8015B ☐ (Subcontracted)	TPH FC ☐ 8015M (Subcontracted)	Semi-Volatile Organics GC/MS 625 ☐ 8270C ☐ (Subcontracted)	0	Cr VI (196)	Remarks
MW-18-5	1	10/24/08	0831	W	1							X		QC LEVEL IV
MW-18-4	2	|	0909	|	|						X		
MW-18-3	3	|	1000	|	|						X		
MW-18-2	4	|	1043	|	|						X		
MW-18-1	5	|	1127	|	2							X		MS/MSD, QC LEVEL IV
DUPE-02-4Q08	6	|	—	|	1							X		DUPLICATE, QC LEVEL IV
EB-04-10/24/08	7	|	1107	|	1							X		EQUIPMENT BLANK
~~TB-04-10/24/08~~		|	—	|	1							X		~~TRIP BLANK~~ CCB

Preservative Key	
0	None
1	HCL
2	HNO3
3	H2SO4
4	NaOH
5	Zn Acetate
6	Asc Acid
7	Other

Report Tier Levels - please select

Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) X

MRL required Yes / No
MDL / PQL / J required Yes / No

EDD required Yes / No
Type: Excel tracker

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	10/24/08	1230		10/24/08	1230
	10/24/08	1315		10/24/08	1315
	Date:	Time:		Date:	Time:

Cooler / Blank / Ice / No Ice
Temperature 3 °C

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q08
Project Number : G486090
Sample Matrix : WATER

Service Request : P0803553
Date Collected : 10/24/08
Date Received : 10/24/08

Chromium, Hexavalent

Prep Method : None
Analysis Method : 7196A
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-18-5	P0803553-001	0.010	0.006	1	NA	10/24/08 14:45	ND	
MW-18-4	P0803553-002	0.010	0.006	1	NA	10/24/08 14:45	ND	
MW-18-3	P0803553-003	0.010	0.006	1	NA	10/24/08 14:45	ND	
MW-18-2	P0803553-004	0.010	0.006	1	NA	10/24/08 14:45	ND	
MW-18-1	P0803553-005	0.010	0.006	1	NA	10/24/08 14:45	ND	
DUPE-02-4Q08	P0803553-006	0.010	0.006	1	NA	10/24/08 14:45	ND	
EB-04-10/24/08	P0803553-007	0.010	0.006	1	NA	10/24/08 14:45	ND	
Method Blank	P0803553-MB	0.010	0.006	1	NA	10/24/08 14:45	ND	

Approved By _____ Date : 11/10/08

Report By:NFallahi

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

CAS SR #P0803567

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2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

November 7, 2008

David Conner
Battelle
3990 Old Town Ave., Suite C-205
San Diego, CA 92110

RE: JPL Groundwater Monitoring 4Q08 / G486090

Dear David:

Enclosed are the results of the samples submitted to our laboratory on October 27, 2008. For your reference, these analyses have been assigned our service request number P0803567.

All Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 25 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

Client: Battelle CAS Project No: P0803567
Project: JPL Groundwater Monitoring 4Q08 / G486090

CASE NARRATIVE

The samples were received intact under chain of custody on October 27, 2008 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q08/G486090

Service Request: P0803567

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
P0803567-001	MW-17-5	10/27/08	08:25
P0803567-002	MW-17-4	10/27/08	08:56
P0803567-003	MW-17-3	10/27/08	09:56
P0803567-004	MW-17-2	10/27/08	10:34
P0803567-005	MW-17-1	10/27/08	11:06
P0803567-006	DUPE-03-4Q08	10/27/08	00:00
P0803567-007	EB-05-10/27/08	10/27/08	10:51

Acronyms

CA LUFT	California DHS LUFT Method
ASTM	American Society for Testing and Materials
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CRDL	Contract Required Detection Limit
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOH or DHS	Department of Health Services
EPA	U.S. Environmental Protection Agency
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
M	Modified Method
MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl *tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 19th Ed., 1995.
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)
VOC	Volatile Organic Compound(s)

Qualifiers

U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
J	The result is an estimated concentration that is less than the MRL (PQL), but greater than or equal to the MDL.
B	Analyte detected in the method blank above MRL (PQL).
E	Estimated; result based on response which exceeded the instrument calibration range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
D	The reported result is from a dilution.
X	See case narrative.

Water & Soil - Chain of Custody Record & Analytical Service Request

Columbia Analytical Services INC.
An Employee - Owned Company

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P0803567

CAS Contact:

Company Name & Address (Reporting Information)	Project Name
BATTELLE 3990 OLD TOWN AVE., C-205 SAN DIEGO, CA 92110	JPL GW MON. 4Q08
	Project Number G486090
Project Manager DAVID CONNER	P.O. # / Billing Information 214319/ BATTELLE ATTN: GERALD TOMPKINS 505 KING AVE. COLUMBUS, OH 43201
Phone 619-726-7311	Fax
Email Address for Result Reporting	Sampler (Print & Sign)

Analysis Method and/or Analytes

Preservative Code

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	Volatile Organics GC/MS 624 ☐ 8260B ☐ Oxygenates ☐ TPH Gas ☐	TPH Gas 8015B ☐ BTEX 8021B ☐ MTBE 8021B ☐	TPH Diesel 8015B ☐ (Subcontracted)	TPH Diesel Low Level 8015B ☐ (Subcontracted)	TPH FC ☐ 8015M (Subcontracted)	Semi-Volatile Organics GC/MS 625 ☐ 8270C ☐ (Subcontracted)	0	Cr VI (7196)	Remarks
MW-17-5	1	10/27/08	0825	W	1							X		
MW-17-4	2		0856									X		
MW-17-3	3		0956									X		
MW-17-2	4		1034									X		
MW-17-1	5		1106		2							X		MS/MSD
DUPE-03-4Q08	6		—		1							X		DUPLICATE
EB-05-10/27/08	7		1051		1							X		EQUIPMENT BLANK

Preservative Key

0	None
1	HCL
2	HNO3
3	H2SO4
4	NaOH
5	Zn Acetate
6	Asc Acid
7	Other

Report Tier Levels - please select

Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) ____

MRL required Yes / No
MDL / PQL / J required Yes / No

EDD required Yes / No
Type: ____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 10/27/08	Time: 1230	Received by: (Signature)	Date: 10/27/08	Time: 12:30	
Relinquished by: (Signature)	Date: 10/27/08	Time: 1304	Received by: (Signature)	Date: 10/27/08	Time: 1304	Cooler / Blank / Ice / No Ice
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	Temperature 3°C °C

01

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q08
Project Number : G486090
Sample Matrix : WATER

Service Request : P0803567
Date Collected : 10/27/08
Date Received : 10/27/08

Chromium, Hexavalent

Prep Method : None
Analysis Method : 7196A
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-17-5	P0803567-001	0.010	0.006	1	NA	10/27/08 15:30	ND	
MW-17-4	P0803567-002	0.010	0.006	1	NA	10/27/08 15:30	ND	
MW-17-3	P0803567-003	0.010	0.006	1	NA	10/27/08 15:30	ND	
MW-17-2	P0803567-004	0.010	0.006	1	NA	10/27/08 15:30	ND	
MW-17-1	P0803567-005	0.010	0.006	1	NA	10/27/08 15:30	ND	
DUPE-03-4Q08	P0803567-006	0.010	0.006	1	NA	10/27/08 15:30	ND	
EB-05-10/27/08	P0803567-007	0.010	0.006	1	NA	10/27/08 15:30	ND	
Method Blank	P0803567-MB	0.010	0.006	1	NA	10/27/08 15:30	ND	

Approved By Sue Anderson Date : 11/7/08

Report By:NFallahi

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

CAS SR #P0803577

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2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

November 7, 2008

David Conner
Battelle
3990 Old Town Ave., Suite C-205
San Diego, CA 92110

RE: JPL Groundwater Monitoring 4Q08 / G486090

Dear David:

Enclosed are the results of the samples submitted to our laboratory on October 28, 2008. For your reference, these analyses have been assigned our service request number P0803577.

All Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 25 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

Client: Battelle CAS Project No: P0803577
Project: JPL Groundwater Monitoring 4Q08 / G486090

CASE NARRATIVE

The samples were received intact under chain of custody on October 28, 2008 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q08/G486090

Service Request: P0803577

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
P0803577-001	MW-3-5	10/28/08	08:40
P0803577-002	MW-3-4	10/28/08	09:15
P0803577-003	MW-3-3	10/28/08	09:42
P0803577-004	MW-3-2	10/28/08	10:13
P0803577-005	MW-3-1	10/28/08	10:45
P0803577-006	DUPE-04-4Q08	10/28/08	00:00
P0803577-007	EB-06-10/28/08	10/28/08	10:31

Acronyms

CA LUFT	California DHS LUFT Method
ASTM	American Society for Testing and Materials
BTEX	Benzene/Toluene/Ethylbenzene/Xylenes
CAS Number	Chemical Abstract Service Registry Number
CFC	Chlorofluorocarbon
CRDL	Contract Required Detection Limit
DLCS	Duplicate Laboratory Control Sample
DMS	Duplicate Matrix Spike
DOH or DHS	Department of Health Services
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GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
IC	Ion Chromatography
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
LCS	Laboratory Control Sample
LUFT	Leaking Underground Fuel Tank
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MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl *tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
ppm	Parts Per Million
PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
SM	*Standard Methods for the Examination of Water and Wastewater*, 19th Ed., 1995.
SW	*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*, SW-846, Third Edition, 1986 and as amended by Updates I, II, IIA, and IIB.
TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)
VOC	Volatile Organic Compound(s)

Qualifiers

U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
J	The result is an estimated concentration that is less than the MRL (PQL), but greater than or equal to the MDL.
B	Analyte detected in the method blank above MRL (PQL).
E	Estimated; result based on response which exceeded the instrument calibration range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
D	The reported result is from a dilution.
X	See case narrative.

Water & Soil - Chain of Custody Record & Analytical Service Request

Columbia Analytical Services INC.
An Employee - Owned Company

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day - Standard

CAS Project No. P803577

CAS Contact:

Company Name & Address (Reporting Information)
BATTELLE
3990 OLD TOWN AVE., C-205
SAN DIEGO, CA 92110

Project Name: JPL GW MON 4Q08

Project Number: G486090

Project Manager: DAVID CONNER

P.O. # / Billing Information: 214319 / BATTELLE ATTN: GERALD TOMPKINS 505 KING AVE. COLUMBUS, OH 43201

Phone: 619-726-7311

Fax:

Email Address for Result Reporting

Sampler (Print & Sign)

Analysis Method and/or Analytes

Preservative Code

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Matrix	Number of Containers	Volatile Organics GC/MS 624 ☐ 8260B ☐ Oxygenates ☐ TPH Gas ☐	TPH Gas 8015B ☐ BTEX 8021B ☐ MTBE 8021B ☐	TPH Diesel 8015B ☐ (Subcontracted)	TPH Diesel Low Level 8015B ☐ (Subcontracted)	TPH FC ☐ 8015M (Subcontracted)	Semi-Volatile Organics GC/MS 625 ☐ 8270C ☐ (Subcontracted)	0 Cr III (7196)	Remarks
MW-3-5	1	10/28/08	0840	W	1							X	
MW-3-4	2		0915									X	
MW-3-3	3		0942									X	
MW-3-2	4		1013									X	
MW-3-1	5		1045									X	
DUPE-04-4Q08	6		—									X	DUPLICATE
EB-06-10/28/08	7		1031									X	EQUIPMENT BLANK

Preservative Key

0	None
1	HCL
2	HNO3
3	H2SO4
4	NaOH
5	Zn Acetate
6	Asc Acid
7	Other

Report Tier Levels - please select

Tier I - (Results/Default if not specified) ____
Tier II - (Results + QC) ____
Tier III - (Data Validation Package) 10% Surcharge ____
Tier V - (client specified) X

MRL required Yes / No
MDL / PQL / J required Yes / No

EDD required Yes / No
Type: Geotracker

Project Requirements (MRLs, QAPP)

	Date	Time		Date	Time
Relinquished by: (Signature)	10/28/08	1200	Received by: (Signature)	10/28/08	1200
Relinquished by: (Signature)	10/28/08	1240	Received by: (Signature)	10/28/08	1240
Relinquished by: (Signature)			Received by: (Signature)		

Cooler / Blank / Ice / No Ice

Temperature 3 °C

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q08
Project Number : G486090
Sample Matrix : WATER

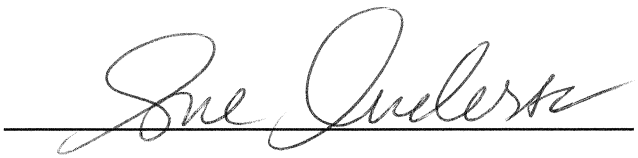
Service Request : P0803577
Date Collected : 10/28/08
Date Received : 10/28/08

Chromium, Hexavalent

Prep Method : None
Analysis Method : 7196A
Test Notes :

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date/Time Analyzed	Result	Result Notes
MW-3-5	P0803577-001	0.010	0.006	1	NA	10/28/08 15:05	ND	
MW-3-4	P0803577-002	0.010	0.006	1	NA	10/28/08 15:05	ND	
MW-3-3	P0803577-003	0.010	0.006	1	NA	10/28/08 15:05	ND	
MW-3-2	P0803577-004	0.010	0.006	1	NA	10/28/08 15:05	ND	
MW-3-1	P0803577-005	0.010	0.006	1	NA	10/28/08 15:05	ND	
DUPE-04-4Q08	P0803577-006	0.010	0.006	1	NA	10/28/08 15:05	ND	
EB-06-10/28/08	P0803577-007	0.010	0.006	1	NA	10/28/08 15:05	ND	
Method Blank	P0803577-MB	0.010	0.006	1	NA	10/28/08 15:05	ND	

Approved By  Date : 11/7/08

Report By:NFallahi

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

CAS SR #P0803590

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2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

LABORATORY REPORT

November 10, 2008

David Conner
Battelle
3990 Old Town Ave., Suite C-205
San Diego, CA 92110

RE: JPL Groundwater Monitoring 4Q08 / G486090

Dear David:

Enclosed are the results of the samples submitted to our laboratory on October 29, 2008. For your reference, these analyses have been assigned our service request number P0803590.

All Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein. Your report contains 26 pages.

Columbia Analytical Services, Inc. is certified by the California Department of Health Services, NELAP Laboratory Certificate No. 02115CA; Arizona Department of Health Services, Certificate No. AZ0694; Florida Department of Health, NELAP Certification E871020; New Jersey Department of Environmental Protection, NELAP Laboratory Certification ID #CA009; New York State Department of Health, NELAP NY Lab ID No: 11221; Oregon Environmental Laboratory Accreditation Program, NELAP ID: CA20007; The American Industrial Hygiene Association, Laboratory #101661; Department of the Navy (NFESC); Pennsylvania Registration No. 68-03307; TX Commission of Environmental Quality, NELAP ID T104704413-08-TX. Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact me for information corresponding to a particular certification.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Manager

2655 Park Center Drive, Suite A Simi Valley, California 93065 (805) 526-7161 (805) 526-7270 fax

Columbia Analytical Services INC.
An Employee - Owned Company

Client: Battelle CAS Project No: P0803590
Project: JPL Groundwater Monitoring 4Q08 / G486090

CASE NARRATIVE

The samples were received intact under chain of custody on October 29, 2008 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Hexavalent Chromium by EPA Method 7196A

No anomalies were encountered during this analysis.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for utilization of less than the complete report.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q08/G486090

Service Request: P0803590

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
P0803590-001	MW-14-5	10/29/08	08:15
P0803590-002	MW-14-4	10/29/08	08:51
P0803590-003	MW-14-3	10/29/08	09:45
P0803590-004	MW-14-2	10/29/08	10:41
P0803590-005	MW-14-1	10/29/08	11:20
P0803590-006	DUPE-05-4Q08	10/29/08	00:00
P0803590-007	EB-07-10/29/08	10/29/08	11:00

3

Acronyms

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CAS Number	Chemical Abstract Service Registry Number
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CRDL	Contract Required Detection Limit
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GC/MS	Gas Chromatography/Mass Spectrometry
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LCS	Laboratory Control Sample
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MDL	Method Detection Limit
MRL	Method Reporting Limit
MS	Matrix Spike
MTBE	Methyl *tert*-Butyl Ether
NA	Not Applicable
NC	Not Calculated
ND	None Detected at or above the Method Reporting/Detection Limit (MRL/MDL)
NTU	Nephelometric Turbidity Units
ppb	Parts Per Billion
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PQL	Practical Quantitation Limit
QA/QC	Quality Assurance/Quality Control
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RPD	Relative Percent Difference
SIM	Selected Ion Monitoring
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TDS	Total Dissolved Solids
TPH	Total Petroleum Hydrocarbons
TSS	Total Suspended Solids
TTLC	Total Threshold Limit Concentration
VOA	Volatile Organic Analyte(s)
VOC	Volatile Organic Compound(s)

Qualifiers

U	The compound was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL.
J	The result is an estimated concentration that is less than the MRL (PQL), but greater than or equal to the MDL.
B	Analyte detected in the method blank above MRL (PQL).
E	Estimated; result based on response which exceeded the instrument calibration range.
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