

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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-06A

Client I.D. Number: DUPE-03-1Q09

Attn: David Conner

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

x. (014) 430-0041

Sampled: 01/30/09

Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBCI	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	104	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

33 Dibromochloromethane

Tetrachloroethene

34 1,2-Dibromoethane (EDB)

Roger Scholl Kandy Saular

ND

ND

Walter Hinkow

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

µg/L

μg/L

µg/L

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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.

16/09
Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-07A

Client I.D. Number: DUPE-04-1Q09

Attn: David Conner Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 01/30/09

Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	ng Limit Compound			Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
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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-Xvlene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xvlene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyitoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	108	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

1,2-Dibromoethane (EDB)

Tetrachloroethene

Roger Scholl Kandy Soulur

ND

ND

Walter Acrim

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

µg/L

μg/L

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2/16/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#:

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-08A

Client I.D. Number: EB-06-01/30/09

Attn:

David Conner (619) 574-4827

Phone: Fax:

(614) 458-6641

Sampled: 01/30/09

Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Limit	
1	Dichlorodifluoromethane	DM	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-Propvlbenzene	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-Butvibenzene	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
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22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBCI	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	106	(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					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

1,2-Dibromoethane (EDB)

Tetrachloroethene

ND

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

µg/L

μg/L

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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-09A

Client I.D. Number: TB-06-01/30/09

David Conner Attn:

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 01/30/09

Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit			Compound	Concentration	Reporting 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
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23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
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30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

33 Dibromochloromethane 1,2-Dibromoethane (EDB)

Tetrachioroethene

ND

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

Alpha Analytical Number: BMI09020305-11A

Client I.D. Number: MW-24-3

Attn: David Conner Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/02/09

Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit	Compound		Concentration	Reporting Li	imit
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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
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12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
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14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	91	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

33 Dibromochloromethane

Tetrachloroethene

1,2-Dibromoethane (EDB)

Roger Scholl Kandy Saulan

ND

ND

Walter Firehour

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

1.0

μg/L

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

2/16/09 Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

G005862/JPL Groundwater Monitoring Job#:

Alpha Analytical Number: BMI09020305-12A

Client I.D. Number: MW-24-2

David Conner Attn:

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/02/09

Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	l 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	Bromochioromethane	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 ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	0.61	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	NĐ	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND ND	1.0	μg/Ľ
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	104	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
		!							

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35

1,2-Dibromoethane (EDB)

Tetrachloroethene

ND

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

μg/L

µg/L

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Report Date Page 1 of 1



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#:

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-13A

Client I.D. Number: MW-24-1

Attn: David Conner

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/02/09

Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	: ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	2.6	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	NĐ	0.50	μg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	108	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L				,	
33	Dibromochloromethane	ND	0.50	μg/L					
~ .	4.0.00	!		. •					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

1,2-Dibromoethane (EDB)

Tetrachloroethene

ND

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

μg/L

μg/L

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Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

G005862/JPL Groundwater Monitoring Job#:

Alpha Analytical Number: BMI09020305-14A

Client I.D. Number: EB-07-02/02/09

David Conner Attn:

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/02/09 Received: 02/03/09

Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	-
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xvlene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	µg/L	43	1.1.2.2-Tetrachloroethane	ND	0.50	
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	
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-Propvibenzene	ND	0.50	
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	ug/L	51	tert-Butvlbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
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	ug/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	
30	1.1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L				, ,	
33	Dibromochloromethane	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

1,2-Dibromoethane (EDB)

Tetrachloroethene

ND

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

µg/L

µg/L

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2/16/09

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020305-15A

Client I.D. Number: TB-07-02/02/09

Attn: David Conner Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/02/09

Received: 02/03/09 Analyzed: 02/06/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butvibenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBCI	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	104	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L			1	,	

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

33 Dibromochloromethane

Tetrachloroethene

1,2-Dibromoethane (EDB)

Roger Scholl KundgeSauleur

ND

Walter Acrilian

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

μg/L

μg/L

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2/16/09 Report Date



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

VOC Sample Preservation Report

Work Order: BMI09020305 Project: G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	рН	
09020305-01A	MW-20-5	Aqueous	2	
09020305-02A	MW-20-4	Aqueous	2	
09020305-03A	MW-20-3	Aqueous	2	
09020305-04A	MW-20-2	Aqueous	2	
09020305-05A	MW-20-1	Aqueous	2	
09020305-06A	DUPE-03-1Q09	Aqueous	2	
09020305-07A	DUPE-04-1Q09	Aqueous	2	
09020305-08A	EB-06-01/30/09	Aqueous	2	
09020305-09A	TB-06-01/30/09	Aqueous	2	
09020305-11A	MW-24-3	Aqueous	2	
09020305-12A	MW-24-2	Aqueous	2	
09020305-13A	MW-24-1	Aqueous	2	
09020305-14A	EB-07-02/02/09	Aqueous	2	
09020305-15A	TB-07-02/02/09	Aqueous	2	



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Date: 11-Feb-09		(QC S	ummai	y Repor	·t				Work Ord 09020303	
Method Blan	nk		Туре І		est Code: E Batch ID: 214		thod 314.0	Analys	sis Date:	02/04/2009 13:26	
Sample ID:	MB-21443	Units : µg/L		Run ID: I	C_3_090204 <i>i</i>	Δ,		Prep [Date:	02/04/2009	
Analyte		Result	PQL	SpkVa	SpkRefVal	%REC	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate	- 110	ND		1							
Laboratory	Fortified Blank		Туре І	LFB 7	est Code: E	PA Me	thod 314.0				
File ID: 15				E	Batch ID: 214	43		Analys	sis Date:	02/04/2009 13:44	
Sample ID:	LFB-21443	Units : µg/L		Run ID: I	C_3_090204	4		Prep [Date:	02/04/2009	
Analyte		Result	PQL	SpkVa	l SpkRefVal	%REC	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		23.9		2 25	j	95	85	115			
Sample Mat	trix Spike	-	Туре	LFM 3	est Code: E	PA Me	thod 314.0				
File ID: 20				E	Batch ID: 214	43		Analy	sis Date:	02/05/2009 16:18	
Sample ID:	09020305-13ALFM	Units : µg/L		Run ID: I	C_3_090204 <i>i</i>	A		Prep [Date:	02/04/2009	
Analyte		Result	PQL	SpkVa	l SpkRefVal	%REC	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		845	4	0 500	326.4	104	80	120			
Sample Mat	rix Spike Duplicate		Type	LFMD	Fest Code: E	PA Me	thod 314.0				
File ID: 21	•			E	Batch ID: 214	43		Analy	sis Date:	02/05/2009 16:37	
Sample ID:	09020305-13ALFMD	Units : µg/L		Run ID: I	C_3_090204	A		Prep [Date:	02/04/2009	
Analyte		Result	PQL	SpkVa	SpkRefVal	%REC	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		816	4	0 500	326.4	98	80	120	844.	6 3.4(15)	

Comments:

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



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Date: 11-Feb-09	QC Summary Report	Work Order: 09020305
Method Blank File ID: 020409.B\MB458.D\	Type MBLK Test Code: EPA Method 200.8 Batch ID: 21458K Analysis Date: 02/05/20	009 15:00
Sample ID: MB-21458	Units: mg/L Run ID: ICP/MS_090205C Prep Date: 02/05/20	09
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RP	D(Limit) Qual
Chromium (Cr)	ND 0.005	
Laboratory Control Spike	Type LCS Test Code: EPA Method 200.8	
File ID: 020409.B\L48.D\	Batch ID: 21458K Analysis Date: 02/05/20	009 15:06
Sample ID: LCS-21458	Units: mg/L Run ID: ICP/MS_090205C Prep Date: 02/05/20	109
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RP	D(Limit) Qual
Chromium (Cr)	0.0506 0.005 0.05 101 80 120	
Sample Matrix Spike	Type MS Test Code: EPA Method 200.8	
File ID: 020409.B\MS53.D\	Batch ID: 21458K Analysis Date: 02/05/20	009 15:29
Sample ID: 09020305-13AMS	Units: mg/L Run ID: ICP/MS_090205C Prep Date: 02/05/20	109
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RP	D(Limit) Qual
Chromium (Cr)	0.06 0.005 0.05 0.008582 103 80 120	
Sample Matrix Spike Duplicate	Type MSD Test Code: EPA Method 200.8	
File ID: 020409.B\MSD53.D\	Batch ID: 21458K Analysis Date: 02/05/20	009 15:34
Sample ID: 09020305-13AMSD	Units: mg/L Run ID: ICP/MS_090205C Prep Date: 02/05/20	09
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RP	D(Limit) Qual
Chromium (Cr)	0.0565	.1(20)

Comments:

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



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Date: 12-Feb-09	(QC Summ	ary Report			Work Order: 09020305
Method Blank File ID: 09020606.D		Type MBLK	Test Code:	00014	Analysis Data, 00/06/5	
	limite	D 15	Batch ID: MS15W0	206M	Analysis Date: 02/06/2	
Sample ID: MBLK MS15W0206M Analyte	Units : µg/L): MSD_15_090206B	C LOU(ME) L	Prep Date: 02/06/2	
	Result		vai Spkkeivai %KE	C LCL(IVIE) U	CL(ME) RPDRefVal %RF	PD(Limit) Qual
Dichlorodifluoromethane Chloromethane	ND	0.5				
Vinyl chloride	ND ND	1 0.5				
Chloroethane	ND ND	0.5				
Bromomethane	ND	1				
Trichlorofluoromethane	ND	0.5				
1,1-Dichloroethene	ND	0.5				
Dichloromethane	ND	1				
Freon-113	ND	0.5				
trans-1,2-Dichloroethene	ND	0.5				
Methyl tert-butyl ether (MTBE)	ND	0.5				
1,1-Dichloroethane	ND	0.5				
2-Butanone (MEK) cis-1,2-Dichloroethene	ND	10				
Bromochloromethane	ND ND	0.5				
Chloroform	ND ND	0.5 0.5				
2,2-Dichloropropane	ND ND	0.5 0.5				
1,2-Dichloroethane	ND	0.5				
1,1,1-Trichloroethane	ND	0.5				
1,1-Dichloropropene	ND	0.5				
Carbon tetrachloride	ND	0.5				
Benzene	ND	0.5				
Dibromomethane	ND	0.5				
1,2-Dichloropropane	ND	0.5				
Trichloroethene	ND	0.5				
Bromodichloromethane	ND	0.5				
4-Methyl-2-pentanone (MIBK)	ND	2.5				
cis-1,3-Dichloropropene trans-1,3-Dichloropropene	ND ND	0.5				
1,1,2-Trichloroethane	ND ND	0.5 0.5				
Toluene	ND	0.5				
1,3-Dichloropropane	ND	0.5				
Dibromochloromethane	ND	0.5				
1,2-Dibromoethane (EDB)	ND	1				
Tetrachloroethene	ND	0.5				
1,1,1,2-Tetrachloroethane	ND	0.5				
Chlorobenzene	ND	0.5				
Ethylbenzene	ND	0.5				
m,p-Xylene	ND	0.5				
Bromoform	ND	0.5				
Styrene o-Xylene	ND	0.5				
1,1,2,2-Tetrachloroethane	ND ND	0.5 0.5				
1,2,3-Trichloropropane	ND	1				
Isopropylbenzene	ND	0.5				
Bromobenzene	ND	0.5				
n-Propylbenzene	ND	0.5				
4-Chlorotoluene	ND	0.5				
2-Chlorotoluene	ND	0.5				
1,3,5-Trimethylbenzene	ND	0.5				
tert-Butylbenzene	ND	0.5				
1,2,4-Trimethylbenzene	ND	0.5				
sec-Butylbenzene 1,3-Dichlorobenzene	ND ND	0.5				
1,4-Dichlorobenzene	ND ND	0.5				
4-Isopropyltoluene	ND ND	0.5 0.5				
1,2-Dichlorobenzene	ND ND	0.5				
n-Butylbenzene	ND	0.5				
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5				
1,2,4-Trichlorobenzene	ND	1				
Naphthalene	ND	1				
Hexachlorobutadiene	ND	1				
1,2,3-Trichlorobenzene	ND	1				
Surr: 1,2-Dichloroethane-d4	10.3		10 103		130	
Surr: Toluene-d8	10.3		10 103	70	130	



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Date: 12-Feb-09	(QC Sun	nmary Re	eport			Work Ord 0902030:	
Surr: 4-Bromofluorobenzene	9.54		10	95	70	130		
Laboratory Control Spike		Type LCS	Test Co	ode:				
File ID: 09020604.D			Batch II	D: MS15W0206	M	Analysis D	ate: 02/06/2009 08:31	
Sample ID: LCS MS15W0206M	Units : µg/L		n ID: MSD_1 :			Prep Date:		
Analyte	Result	PQL	SpkVal SpkF	RefVal %REC I	CL(ME)) UCL(ME) RPD	RefVal %RPD(Limit)	Qua
Dichlorodifluoromethane	7.7	1	10	77	70	130		
Chloromethane	7.6	2	10	76	70	130		
Vinyl chloride Chloroethane	8.97	1	10	90	70 70	130		
Bromomethane	8.64 7.54	1 2	10 10	86 75	70 70	130 130		
Trichlorofluoromethane	11	1	10	110	70	130		
1,1-Dichloroethene	10.5	1	10	105	70	130		
Dichloromethane	9.82	2	10	98	70	130		
trans-1,2-Dichloroethene	10.1	1	10	101	70	130		
Methyl tert-butyl ether (MTBE) 1,1-Dichloroethane	10.1 10.3	0.5 1	10 10	101 103	62 70	136 130		
cis-1,2-Dichloroethene	10.7	1	10	107	70	130		
Bromochloromethane	11	1	10	110	70	130		
Chloroform	9.75	1	10	98	70	130		
2,2-Dichloropropane	8.77	1	10	88	70	130		
1,2-Dichloroethane 1,1,1-Trichloroethane	10.2 10.5	1 1	10 10	102 105	70 70	130 130		
1,1-Dichloropropene	10.5	1	10 10	105	70 70	130		
Carbon tetrachloride	10.1	1	10	101	70	130		
Benzene	9.54	0.5	10	95	70	130		
Dibromomethane	10.8	1	10	108	70	130		
1,2-Dichloropropane	9.85	1	10	99	70	130		
Trichloroethene Bromodichloromethane	10.8	1 1	10 10	108 105	70 70	130 130		
cis-1,3-Dichloropropene	10.5 10.4	1	10	103	70	130		
trans-1,3-Dichloropropene	10.4	1	10	104	70	130		
1,1,2-Trichloroethane	9.72	1	10	97	70	130		
Toluene	9.57	0.5	10	96	70	130		
1,3-Dichloropropane	9.31	1	10	93	70 70	130		
Dibromochloromethane 1,2-Dibromoethane (EDB)	10.4 19.5	1 2	10 20	104 98	70 70	130 130		
Tetrachloroethene	10.3	1	10	103	70	130		
1,1,1,2-Tetrachloroethane	9.8	1	10	98	70	130		
Chlorobenzene	9.4	1	10	94	70	130		
Ethylbenzene	9.6	0.5	10	96	70	130		
m,p-Xylene Bromoform	9.76 9.56	0.5 1	10 10	98 96	70 70	130 130		
Styrene	9.57	1	10	96	70	130		
o-Xylene	9.54	0.5	10	95	70	130		
1,1,2,2-Tetrachloroethane	8.81	1	10	88	70	130		
1,2,3-Trichloropropane	18.5	2	20	92	70	130	-	
Isopropylbenzene Bromobenzene	9.69 9.49	1	10 10	97 95	70 70	130 130		
n-Propylbenzene	9.87	1	10	99	70	130		
4-Chlorotoluene	10	1	10	100	70	130		
2-Chlorotoluene	9.84	1	10	98	70	130		
1,3,5-Trimethylbenzene	9.44	1	10	94	70	130		
tert-Butylbenzene 1,2,4-Trimethylbenzene	9.36 9.77	1 1	10 10	94 98	70 70	130 130		
sec-Butylbenzene	9.33	1	10	93	70	130		
1,3-Dichlorobenzene	9.64	1	10	96	70	130		
1,4-Dichlorobenzene	9.32	1	10	93	70	130		
4-Isopropyltoluene	9.54	1	10	95	70	130		
1,2-Dichlorobenzene n-Butylbenzene	9.21	1	10	92 97	70 70	130 130		
n-Butylbenzene 1,2-Dibromo-3-chloropropane (DBCP)	9.72 45.9	1 3	10 50	9 7 92	70 70	130		
1,2,4-Trichlorobenzene	45.9 10.1	2	10	101	70 70	130		
Naphthalene	9.09	2	10	91	70	130		
Hexachlorobutadiene	18.9	2	20	94	70	130		
1,2,3-Trichlorobenzene	10.2	2	10	102	70 70	130		
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	9.63 9.97		10 10	96 99.7	70 70	130 130		
Surr: 4-Bromofluorobenzene	9.97 9.84		10	99.7 98	70 70	130		



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 Date: 12-Feb-09
 QC Summary Report
 Work Order: 09020305

 Sample Matrix Spike File ID: 09020607.D
 Type MS
 Test Code: Batch ID: MS15W0206M
 Analysis Date: 02/06/2009 09:55

Sample Matrix Spike		Type MS	Te:	st Code:					
File ID: 09020607.D			Bat	ch ID: MS1	5W020)6M	Analysis Dat	e: 02/06/2009 09:55	
Sample ID: 09020305-13AMS	Units : µg/L	F	Run ID: MS	D_15_0902	06B		Prep Date:	02/06/2009	
Analyte	Result	PQL				LCL(ME)	UCL(ME) RPDR	efVal %RPD(Limit)	Qua
Dichlorodifluoromethane	46.3	2.5	50	0	93	13	167		
Chloromethane	38.7	10	50	Õ	77	28	145		
Vinyl chloride	45.5	2.5	50	0	91	43	134		
Chloroethane	39	2.5	50	Ō	78	39	154		
Bromomethane	37.9	10	50	0	76	19	176		
Trichlorofluoromethane	50.5	2.5	50	0	101	34	160		
1,1-Dichloroethene	45	2.5	50	0	90	60	130		
Dichloromethane	43.7	10	50	0	87	68	130		
trans-1,2-Dichloroethene	45.1	2.5	50	0	90	63	130		
Methyl tert-butyl ether (MTBE)	44.4	1.3	50	0	89	56	141		
1,1-Dichloroethane	45.4	2.5	50	0	91	61	130		
cis-1,2-Dichloroethene	47.2	2.5	50	0	94	70	130		
Bromochloromethane	48.8	2.5	50	0	98	70	130		
Chloroform	46	2.5	50	2.62	87	67	130		
2,2-Dichloropropane	39.1	2.5	50	0	78	30	152		
1,2-Dichloroethane	46.9	2.5	50	0	94	60	135		
1,1,1-Trichloroethane	45.9	2.5	50	0	92	59	137		
1,1-Dichloropropene	45.9	2.5	50	0	92	63	130		
Carbon tetrachloride	44.1	2.5	50	0	88	50	147		
Benzene	41.7	1.3	50	0	83	67	130		
Dibromomethane	48.4	2.5	50	0	97	69	133		
1,2-Dichloropropane	43.4	2.5	50	0	87	69	130		
Trichloroethene	46.9	2.5	50	0	94	69	130		
Bromodichloromethane	47.4	2.5	50	0	95	66	134		
cis-1,3-Dichloropropene trans-1,3-Dichloropropene	44.8	2.5	50	0	90	63 66	130		
1,1,2-Trichloroethane	45.4	2.5	50 50	0	91	66 68	131		
Toluene	42.2 40.7	2.5	50 50	0	84 81	68 66	130 130		
1,3-Dichloropropane	40.7	1.3 2.5	50	0	81	70	130		
Dibromochloromethane	44.5	2.5	50 50	0	89	70 70	130		
1,2-Dibromoethane (EDB)	85.2	10	100	0	85	70	130		
Tetrachloroethene	43.2	2.5	50	0	86	61	134		
1,1,1,2-Tetrachloroethane	42.4	2.5	50 50	0	85	70	130		
Chlorobenzene	41.3	2.5	50 50	0	83	70	130		
Ethylbenzene	41.1	1.3	50	0	82	68	130		
m,p-Xylene	41.8	1.3	50	0	84	64	130		
Bromoform	40.5	2.5	50	Ö	81	64	138		
Styrene	42	2.5	50	Ö	84	69	130		
o-Xylene	41.2	1.3	50	Ō	82	70	130		
1,1,2,2-Tetrachloroethane	38.5	2.5	50	Ō	77	65	131		
1,2,3-Trichloropropane	78.6	10	100	0	79	70	130		
Isopropylbenzene	42.4	2.5	50	0	85	64	138		
Bromobenzene	42.5	2.5	50	0	85	70	130		
n-Propylbenzene	42	2.5	50	0	84	66	132		
4-Chlorotoluene	44.7	2.5	50	0	89	70	130		
2-Chlorotoluene	42.7	2.5	50	0	85	70	130		
1,3,5-Trimethylbenzene	42.2	2.5	50	0	84	66	136		
tert-Butylbenzene	41.2	2.5	50	0	82	65	137		
1,2,4-Trimethylbenzene	43.1	2.5	50	0	86	65	137		
sec-Butylbenzene	40.8	2.5	50	0	82	66	134		
1,3-Dichlorobenzene	43	2.5	50	0	86	70	130		
1,4-Dichlorobenzene	41.1	2.5	50	0	82	70	130		
4-Isopropyltoluene	42.2	2.5	50	0	84	66	137		
1,2-Dichlorobenzene	41.5	2.5	50	0	83	70	130		
n-Butylbenzene	42.2	2.5	50	0	84	60	142		
1,2-Dibromo-3-chloropropane (DBCP)	198	15	250	0	79	67	130		
1,2,4-Trichlorobenzene	43.7	10	50	0	87	61	137		
Naphthalene	35.8	10	50	0	72	40	167		
Hexachlorobutadiene	80.3	10	100	0	80	61	130		
1,2,3-Trichlorobenzene	42.5	10	50	0	85	51	144		
1,2,3-Trichlorobenzene Surr: 1,2-Dichloroethane-d4	42.5 48.4	10	50	0	97	70	130		
1,2,3-Trichlorobenzene	42.5	10		0					



Surr: 4-Bromofluorobenzene

49.5

Alpha Analytical, Inc.

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

Work Order: Date: QC Summary Report 12-Feb-09 09020305 Type MSD Test Code: Sample Matrix Spike Duplicate Analysis Date: 02/06/2009 10:18 File ID: 09020608.D Batch ID: MS15W0206M Sample ID: 09020305-13AMSD Units: µg/L Prep Date: 02/06/2009 Run ID: MSD_15_090206B SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD(Limit) Analyte Result **PQL** Qual Dichlorodifluoromethane 167 46.28 10.1(20) 51.2 2.5 50 0 102 13 145 38.73 12.2(20) Chloromethane 43.8 10 50 0 88 28 Vinyl chloride 43 134 45.51 7.2(20)2.5 98 48.9 50 0 Chloroethane 39 154 39.04 9.9(20)43.1 2.5 50 0 86 176 R5 19 37.92 20.6(20) Bromomethane 46.7 10 50 0 93 Trichlorofluoromethane 54.6 2.5 50 0 109 34 160 50.5 7.8(20) 60 44.96 9.0(20)1.1-Dichloroethene 49.2 2.5 50 n 98 130 Dichloromethane 47.1 10 50 0 94 68 130 43.7 7.5(20)trans-1,2-Dichloroethene 49.7 2.5 50 0 99 63 130 45.07 9.9(20)Methyl tert-butyl ether (MTBE) 141 44.43 7.1(20)47 7 1.3 50 O 95 56 1,1-Dichloroethane 130 45.42 8.4(20)494 2.5 50 99 61 cis-1.2-Dichloroethene 0 101 70 130 47.23 7.1(20) 50.7 2.5 50 Bromochloromethane 52.5 2.5 50 0 105 70 130 48.75 7.5(20)Chloroform 49.4 2.5 50 2.62 94 67 130 46.04 7.1(20) 2,2-Dichloropropane 30 152 39.08 12.6(20) 0 89 44.4 2.5 50 1,2-Dichloroethane 60 135 46.94 5.1(20) 49.4 2.5 50 99 45.85 100 59 9.1(20)1.1.1-Trichloroethane 50.2 2.5 50 O 137 1,1-Dichloropropene 50.8 2.5 50 0 102 63 130 45.94 10.0(20) Carbon tetrachloride 49.2 2.5 50 0 98 50 147 44.07 10.9(20) 8.4(20) 67 130 41.69 Benzene 91 45.3 1.3 50 0 48.37 4.8(20) Dibromomethane 50.7 2.5 50 O 101 69 133 7.6(20) 1,2-Dichloropropane 46.9 2.5 50 0 94 69 130 43.44 Trichloroethene 2.5 50 0 102 69 130 46.89 8.2(20)50.9 Bromodichloromethane 101 66 134 47.42 5.9(20) 50.3 2.5 50 0 6.6(20) cis-1.3-Dichloropropene 96 63 130 44.76 47.8 2.5 50 0 45.37 5.8(20) trans-1,3-Dichloropropene 48.1 2.5 50 0 96 66 131 68 42.24 8.0(20) 1,1,2-Trichloroethane 45.7 2.5 50 0 91 130 Toluene 0 91 66 130 40.67 11.0(20) 45 4 50 1.3 1,3-Dichloropropane 0 89 70 130 40.55 9.0(20)44 4 2.5 50 Dibromochloromethane 130 44.45 10.2(20) 49.2 2.5 50 0 98 70 85.18 8.0(20) 1,2-Dibromoethane (EDB) 92.3 100 0 92 70 130 10 Tetrachloroethene 49.3 2.5 50 0 99 61 134 43.16 13.2(20) 1.1,1,2-Tetrachloroethane 46.7 70 42.43 9.5(20)2.5 50 Ω 93 130 Chlorobenzene 45.8 2.5 50 0 92 70 130 41.3 10.3(20) 41.14 11.7(20) Ethylbenzene 46.3 1.3 50 0 93 68 130 m.p-Xylene 46.7 50 O 93 64 130 41.79 11.0(20) 1.3 Bromoform 45.3 2.5 50 0 91 64 138 40.46 11.3(20) 69 130 41.96 10.2(20) Styrene 50 0 93 46.5 2.5 41.21 10.3(20) o-Xylene 45.7 1.3 50 0 91 70 130 38 46 7.4(20)1,1,2,2-Tetrachloroethane 41.4 2.5 50 0 83 65 131 1.2.3-Trichloropropane 70 130 78.61 10.3(20) 87.2 10 100 0 87 Isopropylbenzene 0 93 64 138 42.38 9.6(20)46.7 2.5 50 70 7.4(20)Bromobenzene 0 92 130 42 54 45.8 2.5 50 n-Propylbenzene 46.7 2.5 50 0 93 66 132 41.98 10.6(20) 4-Chlorotoluene 48.8 2.5 50 0 98 70 130 44.7 8.7(20)47.6 70 130 42.73 10.7(20) 2-Chlorotoluene 0 95 2.5 50 1,3,5-Trimethylbenzene 45.9 2.5 50 0 92 66 136 42.23 8.3(20) 0 65 137 41.17 10.0(20) tert-Butvlbenzene 45.5 2.5 50 91 1,2,4-Trimethylbenzene 47.1 2.5 0 94 65 137 43.12 8.8(20)50 sec-Butylbenzene 45.7 2.5 50 0 91 66 134 40.78 11.4(20) 1.3-Dichlorobenzene 0 94 70 130 42.97 9.3(20)47.2 2.5 50 1,4-Dichlorobenzene 0 90 70 130 41.1 9.4(20)45.1 2.5 50 0 42.19 10.8(20) 4-Isopropyltoluene 94 66 137 47 2.5 50 70 130 41.5 7.5(20)1,2-Dichlorobenzene 44.7 2.5 50 0 89 142 42.18 11.6(20) n-Butvibenzene 47.4 2.5 50 0 95 60 1,2-Dibromo-3-chloropropane (DBCP) 218 0 87 67 130 198.4 9.5(20)15 250 1,2,4-Trichlorobenzene 10 50 0 104 61 137 43.71 16.9(20) 51.8 Naphthalene 0 86 40 167 35.82 18.1(20) 43 10 50 Hexachlorobutadiene 61 130 80.26 17.2(20) 95.4 10 100 0 95 R5 1,2,3-Trichlorobenzene 22.3(20) 53.2 10 50 0 106 51 144 42.49 Surr: 1,2-Dichloroethane-d4 46.8 50 94 70 130 Surr: Toluene-d8 70 50.6 101 130 50

50

99

130



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

Date: 12-Feb-09

QC Summary Report

Work Order: 09020305

Comments:

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

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

Billing Information:

505 King Avenue

Columbus, OH 43201

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

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

Report Attention Shane Walton Betsy Cutie David Conner Phone Number (614) 424-4117 x (614) 424-4899 x (619) 574-4827 x connerd@battelle.org cutiee@batelle.org waltons@battelle.org EMail Address

Page: 1 of 2

WorkOrder: BMI09020305

Report Due By: 5:00 PM On: 17-Feb-2009

EDD Required: Yes

Sampled by: Client

Samples Received

BMI09020305-10A MW-24-4 Sample ID Client's COC #: 24139 BMI09020305-07A BMI09020305-05A MW-20-1 BMI09020305-04A MW-20-2 BMI09020305-03A MW-20-3 BMI09020305-02A MW-20-4 BMI09020305-01A MW-20-5 QC Level: S4 BMI09020305-09A TB-06-01/30/09 BMI09020305-08A BMI09020305-06A DUPE-03-1Q09 DUPE-04-1Q09 EB-06-01/30/09 Sample ID Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates Job : ò Matrix Date Š Š Š ģ å Š å á AQ 01/30/09 08:45 01/30/09 00:00 01/30/09 00:00 01/30/09 09:51 01/30/09 00:00 01/30/09 10:37 02/02/09 08:40 01/30/09 10:21 01/30/09 11:10 01/30/09 09:19 G005862/JPL Groundwater Monitoring Collection No. of Bottles Alpha Sub Ç S G Ç S O S G 0 0 0 0 0 0 0 0 0 0 TAT 5 6 5 6 5 6 6 6 6 **a** Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate 314_W METALS_D VOC_TIC_ Ç Ç Ç Ç Ç Ç Ç Ç VOC by 524 VOC by 524 Criteria Criteria VOC_W Requested Tests Cooler Temp 03-Feb-2009 Reno Trip Blank 1/6/09 Sample Remarks Level IV QC. Level IV QC 03-Feb-2009 Date Printed

Logged in by: 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. Employth (lacox thizabeth flocax Alpha Analytical, Inc. Company 2/3/107 1038 Date/Time

No security seals. Frozen ice. Temp Blank #8237 received @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC. Perchlorate RL of 1.0 ug/L.:

The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

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

Comments:

Billing Information:

505 King Avenue

Columbus, OH 43201

Report Attention

Phone Number

EMail Address

505 King Avenue Battelle Memorial Institute

PO: 218013 Columbus, OH 43201

Client's COC #: 24139

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

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

Shane Walton **Betsy Cutie** David Conner (619) 574-4827 x (614) 424-4117 x (614) 424-4899 x connerd@battelle.org waltons@battelle.org cutiee@batelle.org

Page: 2 of 2

WorkOrder: BMI09020305

Report Due By: 5:00 PM On: 17-Feb-2009

EDD Required: Yes

Sampled by: Client Cooler Temp

Samples Received

03-Feb-2009 03-Feb-2009 Date Printed

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

Job :

G005862/JPL Groundwater Monitoring

								Requested Tests	S	
Alpha Sample ID	Client Sample ID	Collection Matrix Date	Collection No. of Bottles x Date Alpha Sub	ttles ub TAT	314_W	METALS_D W	METALS_D VOC_TIC_	VOC_W		Sample Remarks
BMI09020305-11A MW-24-3	MW-24-3	AQ 02/02/09 09:04	5	10	Perchlorate	Ωr	VOC by 524 Criteria	VOC by 524 Criteria		
BMI09020305-12A	MW-24-2	AQ 02/02/09 09:28	5	10	Perchlorate	Ç	VOC by 524 Criteria	VOC by 524 Criteria		
BM109020305-13A	MW-24-1	AQ 02/02/09 10:21	10	10	Perchlorate	Ç	VOC by 524 Criteria	VOC by 524 Criteria		MS/MSD
BMI09020305-14A	EB-07-02/02/09	AQ 02/02/09 10:03	5	10	Perchlorate	유	VOC by 524 Criteria	VOC by 524 Criteria		
BMI09020305-15A TB-07-02/02/09	TB-07-02/02/09	AQ 02/02/09 00:00		0 10			VOC by 524 Criteria	VOC by 524 Criteria		Reno Trip Blank 1/6/09

Comments: No security seals. Frozen ice, Temp Blank #8237 received @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC. Perchlorate RL of 1.0 ug/L.:

	Logged in by:	
	Compatible Calcax	Signature
		Print Name
	Alpha Analytical, Inc.	Company
19	2/3/09 1038	Date/Time

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report. 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. Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

′ 1		Alpha Analytical, Inc.	Samples Collected From Which State?	which State? 24139
		255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778	$\left \left \cdot \right \right $	h i
prumbus,0		Phone (775) 355-1044 Fax (775) 355-0406	Analyses Required	uired /
Phone Number Fax		1 ax (113) 333-9400		
Client Name TAVID CON NETL	PO.# 218013	Job# G-005-862	16 6 12 1	/ Required QC Level?
PA	EMail Address		24. 20/3/4	
2	Phone # 19-776 -731/	Fax #	2	EDD / EDF? YES NO
Matrix* Sampled by	Report Attention	Total and type of	of C 12/09	Giobal ID #
Sampled Sampled Below Lab ID Number (Office Only)	Sample Description	TAT Filtered ** See below) / Ø K	/ REMARKS
10-01/3% AR BMI09020305-01	MW-20-5		× ×	
	2 MW-20-4		× ×	
095)			X X	
1021	_		×	
90-	MW-20-1		×	SC LEVEL III
١٥٠.	Dupe-03-1009		× ×	DUPLICANTE
- - 07			× ×	ac LOVEL III hopes
1037	6 6.8-06-01/30f09		× ×	EQUIPMENT BLOOK
,0,		2	×	TRUP BLANK
ADDITIONAL INSTRUCTIONS:				
Signature	Print Name		Company	Date Time
Relinquished by	CHIKE BIVE	JUSU LA	THE CECT	01/29/09 1370
Received by	Disahit At	Acrx.	(de sha	2/3/69 10.38
Relinquished by				
Received by				
Relinquished by	-			
Received by				
*Key: AQ - Aqueous SO - Soil WA - Waste	ste OT - Other AR - Air	**: L-Liter V-Voa S-Soil Jar	O-Orbo T-Tedlar	B-Brass P-Plastic OT-Other

of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

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

Billing Information:			Alpha Analytical, Inc.	ytical, I	inc.	Samples AZ	Samples Collected From Which State? AZ CA NV WA	rom Which	State?	-
<u>ح</u>			Sparks, Nevada 89431-5778	89431-57	78			OTHER	Page #	# 1 of 1
te, Zip Collandials	101		Phone (775) 355-1044 Fax (775) 355-0406	5-1044 1406			• t	J		
Phone Number Fax							Allalyses	Arialyses nequired		
Client Name DAVID CONNER	,	8013	# dob	500	218500	2	200	_	/ / Requ	Required QC Level?
Address OLD TOWN AVE, C-205	EMail Address					24	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		-	" ("I") IV
5, CA 921	Phone # 619 = ₹	-Z6-731)	Fax #	:		6	1.30	_	EDD / EDF? YES	? YESNO
Sampled by	Report Attention	•			Total and type of	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0/50 "	<u> </u>	Global ID#_	
Sampled Sampled Below Lab ID Number (Use Only)	Sar	Sample Description		TAT Filtered	ared ** See below	N R	C/er P		RE	REMARKS
The MAR	MW-24-4				+2	7				
11-	MU-24-3				21	×	X			
0928 -/2	MW-24-2				N	×	X		***************************************	
1021 -13					0	×	×		MS/MSD	\$\frac{1}{2}
,	23-07-	orforfo9			4	×	X		Camphine	WINT BLAN
- 15	TB-07 -	02/02/09				X			TRIP E	BLAME
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ADDITIONAL INSTRUCTIONS:										5
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Og more	١	<u>.</u>				-	-			197
Relinquisbectoy	CHI	15/E 15/12	SUPE DON		125/	-AT	ECC)	9	462/09	0557
Received by On a butter Ad Corx Relinquished by	Elizabeth	n Hdax	×			leph	a	2	/3/09	1038
Received by										
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*Key: AQ - Aqueous SO - Soil WA - Waste	te OT - Other	AR - Air	**: L-Liter	V-Voa	a S-Soil Jar	O-Orbo	T-Tedlar	B-Brass	P-Plastic	OT-Other

of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

*Key: AQ - Aqueous

SO - Soil

WA - Waste

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



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

Date: 10-Feb-09 David Conner

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 (619) 574-4827

CASE NARRATIVE

Project: Work Order:	G005862/JPL Groun BMI09020401	dwater Monitoring	Cooler Temp: 4°C
Alpha's	Sample ID	Client's Sample ID	Matrix
09020	401-01A	MW-12-5	Aqueous
09020	401-02A	MW-12-4	Aqueous
09020	401-03A	MW-12-3	Aqueous
09020	401-04A	MW-12-2	Aqueous
09020	401-05A	MW-12-1	Aqueous
09020	401-06A	EB-08-02/03/09	Aqueous
09020	401-07A	TB-08-02/03/09	Aqueous

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

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

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

Roger Scholl Kandy Salter Wirihm



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: 02/04/09

Job#:

G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography

EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID: Lab ID:	MW-12-5 BMI09020401-01A	Perchlorate	1.62	1.00 μg/L	02/03/09	02/04/09
Client ID: Lab ID:	MW-12-4 BMI09020401-02A	Perchlorate	3.25	1.00 µg/L	02/03/09	02/04/09
Client ID: Lab ID:	MW-12-3 BMI09020401-03A	Perchlorate	ND	1.00 μg/L	02/03/09	02/04/09
Client ID : Lab ID :	MW-12-2 BMI09020401-04A	Perchlorate	2.21	1.00 µg/L	02/03/09	02/04/09
Client ID: Lab ID:	MW-12-1 BMI09020401-05A	Perchlorate	ND	1.00 µg/L	02/03/09	02/04/09
Client ID: Lab ID:	EB-08-02/03/09 BMI09020401-06A	Perchlorate	ND	1.00 µg/L	02/03/09	02/04/09

ND = Not Detected

Roger Scholl

Kandy Saulner

Walter Hirkman

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

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

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

2/17/09 Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue

Columbus, OH 43201

Attn:

David Conner

Phone:

(619) 574-4827

Fax:

(614) 458-6641

D.4. 1

Date Received: 02/04/09

Job#:

G005862/JPL Groundwater Monitoring

Metals by ICPMS

EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID:	MW-12-3					
Lab ID:	BMI09020401-03A	Chromium (Cr)	ND	0.0050 mg/L	02/03/09	02/04/09
Client ID:	MW-12-2					
Lab ID:	BMI09020401-04A	Chromium (Cr)	ND	0.0050 mg/L	02/03/09	02/04/09
Client ID:	MW-12-1					
Lab ID:	BMI09020401-05A	Chromium (Cr)	ND	0.0050 mg/L	02/03/09	02/04/09
Client ID:	EB-08-02/03/09					
Lab ID :	BMI09020401-06A	Chromium (Cr)	ND	0.0050 mg/L	02/03/09	02/04/09

ND = Not Detected

Roger Scholl

Kandy Saulner

Walter Hirihow

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

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

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

2/1**2/**09 Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue

Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Attn: David Conner Phone: (619) 574-4827

Fax:

(614) 458-6641

Tentatively Identified Compounds - Volatile Organics by GC/MS

				Estimated			
		Parameter	Estimated	Reporting	Date	Date	Date
			Concentration	Limit	Received	Sampled	Analyzed
Client ID : Lab ID :	MW-12-5 BMI09020401-01A	Sulfur dioxide	11	2.0 μg/L	02/04/09	02/03/09	02/05/09
Client ID: Lab ID:	MW-12-4 BMI09020401-02A	Sulfur dioxide	14	2.0 μg/L	02/04/09	02/03/09	02/05/09
Client ID: Lab ID:	MW-12-3 BMI09020401-03A	Sulfur dioxide	14	2.0 µg/L	02/04/09	02/03/09	02/05/09
Client ID: Lab ID:	MW-12-2 BMI09020401-04A	Sulfur dioxide	19	2.0 μg/L	02/04/09	02/03/09	02/05/09
Client ID: Lab ID:	MW-12-1 BMI09020401-05A	Sulfur dioxide	8.9	2.0 μg/L	02/04/09	02/03/09	02/05/09
Client ID: Lab ID:	EB-08-02/03/09 BMI09020401-06A	*** None Found ***	ND	2.0 μg/L	02/04/09	02/03/09	02/05/09
Client ID: Lab ID:	TB-08-02/03/09 BMI09020401-07A	*** None Found ***	ND	2.0 μg/L	02/04/09	02/03/09	02/05/09

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

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

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

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G00

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020401-01A

Client I.D. Number: MW-12-5

Attn: David Conner Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/03/09

Received: 02/04/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	. ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m.p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND ND	1.0	μg/L	40	Bromoform	: ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	, ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	: ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	. ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	. 107	(70-130)	%REC
30	1,1,2-Trichloroethane	· ND	0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	: ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
~ .	4.0.50			-					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

1,2-Dibromoethane (EDB)

Tetrachloroethene

oger Scholl Kandy Santaur

ND

Walter Striken

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

μg/L

μg/L

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

2/17/09 Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#:

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020401-02A

Client I.D. Number: MW-12-4

Attn:

David Conner Phone: (619) 574-4827

Fax:

(614) 458-6641

Sampled: 02/03/09

Received: 02/04/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concen	tration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane		ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	:	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene		ND	0.50	μg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene		ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform		ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	:	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene		ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane		ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane		ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene		ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene		ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene		ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene		ND	0.50	μg/L
14	cis-1,2-Dichloroethene	. ND	0.50	µg/L	49	2-Chlorotoluene		ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene		ND	0.50	μg/L
16	Chloroform	0.87	0.50	μg/L	51	tert-Butylbenzene		ND	0.50	μg/L
17	2,2-Dichloropropane	ⁱ ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	į	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	1	ND	0.50	μg/L
21	Carbon tetrachloride	1.7	0.50	μg/L	56	4-Isopropyltoluene		ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene		ND	0.50	μg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene		ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBC	P)	ND	2.5	μg/Ĺ
25	Trichloroethene	0.53	0.50	μg/L	60	1,2,4-Trichlorobenzene		ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene		ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene		ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene		ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4		108	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8		103	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene		97	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L						
33	Dibromochloromethane	ND	0.50	μg/L						
~ 4	4.0.00									

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Tetrachloroethene

1,2-Dibromoethane (EDB)

ND

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

µg/L

μg/L

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2/17/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#:

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020401-03A

Client I.D. Number: MW-12-3

David Conner Attn:

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

Sampled: 02/03/09

Received: 02/04/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	, ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	: ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	: ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	. ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	: ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	3.8	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	0.62	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	i ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	107	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Tetrachloroethene

1,2-Dibromoethane (EDB)

ND

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

μg/L

μg/L

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

2/17/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020401-04A

Client I.D. Number: MW-12-2

Attn: David Conner Phone: (619) 574-4827

(614) 458-6641 Fax:

Sampled: 02/03/09

Received: 02/04/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	, ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	. ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	. ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	: ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	, ND	0.50	μg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	µg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	. ND	0.50	μg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	107	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	. ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	. 95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
				-					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Tetrachloroethene

1,2-Dibromoethane (EDB)

ND

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

µg/L

µg/L

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2/17/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020401-05A

Client I.D. Number: MW-12-1

Attn: David Conner Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/03/09

Received: 02/04/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	, ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND .	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND .	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	. ND	0.50	µg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	94	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	μg/L					
^-				-					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

Roger Scholl Kandy Saulin Walter Hinchman, Quality Assurance Officer

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

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

μg/L

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

2/17/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#:

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020401-06A

Client I.D. Number: EB-08-02/03/09

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/03/09

Received: 02/04/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	; ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	· ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	: ND	0.50	μg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	: ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	ug/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	ug/L	54	1,3-Dichlorobenzene	ND	0.50	μ g/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	, ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCI	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	104	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L				, ,	
33	Dibromochloromethane	ND	0.50	μg/L					
~ 4	4.0.00	1		. •					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Tetrachioroethene

1,2-Dibromoethane (EDB)

Roger Scholl Kandy Soulur

ND

Walter Hirihour

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

µg/L

μg/L

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2/17/09

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#:

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020401-07A

Client I.D. Number: TB-08-02/03/09

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/03/09

Received: 02/04/09 Analyzed: 02/05/09

Volatile Organics by GC/MS

	Compound	Concentration	Concentration Reporting Li		imit Compound		Concentration	Reporting Limit	
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
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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 ND	0.50	µg/L	42	o-Xvlene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1.1.2.2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	: ND	0.50	µg/L	44	1,2,3-Trichloropropane	. ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	: ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	, ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L.	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
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17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	i ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	, ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC)	P) ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	ua/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

1,2-Dibromoethane (EDB)

Roger Scholl

ND

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

μg/L µg/L

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2/17/09

Report Date



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

VOC Sample Preservation Report

Work Order: BMI09020401	Project: G005862/JPL Groundwater Monitoring							
Alpha's Sample ID	Client's Sample ID	Matrix	рН					
09020401-01A	MW-12-5	Aqueous	2					
09020401-02A	MW-12-4	Aqueous	2					
09020401-03A	MW-12-3	Aqueous	2					
09020401-04A	MW-12-2	Aqueous	2	•				
09020401-05A	MW-12-1	Aqueous	2					
09020401-06A	EB-08-02/03/09	Aqueous	2					
09020401-07A	TB-08-02/03/09	Aqueous	2					



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Date: 10-Feb-09		(QC S	ummar	y Repor	t				Work Orde 09020401	
Method Bla	nk		Type I		est Code: El atch ID: 214		thod 314.0	Analy	/sis Date:	02/04/2009 13:26	
Sample ID:	MB-21443	Units : µg/L		Run ID: IC	_3_090204/	4		Prep	Date:	02/04/2009	
Analyte		Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		ND		1							
Laboratory File ID: 15	Fortified Blank	•	Type L		est Code: El		thod 314.0	Analy	/sis Date	02/04/2009 13:44	
Sample ID: Analyte	LFB-21443	Units : µg/L Result	PQL	Run ID: IC	_3_090204	1	: I CI (ME)	Prep	Date:	02/04/2009 Val %RPD(Limit)	Qual
Perchlorate		23.9		2 25	Spriterval	95	85	115	THE BITCH	var /orti D(Cirrit)	
Sample Mat	rix Spike		Type L		est Code: El atch ID: 214	_	thod 314.0	Analy	/sis Date:	02/05/2009 16:18	
Sample ID: Analyte	09020305-13ALFM	Units : µg/L Result	PQL		_ 3_090204/ SpkRefVal		LCL(ME)	•	Date: RPDRef	02/04/2009 Val %RPD(Limit)	Qual
Perchlorate		845	40	500	326.4	104	80	120			
Sample Mat	rix Spike Duplicate		Type L		est Code: E		thod 314.0	Analy	/sis Date:	02/05/2009 16:37	
Sample ID:	09020305-13ALFMD	Units : µg/L		Run ID: IC	3 090204/	4		Prep	Date:	02/04/2009	
Analyte		Result	PQL				LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		816	40		326.4	98	80	120	844.		

Comments:

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



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Date: 09-Feb-09	CH Summary Report	Vork Order: 09020401
Method Blank File ID: 020409.B\052SMPL.D\ Sample ID: MB-21448	Type MBLK Test Code: EPA Method 200.8 Batch ID: 21448K Analysis Date: 02/04/200 Units: mg/L Run ID: ICP/MS_090204D Prep Date: 02/04/200	
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD	(Limit) Qual
Chromium (Cr)	ND 0.005	
Laboratory Control Spike File ID: 020409.B\053_LCS.D\	Type LCS Test Code: EPA Method 200.8 Batch ID: 21448K Analysis Date: 02/04/200	09 19:15
Sample ID: LCS-21448	Units: mg/L Run ID: ICP/MS_090204D Prep Date: 02/04/200)9
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD	(Limit) Qual
Chromium (Cr)	0.0505 0.005 0.05 101 80 120	
Sample Matrix Spike File ID: 020409.B\057SMPL.D\	Type MS Test Code: EPA Method 200.8 Batch ID: 21448K Analysis Date: 02/04/200	09 19:38
Sample ID: 09013053-01AMS	Units: mg/L Run ID: ICP/MS_090204D Prep Date: 02/04/200)9
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD	(Limit) Qual
Chromium (Cr)	0.0545 0.005 0.05 0 109 80 120	
Sample Matrix Spike Duplicate File ID: 020409.B\058SMPL.D\	Type MSD Test Code: EPA Method 200.8 Batch ID: 21448K Analysis Date: 02/04/200	09 19:44
Sample ID: 09013053-01AMSD	Units: mg/L Run ID: ICP/MS_090204D Prep Date: 02/04/200)9
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD	(Limit) Qual
Chromium (Cr)	0.0535 0.005 0.05 0 107 80 120 0.05447 1.8	8(20)

Comments:

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



Date:

Alpha Analytical, Inc.

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

Work Order: QC Summary Report 09020401 10-Feb-09 Type MBLK Test Code: Method Blank File ID: 09020506.D Analysis Date: 02/05/2009 10:19 Batch ID: MS15W0205M MBLK MS15W0205M Sample ID: Units: µg/L Run ID: MSD 15 090205A Prep Date: 02/05/2009 Analyte **PQL** SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD(Limit) Qual Result Dichlorodifluoromethane ND 0.5 Chloromethane ND Vinyl chloride ND 0.5 Chloroethane ND 0.5 Bromomethane ND Trichlorofluoromethane 0.5 ND 1,1-Dichloroethene ND 0.5 Dichloromethane ND Freon-113 ND 0.5 trans-1,2-Dichloroethene ND 0.5 Methyl tert-butyl ether (MTBE) ND 0.5 1,1-Dichloroethane ND 0.5 2-Butanone (MEK) ND 10 cis-1,2-Dichloroethene ND 0.5 Bromochloromethane ND 0.5 Chloroform ND 0.5 2,2-Dichloropropane ND 0.5 1,2-Dichloroethane ND 0.5 1.1.1-Trichloroethane ND 0.5 1,1-Dichloropropene ND 0.5 Carbon tetrachloride ND 0.5 Benzene ND 0.5 Dibromomethane ND 0.5 1,2-Dichloropropane ND 0.5 Trichloroethene ND 0.5 Bromodichloromethane ND 0.5 4-Methyl-2-pentanone (MIBK) ND 2.5 cis-1,3-Dichloropropene ND 0.5 trans-1,3-Dichloropropene ND 0.5 1,1,2-Trichloroethane ND 0.5 Toluene ND 0.5 1,3-Dichloropropane ND 0.5 Dibromochloromethane ND 0.5 1,2-Dibromoethane (EDB) ND Tetrachloroethene 0.5 ND 1,1,1,2-Tetrachloroethane ND 0.5 Chlorobenzene ND 0.5 Ethylbenzene ND 0.5 m,p-Xylene ND 0.5 Bromoform ND 0.5 Styrene ND 0.5 o-Xylene ND 0.5 1,1,2,2-Tetrachloroethane ND 0.5 1,2,3-Trichloropropane ND Isopropylbenzene ND 0.5 Bromobenzene ND 0.5 n-Propylbenzene ND 0.5 4-Chlorotoluene ND 0.5 2-Chlorotoluene ND 0.5 1,3,5-Trimethylbenzene ND 0.5 tert-Butylbenzene ND 0.5 1.2.4-Trimethylbenzene ND 0.5 sec-Butylbenzene ND 0.5 1,3-Dichlorobenzene ND 0.5 1,4-Dichlorobenzene ND 0.5 4-Isopropyltoluene ND 0.5 1.2-Dichlorobenzene ND 0.5 n-Butylbenzene ND 0.5 1,2-Dibromo-3-chloropropane (DBCP) ND 2.5 1,2,4-Trichlorobenzene ND Naphthalene ND Hexachlorobutadiene ND 1,2,3-Trichlorobenzene ND Surr: 1,2-Dichloroethane-d4 10.5 10 105 70 130 Surr: Toluene-d8 101 70 130 10.1 10



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

Date: 10-Feb-09	(QC Sum	mary Re	port			Work Orde 09020401	
Surr: 4-Bromofluorobenzene	9.44		10	94	70	130	07020101	
Laboratory Control Spike		Type LCS	Test Cod	le:				
File ID: 09020504.D			Batch ID	MS15W0205	M	Analysis Date	e: 02/05/2009 09:20	
Sample ID: LCS MS15W0205M	Units : µg/L		ID: MSD_15			Prep Date:	02/05/2009	
Analyte	Result	PQL S	pkVal SpkRe	efVal %REC L	CL(ME) UCL(ME) RPDRe	efVal %RPD(Limit)	Qual
Dichlorodifluoromethane	7.91	1	10	79	70	130		
Chloromethane	7.88	2	10	79	70	130		
Vinyl chloride Chloroethane	9.28 8.38	1 1	10 10	93 84	70 70	130 130		
Bromomethane	8.43	2	10	84	70	130		
Trichlorofluoromethane	10.8	1	10	108	70	130		
1,1-Dichloroethene	10.4	1	10	104	70	130		
Dichloromethane trans-1,2-Dichloroethene	9.76 10.5	2 1	10 10	98 105	70 70	130 130		
Methyl tert-butyl ether (MTBE)	10.5	0.5	10	103	62	136		
1,1-Dichloroethane	10.4	1	10	104	70	130		
cis-1,2-Dichloroethene	10.6	1	10	106	70	130		
Bromochloromethane Chloroform	11.3	1	10	113	70 70	130		
2,2-Dichloropropane	9.78 8.9	1 1	10 10	98 89	70 70	130 130		
1,2-Dichloroethane	10.4	1	10	104	70	130		
1,1,1-Trichloroethane	10.6	1	10	106	70	130		
1,1-Dichloropropene	10.8	1	10	108	70	130		
Carbon tetrachloride Benzene	10.2	1	10	102	70	130 130		
Dibromomethane	9.56 10.6	0.5 1	10 10	96 106	70 70	130		
1,2-Dichloropropane	9.96	1	10	99.6	70	130		
Trichloroethene	10.9	1	10	109	70	130		
Bromodichloromethane	10.5	1	10	105	70	130		
cis-1,3-Dichloropropene trans-1,3-Dichloropropene	10.4 10.3	1 1	10 10	104 103	70 70	130 130		
1,1,2-Trichloroethane	9.72	1	10	97	70	130		
Toluene	9.47	0.5	10	95	70	130		
1,3-Dichloropropane	9.31	1	10	93	70	130		
Dibromochloromethane 1,2-Dibromoethane (EDB)	10.2 19	1 2	10 20	102 95	70 70	130 130		
Tetrachloroethene	10.1	1	10	101	70	130		
1,1,1,2-Tetrachloroethane	9.57	1	10	96	70	130		
Chlorobenzene	9.31	1	10	93	70	130		
Ethylbenzene	9.51	0.5	10	95	70 70	130		
m,p-Xylene Bromoform	9.77 9.31	0.5 1	10 10	98 93	70 70	130 130		
Styrene	9.57	1	10	96	70	130		
o-Xylene	9.46	0.5	10	95	70	130		
1,1,2,2-Tetrachloroethane	8.74	1	10	87	70	130		
1,2,3-Trichloropropane Isopropylbenzene	18 9.61	2 1	20 10	90 96	70 70	130 130		
Bromobenzene	9.35	1	10	94	70	130		
n-Propylbenzene	9.78	1	10	98	70	130		
4-Chlorotoluene	9.8	1	10	98	70	130		
2-Chlorotoluene 1,3,5-Trimethylbenzene	9.67	1 1	10	97 93	70 70	130 130		
tert-Butylbenzene	9.34 9.22	1	10 10	93 92	70	130		
1,2,4-Trimethylbenzene	9.66	1	10	97	70	130		
sec-Butylbenzene	9.28	1	10	93	70	130		
1,3-Dichlorobenzene	9.52	1	10	95	70	130		
1,4-Dichlorobenzene 4-Isopropyltoluene	9.15 9.46	1	10 10	92 95	70 70	130 130		
1,2-Dichlorobenzene	9.09	1	10	91	70	130		
n-Butylbenzene	9.6	1	10	96	70	130		
1,2-Dibromo-3-chloropropane (DBCP)	44.7	3	50	89	70	130		
1,2,4-Trichlorobenzene Naphthalene	10.2 9.76	2	10	102 88	70 70	130 130		
Hexachlorobutadiene	8.76 18.4	2 2	10 20	88 92	70 70	130		
1,2,3-Trichlorobenzene	10.1	2	10	101	70	130		
Surr: 1,2-Dichloroethane-d4	9.88	-	10	99	70	130		
Surr: Toluene-d8	9.94		10	99	70	130		
Surr: 4-Bromofluorobenzene	9.78		10	98	70	130		



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

Date:
10-Feb-09QC Summary ReportWork Order:
09020401

Sample Matrix Spike		Type MS		st Code:					
File ID: 09020507.D			Ba	tch ID: MS1	5W020	5M	Analysis Date	: 02/05/2009 10:41	
Sample ID: 09020401-05AMS	Units : µg/L	F	Run ID: MS	SD_15_0902	05A		Prep Date:	02/05/2009	
Analyte	Result	PQL				LCL(ME)	UCL(ME) RPDRe	fVal %RPD(Limit)	Qua
Dichlorodifluoromethane	41.3	2.5	50	0	83	13	167		
Chloromethane	38.4	10	50	Ŏ	77	28	145		
Vinyl chloride	43.5	2.5	50	Ō	87	43	134		
Chloroethane	37.4	2.5	50	Ö	70	39	154		
Bromomethane	39.1	10	50	Ŏ	78	19	176		
Trichlorofluoromethane	49	2.5	50	ő	98	34	160		
1,1-Dichloroethene	46.7	2.5	50	ő	93	60	130		
Dichloromethane	45.4	10	50	ő	91	68	130		
trans-1,2-Dichloroethene	47.4	2.5	50	Ŏ	95	63	130		
Methyl tert-butyl ether (MTBE)	48.7	1.3	50	Ö	97	56	141		
1,1-Dichloroethane	47.4	2.5	50	Ō	95	61	130		
cis-1,2-Dichloroethene	48.6	2.5	50	Ō	97	70	130		
Bromochloromethane	53.5	2.5	50	0	107	70	130		
Chloroform	45.5	2.5	50	0	91	67	130		
2,2-Dichloropropane	39.9	2.5	50	0	80	30	152		
1,2-Dichloroethane	49.4	2.5	50	0	99	60	135		
1,1,1-Trichloroethane	47	2.5	50	0	94	59	137		
1,1-Dichloropropene	48	2.5	50	0	96	63	130		
Carbon tetrachloride	45.7	2.5	50	0	91	50	147		
Benzene	43.7	1.3	50	0	87	67	130		
Dibromomethane	51.8	2.5	50	0	104	69	133		
1,2-Dichloropropane	46.4	2.5	50	0	93	69	130		
Trichloroethene	49.2	2.5	50	0	98	69	130		
Bromodichloromethane	49.9	2.5	50	0	99.8	66	134		
cis-1,3-Dichloropropene	47.8	2.5	50	0	96	63	130		
trans-1,3-Dichloropropene	50.1	2.5	50	0	100	66	131		
1,1,2-Trichloroethane	46.7	2.5	50	0	93	68	130		
Toluene	43.3	1.3	50	0	87	66	130		
1,3-Dichloropropane	44.9	2.5	50	0	90	70	130		
Dibromochloromethane	48.7	2.5	50	0	97	70	130		
1,2-Dibromoethane (EDB)	92.6	10	100	0	93	70	130		
Tetrachloroethene	45.5	2.5	50	0	91	61	134		
1,1,1,2-Tetrachloroethane	45.9	2.5	50	0	92	70	130		
Chlorobenzene	43.5	2.5	50	0	87	70	130		
Ethylbenzene	43.6	1.3	50	0	87	68	130		
m,p-Xylene	44.8	1.3	50	0	90	64	130		
Bromoform	45.1	2.5	50	0	90	64	138		
Styrene	44.8	2.5	50	0	90	69	130		
o-Xylene	43.5	1.3	50	0	87	70	130		
1,1,2,2-Tetrachloroethane	43.5	2.5	50	0	87	65	131		
1,2,3-Trichloropropane	88.9	10	100	0	89	70	130		
Isopropylbenzene	43.4	2.5	50	0	87	64	138		
Bromobenzene n-Propylbenzene	44.6	2.5	50	0	89	70	130		
4-Chlorotoluene	43.2	2.5	50	0	86 92	66 70	132 130		
2-Chlorotoluene	45.9	2.5	50	0					
1,3,5-Trimethylbenzene	44.4	2.5	50	0	89 86	70 66	130 136		
tert-Butylbenzene	43.1	2.5	50	0	84	65	137		
1,2,4-Trimethylbenzene	42.1 44.2	2.5 2.5	50 50	0	88 88	65	137		
sec-Butylbenzene	42.2	2.5	50	0	84	66	134		
1,3-Dichlorobenzene	44.4	2.5	50	0	89	70	130		
1,4-Dichlorobenzene	42.7	2.5	50	0	85	70	130		
4-Isopropyltoluene	43.3	2.5	50	0	87	66	137		
1,2-Dichlorobenzene	43.3	2.5	50	0	86	70	130		
n-Butylbenzene	43.4	2.5	50	0	87	60	142		
1,2-Dibromo-3-chloropropane (DBCP)	222	15	250	0	89	67	130		
1,2,4-Trichlorobenzene	48.6	10	50	0	97	61	137		
Naphthalene	43.6	10	50	0	87	40	167		
Hexachlorobutadiene	45.0 85	10	100	0	85	61	130		
1,2,3-Trichlorobenzene	50.6	10	50	0	101	51	144		
Surr: 1,2-Dichloroethane-d4	49.2	10	50	U	98	70	130		
	49.6		50		99	70	130		
Surr: Toluene-d8									



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

Work Order: Date: QC Summary Report 09020401 10-Feb-09 Type MSD Test Code: Sample Matrix Spike Duplicate File ID: 09020508.D Analysis Date: 02/05/2009 11:04 Batch ID: MS15W0205M Sample ID: 09020401-05AMSD Units: µg/L Run iD: MSD 15 090205A Prep Date: 02/05/2009 Analyte SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD(Limit) Qual Result **PQL** 2.6(20)Dichlorodifluoromethane 40.2 2.5 13 167 41.31 Chloromethane 37.2 10 50 0 74 28 145 38.37 3.2(20)Vinyl chloride 2.5 50 84 43 134 43.49 3.6(20)42 3.0(20) Chloroethane 72 39 154 37 44 38.6 2.5 50 0 Bromomethane 6.0(20)41.5 10 50 0 83 19 176 39.1 Trichlorofluoromethane 2.4(20)47.9 2.5 50 0 96 34 160 49.04 1.1-Dichloroethene 46.71 3.8(20)2.5 90 60 130 45 50 0 Dichloromethane 45.3 10 50 0 91 68 130 45.43 0.2(20)47.36 0.1(20)trans-1.2-Dichloroethene 95 63 130 47.3 2.5 50 0 Methyl tert-butyl ether (MTBE) 48.2 1.3 50 0 96 56 141 48.7 1.0(20)1,1-Dichloroethane 2.5 50 0 95 61 130 47.4 0.2(20)47.5 cis-1.2-Dichloroethene 2.5 50 100 70 130 48.61 2.9(20)50 0 Bromochloromethane 1.4(20)52.8 2.5 50 0 106 70 130 53.52 45.49 0.4(20)Chloroform 45.7 2.5 50 0 91 67 130 2,2-Dichloropropane 40.2 30 152 39.87 0.9(20)2.5 50 n 80 1,2-Dichloroethane 49.3 2.5 50 0 99 60 135 49.41 0.2(20)1.1.1-Trichloroethane 47.02 0.1(20)47.1 2.5 50 0 94 59 137 1,1-Dichloropropene 47.5 0 95 63 130 48.02 1.1(20)2.5 50 Carbon tetrachloride 45.9 2.5 50 0 92 50 147 45.65 0.5(20)Benzene 43.68 1.2(20)44.2 1.3 50 0 88 67 130 Dibromomethane 2.5 50 0 104 69 133 51.8 0.4(20)46.38 0.7(20)1.2-Dichloropropane 46.7 2.5 50 0 93 69 130 Trichloroethene 48.8 2.5 0 98 69 130 49.17 0.8(20)50 Bromodichloromethane 134 49.92 0.3(20)50.1 2.5 50 0 100 66 cis-1,3-Dichloropropene 130 47.84 0.7(20)95 63 47.5 2.5 50 0 trans-1,3-Dichloropropene 49.7 2.5 50 0 99 66 131 50.14 0.9(20)1,1,2-Trichloroethane 2.5 50 0 92 68 130 46.72 1.1(20)46.2 Toluene 43.29 1.7(20)44 1.3 50 0 88 66 130 1,3-Dichloropropane 45 0 90 130 44.91 0.2(20)2.5 50 Dibromochloromethane 48.66 2.0(20)49.6 2.5 50 0 99 70 130 1,2-Dibromoethane (EDB) 92.8 10 100 0 93 70 130 92.63 0.2(20)Tetrachioroethene 2.5 0 92 61 134 45.52 1.0(20)50 1,1,1,2-Tetrachloroethane 45.91 1.9(20) 130 46.8 2.5 0 94 70 50 Chlorobenzene 44.6 2.5 50 0 89 70 130 43.48 2.6(20)Ethylbenzene 44.4 1.3 50 0 89 68 130 43.57 1.8(20)m,p-Xylene 45.1 90 44.76 0.8(20)0 64 130 1.3 50 Bromoform 91 64 138 45.06 1.3(20)45.6 2.5 50 0 Styrene 44.75 1.2(20)91 69 130 45.3 2.5 50 0 2.5(20)44.6 1.3 50 0 89 70 130 43.45 1,1,2,2-Tetrachloroethane 3.6(20)41.9 2.5 0 84 65 131 43.45 50 1,2,3-Trichloropropane 88.87 0.1(20)88.8 10 100 0 89 70 130 Isopropylbenzene 64 138 43.35 2.6(20)44.5 2.5 50 0 89 Bromobenzene 70 130 44.59 3.2(20)46.1 2.5 50 0 92 n-Propylbenzene 2.5 0 90 66 132 43.2 4.2(20)45.1 50 4-Chlorotoluene 2.5 0 96 70 130 45.88 4.4(20)50 3.2(20) 2-Chlorotoluene 44.36 45.8 2.5 50 0 92 70 130 1,3,5-Trimethylbenzene 43.13 2.9(20)44.4 2.5 50 0 89 66 136 tert-Butvlbenzene 43.3 2.5 50 0 87 65 137 42.11 2.7(20)1,2,4-Trimethylbenzene 44.22 3.6(20)45.8 2.5 65 137 50 0 92 sec-Butylbenzene 42.8 2.5 50 0 86 66 134 42.19 1.4(20)1,3-Dichlorobenzene 44.42 4.5(20)46.5 2.5 50 0 93 70 130 1,4-Dichlorobenzene 44.5 0 89 70 130 42.72 4.0(20)2.5 50 4-Isopropyltoluene 0 88 66 137 43.28 1.9(20)44.1 2.5 50 1.2-Dichlorobenzene 90 70 130 43.02 4.6(20)45.1 2.5 50 0 n-Butylbenzene 43.36 3.4(20)44.8 2.5 50 0 90 60 142 1,2-Dibromo-3-chloropropane (DBCP) 221.5 0.0(20)221 15 250 0 89 67 130 1,2,4-Trichlorobenzene 106 137 48.56 8.5(20) 52.9 10 n 61 50 Naphthalene 91 40 167 43.58 4.7(20)45.7 10 50 O Hexachlorobutadiene 6.1(20)90.4 10 100 0 90 61 130 85 1,2,3-Trichlorobenzene 7.4(20)54.5 50 109 51 144 50.61 10 Surr: 1,2-Dichloroethane-d4 47.8 50 96 70 130 Surr: Toluene-d8 101 70 50.6 130 50 Surr: 4-Bromofluorobenzene 49.6 50 70 130



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

Date:	OC Summary Danast	Work Order:
10-Feb-09	QC Summary Report	09020401

Comments:

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

Billing Information:

505 King Avenue

Columbus, OH 43201

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

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

Report Attention **Betsy Cutie** Shane Walton Phone Number (614) 424-4117 x (614) 424-4899 x (619) 574-4827 x waltons@battelle.org cutiee@batelle.org connerd@battelle.org EMail Address

Page: 1 of 1

WorkOrder: BMI09020401

Report Due By: 5:00 PM On: 18-Feb-2009

EDD Required: Yes Sampled by: Client

Cooler Temp

Samples Received

04-Feb-2009 04-Feb-2009 **Date Printed**

Sample ID Alpha Client's COC #: 24135 BMI09020401-07A TB-08-02/03/09 BMI09020401-05A MW-12-1 BMI09020401-03A MW-12-3 BMI09020401-02A MW-12-4 BMI09020401-01A MW-12-5 QC Level: S4 BMI09020401-06A EB-08-02/03/09 BMI09020401-04A MW-12-2 Sample ID Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates Job : AQ 02/03/09 09:18 Š Ş Š Matrix Date å Š Š 02/03/09 02/03/09 09:42 G005862/JPL Groundwater Monitoring 02/03/09 11:01 02/03/09 10:05 Collection No. of Bottles 02/03/09 10:20 02/03/09 10:33 Alpha Sub G G Ġ 4 4 0 0 0 0 0 0 0 TAT 6 5 5 6 6 6 5 Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate 314_W METALS_D VOC_TIC_ Ç Ç ζ VOC by 524 VOC by 524 Criteria Criteria Requested Tests VOC_W Reno Trip Blank 1/6/09 Sample Remarks Level IV QC.

Logged in by: enabeth Lizabuth Holcox Alpha Analytical, Inc. Company 2401 1014 Date/Time

No security seals. Frozen ice. Temp Blank #2587 received @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC. Perchlorate RL of 1.0 ug/L.:

Comments:

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report 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. Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

			npies Collecte	rom Which State? $2L$	1 13,
vame CEPTY TONOKINS	Alpha 255 Glen	255 Glendale Avenue, Suite 21	ID CA 7 NV	OTHER WA Page # 1	_ of
SOS KING	Car	Sparks, Nevada 89431-5778			
Fax —		Fax (775) 355-0406	/ Analyses Required	Required /	
WIT CONNEC	P.O.# 2/80/3	Job# 6005-862	20.5	/ / Required QC Level	C Level
2	EMail Address		24		(III) V
The 60 CA 92110	Phone # (19-726-731)	Fax #	C	/ / EDD / EDF? YES_	NO
Matrix* Sampled by	Report Attention	Total and type o		Global ID #	
Sampled Sampled Selow Lab ID Number (Office Only)	Sample Description	TAT Filtered ** See below		REMARKS	S
_	MW-12-5		×		
>	H-12-4	4	×		
-03	MW-12-3	5	×		
	-04 MW-12-2		X X		
705	MW-12-		X X	QC LEVEL IT	17
	EB-08-02/03/09		XXX	EQUIP. B	BLANK
	TB-08-02/03/09	140	X	TRIP BU	BLANK
ADDITIONAL INSTRUCTIONS:					
Signature	Print Name		Company	Date	Time
11	MARCO MENDER	INSIG	CHI FEC	2/3/59 1	1820
Received by Con Control Of Contro	Elizabeth Fldcox		(Mpha	3/4/09 10	014
Received by					
Relinquished by			-		
Received by				:	
*Kev: AO - Agueous SO - Soil WA - Waste	OT - Other AR - Air **:	L-Liter V-Voa S-Soil Jar	O-Orbo T-Tedlar	B-Brass P-Plastic OT-	OT-Other

of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

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



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

Date: 16-Feb-09
David Conner
Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 (619) 574-4827 **CASE NARRATIVE**

Project:

G005862/JPL Groundwater Monitoring

Work Order:

BMI09020504

Cooler Temp:

4°C

Alpha's Sample ID	Client's Sample ID	Matrix
09020504-01A	MW-3-4	Aqueous
09020504-02A	MW-3-3	Aqueous
09020504-03A	MW-3-2	Aqueous
09020504-04A	DUPE-5-1Q09	Aqueous
09020504-05A	MW-4-3	Aqueous
09020504-06A	MW-4-2	Aqueous
09020504-07A	MW-4-1	Aqueous
09020504-08A	EB-09-02/04/09	Aqueous
09020504-09A	TB-09-02/04/09	Aqueous

١	1	an	แล	llv	Inte	gra	ted	Anal	vtes
_,	•	***							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

Alpha's Sample ID	Test Reference	Analyte	
09020504-01A	EPA Method 314.0	Perchlorate	
09020504-03A	EPA Method 314.0	Perchlorate	
09020504-06A	EPA Method 314.0	Perchlorate	
09020504-07A	EPA Method 314.0	Perchlorate	

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

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

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

Roger Scholl

Kandy Saulmer

Walter Hiridman



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 4

(614) 458-6641

Date Received: 02/05/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography

EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : Lab ID :	MW-3-4 BMI09020504-01A	Perchlorate	7.29	1.00 µg/L	02/04/09	02/05/09
Client ID: Lab ID:	MW-3-3 BMI09020504-02A	Perchlorate	ND	1.00 µg/L	02/04/09	02/05/09
Client ID : Lab ID :	MW-3-2 BMI09020504-03A	Perchlorate	98.7	10.0 μg/L	02/04/09	02/12/09
Client ID : Lab ID :	DUPE-5-1Q09 BMI09020504-04A	Perchlorate	ND	1.00 μg/L	02/04/09	02/05/09
Client ID: Lab ID:	MW-4-3 BMI09020504-05A	Perchlorate	ND	1.00 µg/L	02/04/09	02/05/09
Client ID: Lab ID:	MW-4-2 BMI09020504-06A	Perchlorate	2.14	1.00 µg/L	02/04/09	02/05/09
Client ID: Lab ID:	MW-4-1 BMI09020504-07A	Perchlorate	16.0	1.00 µg/L	02/04/09	02/05/09
Client ID: Lab ID:	EB-09-02/04/09 BMI09020504-08A	Perchlorate	ND	1.00 μg/L	02/04/09	02/05/09

ND = Not Detected

Roger Scholl Kandy Sta

Walter Hirihour

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

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

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

2/18/09



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 Attn: David Conner

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

Date Received: 02/05/09

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS

EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID: Lab ID:	MW-3-4 BMI09020504-01A	Chromium (Cr)	ND	0.0050 mg/L	02/04/09	02/13/09
Client ID : Lab ID :	MW-3-3 BMI09020504-02A	Chromium (Cr)	ND	0.0050 mg/L	02/04/09	02/13/09
Client ID: Lab ID:	MW-3-2 BMI09020504-03A	Chromium (Cr)	ND	0.0050 mg/L	02/04/09	02/13/09
Client ID : Lab ID :	DUPE-5-1Q09 BMI09020504-04A	Chromium (Cr)	ND	0.0050 mg/L	02/04/09	02/13/09
Client ID: Lab ID:	MW-4-3 BMI09020504-05A	Chromium (Cr)	ND	0.0050 mg/L	02/04/09	02/13/09
Client ID: Lab ID:	MW-4-2 BMI09020504-06A	Chromium (Cr)	ND	0.0050 mg/L	02/04/09	02/13/09
Client ID: Lab ID:	MW-4-1 BMI09020504-07A	Chromium (Cr)	ND	0.0050 mg/L	02/04/09	02/13/09
Client ID: Lab ID:	EB-09-02/04/09 BMI09020504-08A	Chromium (Cr)	ND	0.0050 mg/L	02/04/09	02/13/09

ND = Not Detected

Roger Scholl Kandy Saulus

Walter Acridmo

 $Roger\ L.\ Scholl,\ Ph.D.,\ Laboratory\ Director \bullet \bullet Randy\ Gardner,\ Laboratory\ Manager\ \bullet \bullet Walter\ Hinchman,\ Quality\ Assurance\ Officer\ Ph.D.,\ Laboratory\ Director\ \bullet \bullet Randy\ Gardner,\ Laboratory\ Manager\ \bullet \bullet Walter\ Hinchman,\ Quality\ Assurance\ Officer\ Ph.D.,\ Laboratory\ Director\ \bullet \bullet Randy\ Gardner,\ Laboratory\ Manager\ \bullet \bullet Walter\ Hinchman,\ Quality\ Assurance\ Officer\ Ph.D.,\ Laboratory\ Director\ \bullet \bullet Randy\ Gardner,\ Laboratory\ Manager\ \bullet \bullet Walter\ Hinchman,\ Quality\ Assurance\ Officer\ Ph.D.,\ Laborator\ Director\ \bullet \bullet Randy\ Gardner,\ Laborator\ Manager\ \bullet \bullet Walter\ Hinchman,\ Quality\ Assurance\ Officer\ Ph.D.,\ Laborator\ Director\ \bullet \bullet Randy\ Gardner,\ Laborator\ Ph.D.,\ Laborator\ Director\ \bullet \bullet Randy\ Gardner,\ Laborator\ Ph.D.,\ Laborator\ Director\ \bullet \bullet Randy\ Gardner,\ Laborator\ Ph.D.,\ Ph.D.,\ Laborator\ Ph.D.,\ Ph.D.,$

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

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

2/18/09 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

Tentatively Identified Compounds - Volatile Organics by GC/MS

				Estimated			
		Parameter	Estimated	Reporting	Date	Date	Date
			Concentration	Limit	Received	Sampled	Analyzed
Client ID : Lab ID :	MW-3-4 BMI09020504-01A	Sulfur dioxide	23	2.0 μg/L	02/05/09	02/04/09	02/09/09
Client ID: Lab ID:	MW-3-3 BMI09020504-02A	Sulfur dioxide	9.5	2.0 μg/L	02/05/09	02/04/09	02/09/09
Client ID: Lab ID:	MW-3-2 BMI09020504-03A	*** None Found ***	ND	2.0 μg/L	02/05/09	02/04/09	02/09/09
Client ID: Lab ID:	DUPE-5-1Q09 BMI09020504-04A	Sulfur dioxide	5.1	2.0 μg/L	02/05/09	02/04/09	02/09/09
Client ID: Lab ID:	MW-4-3 BMI09020504-05A	Sulfur dioxide	2.6	2.0 μg/L	02/05/09	02/04/09	02/09/09
Client ID : Lab ID :	MW-4-2 BMI09020504-06A	* * * None Found * * *	ND	2.0 μg/L	02/05/09	02/04/09	02/09/09
Client ID : Lab ID :	MW-4-1 BMI09020504-07A	* * * None Found * * *	ND	2.0 μg/L	02/05/09	02/04/09	02/09/09
Client ID: Lab ID:	EB-09-02/04/09 BMI09020504-08A	* * * None Found * * *	ND	2.0 μg/L	02/05/09	02/04/09	02/09/09
Client ID: Lab ID:	TB-09-02/04/09 BMI09020504-09A	*** None Found ***	ND	2.0 μg/L	02/05/09	02/04/09	02/09/09

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl

Kandy Saulur

Walter Hinghman Quality Assurance Off

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

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Report Date
Page 1 of 1

2/18/09



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

Client I.D. Number: MW-3-4

Alpha Analytical Number: BMI09020504-01A

Attn: David Conner Phone: (619) 574-4827

(614) 458-6641 Fax:

Sampled: 02/04/09

Received: 02/05/09 Analyzed: 02/09/09

Volatile Organics by GC/MS

	Compound	Concentration	Reportir	g Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	* 0.5	0 μg/L	36	1,1,1,2-Tetrachloroethane	i ND	0.50	μg/L
2	Chloromethane	ND	1			Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.5			Ethylbenzene	0.64	0.50	μg/L
4	Chloroethane	ND	0.5			m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1		40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.5	0 μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.5		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	0.5		44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.5	0 μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.5	0 μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.5	0 μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	1	0 μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.5	0 μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.5	0 μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.5			tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.5		52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.5	0 μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.5	0 μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.5	0 μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.5	0 μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.5	0 μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.5	i0 μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.5	0 μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.5	i0 μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.5			Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2			Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.5	i0 μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.5	i0 μg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.5	i0 μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.5	i0 μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.5	i0 μg/L					
33	Dibromochloromethane	ND	0.5						
34	1,2-Dibromoethane (EDB)	ND	1						
0.5	Takan alala an akha a a								

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

Roger Scholl

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

μg/L

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

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

2/18/09

^{*}Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020504-02A

Client I.D. Number: MW-3-3

Attn: David Conner (619) 574-4827

Phone: Fax:

(614) 458-6641

Sampled: 02/04/09

Received: 02/05/09 Analyzed: 02/09/09

Volatile Organics by GC/MS

Compound		Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	* 0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	j ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC		2.5	µg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

35 Tetrachloroethene

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

μg/L

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Report Date

^{*}Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020504-03A

Client I.D. Number: MW-3-2

David Conner Attn:

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/04/09 Received: 02/05/09

Analyzed: 02/09/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	* 0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	0.70	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	1.0	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	1.1	0.50	μg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

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

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μg/L

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Report Date

^{*}Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020504-04A

Client I.D. Number: DUPE-5-1Q09

David Conner Attn:

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/04/09

Received: 02/05/09 Analyzed: 02/09/09

Volatile Organics by GC/MS

	Compound	Concentration	Re	eporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	*	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND		1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND		0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND		0.50	μg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND		1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND		0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND		0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND		1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND		0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND		0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND		0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND		10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND		0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND		0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND		0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND		0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND		0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND		0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
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21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND		0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND		0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
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25	Trichloroethene	ND		0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND		0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND		0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND		0.50	μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	μg/L					
33	Dibromochloromethane	ND		0.50	ua/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.

ND

ND

ND = Not Detected

34 1,2-Dibromoethane (EDB)

35 Tetrachloroethene

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

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1.0

μg/L

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020504-05A

Client I.D. Number: MW-4-3

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/04/09

Received: 02/05/09 Analyzed: 02/09/09

Volatile Organics by GC/MS

	Compound	Concentration	R	eporting	Limit		Compound	Concentration	Reporting Li	mit
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3	Vinyl chloride	ND		0.50	µg/L	38	Ethylbenzene	2.1	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	0.50	0.50	μg/L
7	1,1-Dichloroethene	ND		0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND		1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
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10	trans-1,2-Dichloroethene	ND		0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	μg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND		10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND		0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND		0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND		0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND		0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND		0.50	μg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND		0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND		0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND		0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC		2.5	μg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND		0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND		0.50	μg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	μg/L					
33	Dibromochloromethane	ND		0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

35 Tetrachloroethene

Roger Scholl

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

μg/L

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / info@alpha-analytical.com Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/T

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020504-06A

Client I.D. Number: MW-4-2

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/04/09

Received: 02/05/09 Analyzed: 02/09/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
1	Dichlorodifluoromethane	ND	* 0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC)	P) ND	2.5	μg/L
25	Trichloroethene	0.50	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

35 Tetrachloroethene

Roger Scholl Kandy Sanlaur

ND

ND

Walter Hinchman Quality Assurance Officer

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

μg/L

1.0

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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

Report Date

^{*}Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020504-07A

Client I.D. Number: MW-4-1

Attn: David Conner

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/04/09

Received: 02/05/09 Analyzed: 02/09/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	J Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	* 0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0		37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50		38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50		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		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		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		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		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		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		59	1,2-Dibromo-3-chloropropane (DBC		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	5 μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50) µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50) µg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50) μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50) μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50) μg/L					
33		ND	0.50) μg/L					
		!							

Note: Analysis conducted using EPA Method 524.2 criteria.

ND

ND

ND = Not Detected

34 1,2-Dibromoethane (EDB)

35 Tetrachloroethene

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

1.0

μg/L

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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.

Report Date

^{*}Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020504-08A

Client I.D. Number: EB-09-02/04/09

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/04/09

Received: 02/05/09 Analyzed: 02/09/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
1	Dichlorodifluoromethane	ND	* 0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC)	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	104	(70-130)	%RE
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%RE
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%RE
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μα/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

35 Tetrachloroethene

Roger Scholl

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

1.0

μg/L

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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.

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020504-09A

Client I.D. Number: TB-09-02/04/09

Attn: David Conner

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/04/09 Received: 02/05/09

Analyzed: 02/09/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting I	Limit		Compound	Concentration	Reporting Li	imit
1	Dichlorodifluoromethane	ND	* 0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
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4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
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8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
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10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
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16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
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18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-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 (DBCl	P) ND	2.5	µg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the 524 CV Criteria of 70-130% @ 135.1%.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

35 Tetrachloroethene

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

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / info@alpha-analytical.com Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

1.0

μg/L

Report Date



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

VOC Sample Preservation Report

Work Order: BMI09020504 Project: G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	рН	
09020504-01A	MW-3-4	Aqueous	2	
09020504-02A	MW-3-3	Aqueous	2	
09020504-03A	MW-3-2	Aqueous	2	
09020504-04A	DUPE-5-1Q09	Aqueous	2	
09020504-05A	MW-4-3	Aqueous	2	
09020504-06A	MW-4-2	Aqueous	2	
09020504-07A	MW-4-1	Aqueous	2	
09020504-08A	EB-09-02/04/09	Aqueous	2	
09020504-09A	TB-09-02/04/09	Aqueous	2	

2/18/09 Report Date



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Date: 16-Feb-09		(QC S	umma	ry Repor	t				Work Orde 09020504	
Method Bla File ID: 14	nk		Type I		Test Code: E Batch ID: 214		thod 314.0	Analysi	is Date:	02/05/2009 14:28	
Sample ID:	MB-21462	Units : µg/L		Run ID: I	C_3_090205	A		Prep D	ate:	02/05/2009	
Analyte		Result	PQL	SpkVa	l SpkRefVal	%REC	LCL(ME)	UCL(ME) F	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		ND		1							
•	Fortified Blank		Type I	LFB	Test Code: E	PA Met	hod 314.0				
File ID: 15					Batch ID: 214	62		Analysi	is Date:	02/05/2009 14:46	
Sample ID:	LFB-21462	Units : μg/L		Run ID: I	C_3_090205	A		Prep D	ate:	02/05/2009	
Analyte		Result	PQL	SpkVa	l SpkRefVal	%REC	LCL(ME)	UCL(ME) F	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		24.1	:	2 2	5	97	85	115			
Sample Mat	trix Spike		Type I	LFM	Test Code: E	PA Met	thod 314.0				
File ID: 18					Batch ID: 214	62		Analysi	is Date:	02/12/2009 14:42	
Sample ID:	09020504-03ALFM	Units : µg/L		Run ID: I	C_3_090205	A		Prep D	ate:	02/05/2009	
Analyte		Result	PQL	SpkVa	al SpkRefVal	%REC	LCL(ME)	UCL(ME) F	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		351	20	0 25	0 98.71	101	80	120			
Sample Mat	rix Spike Duplicate		Type I	LFMD	Test Code: E	PA Met	thod 314.0				
File ID: 19	•				Batch ID: 214	62		Analysi	is Date:	02/12/2009 15:01	
Sample ID:	09020504-03ALFMD	Units : μg/L		Run ID: I	C_3_090205	A		Prep D	ate:	02/05/2009	
Analyte		Result	PQL				LCL(ME)	UCL(ME) F	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		352	20	0 25	0 98.71	101	80	120	351	0.3(15)	

Comments:

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



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Date: 18-Feb-09	QC Summary Report	Work Order: 09020504
Method Blank File ID: 021309.B\091SMPL.D\ Sample ID: MB-21494	Units : mg/L Run ID: ICP/MS_090213C Prep Date:	02/13/2009 21:24 02/11/2009
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRef	Val %RPD(Limit) Qual
Chromium (Cr)	ND 0.005	
Laboratory Control Spike File ID: 021309.B\092_LCS.D\ Sample ID: LCS-21494	Type LCS Test Code: EPA Method 200.8 Batch ID: 21494K Analysis Date: Units: mg/L Run ID: ICP/MS 090213C Prep Date:	02/13/2009 21:29 02/11/2009
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRef	Val %RPD(Limit) Qual
Chromium (Cr)	0.0557 0.005 0.05 111 80 120	
Sample Matrix Spike File ID: 021309.B\096SMPL.D\	-	02/13/2009 21:52
Sample ID: 09020504-03AMS	Units: mg/L Run ID: ICP/MS_090213C Prep Date:	02/11/2009
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRef	Val %RPD(Limit) Qual
Chromium (Cr)	0.0489 0.005 0.05 0 98 80 120	
Sample Matrix Spike Duplicate File ID: 021309.B\097SMPL.D\	Type MSD Test Code: EPA Method 200.8 Batch ID: 21494K Analysis Date:	: 02/13/2009 21:58
Sample ID: 09020504-03AMSD	Units: mg/L Run ID: ICP/MS_090213C Prep Date:	02/11/2009
Analyte	Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRef	Val %RPD(Limit) Qual
Chromium (Cr)	0.0492 0.005 0.05 0 98 80 120 0.048	391 0.7(20)

Comments:

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



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Date: 17-Feb-09	(QC Su		Work Order: 09020504				
Method Blank		Туре М		Test Code:				
File ID: 09020907.D			I	Batch ID: MS15W020 9	9M	Analysis Date:	02/09/2009 10:52	
Sample ID: MBLK MS15W0209M	Units : µg/L	F		/ISD_15_090209B		Prep Date:	02/09/2009	
Analyte	Result	PQL	SpkVa	SpkRefVal %REC	LCL(ME) U	CL(ME) RPDRef	Val %RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5						
Chloromethane	ND	1						
Vinyl chloride	ND	0.5						
Chloroethane Bromomethane	ND ND	0.5 1						
Trichlorofluoromethane	ND	0.5						
1,1-Dichloroethene	ND	0.5						
Dichloromethane	ND	1						
Freon-113	ND	0.5						
trans-1,2-Dichloroethene Methyl tert-butyl ether (MTBE)	ND ND	0.5						
1,1-Dichloroethane	ND ND	0.5 0.5						
2-Butanone (MEK)	ND	10						
cis-1,2-Dichloroethene	ND	0.5						
Bromochloromethane	ND	0.5						
Chloroform	ND	0.5						
2,2-Dichloropropane	ND ND	0.5						
1,2-Dichloroethane 1,1,1-Trichloroethane	ND ND	0.5 0.5						
1,1-Dichloropropene	ND	0.5						
Carbon tetrachloride	ND	0.5						
Benzene	ND	0.5						
Dibromomethane	ND	0.5						
1,2-Dichloropropane	ND	0.5						
Trichloroethene Bromodichloromethane	ND ND	0.5 0.5						
4-Methyl-2-pentanone (MIBK)	ND ND	2.5						
cis-1,3-Dichloropropene	ND	0.5						
trans-1,3-Dichloropropene	ND	0.5						
1,1,2-Trichloroethane	ND	0.5						
Toluene	ND	0.5						
1,3-Dichloropropane Dibromochloromethane	ND ND	0.5 0.5						
1,2-Dibromoethane (EDB)	ND	1						
Tetrachloroethene	ND	0.5						
1,1,1,2-Tetrachloroethane	ND	0.5						
Chlorobenzene	ND	0.5						
Ethylbenzene m.n. Yylono	ND	0.5						
m,p-Xylene Bromoform	ND ND	0.5 0.5						
Styrene	ND	0.5						
o-Xylene	ND	0.5						
1,1,2,2-Tetrachloroethane	ND	0.5						
1,2,3-Trichloropropane	ND	1						
Isopropylbenzene Bromobenzene	ND ND	0.5 0.5						
n-Propylbenzene	ND ND	0.5						
4-Chlorotoluene	ND	0.5						
2-Chlorotoluene	ND	0.5						
1,3,5-Trimethylbenzene	ND	0.5						
tert-Butylbenzene	ND	0.5						
1,2,4-Trimethylbenzene sec-Butylbenzene	ND ND	0.5						
1,3-Dichlorobenzene	ND ND	0.5 0.5						
1,4-Dichlorobenzene	ND ND	0.5						
4-Isopropyltoluene	ND	0.5						
1,2-Dichlorobenzene	ND	0.5						
n-Butylbenzene	ND	0.5						
1,2-Dibromo-3-chloropropane (DBCP) 1,2,4-Trichlorobenzene	ND ND	2.5						
Naphthalene	ND ND	1 1						
Hexachlorobutadiene	ND	1						
1,2,3-Trichlorobenzene	ND	1						
Surr: 1,2-Dichloroethane-d4	10.4		10		70	130		
Surr: Toluene-d8	10.2		1) 102	70	130		



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17-Feb-09	(QC Sι	ımmary	Report				Work Ord 0902050	
Surr: 4-Bromofluorobenzene	9.49		10	95	70	130			
Laboratory Control Spike		Type L	CS Te	est Code:					
File ID: 09020905.D			Ba	tch ID: MS15W020	9M	Analysi	s Date:	02/09/2009 09:51	
Sample ID: LCS MS15W0209M	Units : µg/L		Run ID: MS	SD_15_090209B		Prep D	ate:	02/09/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal %REC	LCL(ME) UCL(ME) F	RPDRefV	al %RPD(Limit)	Qua
Dichlorodifluoromethane	13.5	1	10	135	70	130(130)			L51
Chloromethane	9.65	2	10	97	70	130			
Vinyl chloride	11	1	10	110	70	130			
Chloroethane	10.9	1	10	93	70	130			
Bromomethane	9.42	2	10	94	70	130			
Trichlorofluoromethane 1.1-Dichloroethene	12.2	1	10	122	70 7 0	130 130			
Dichloromethane	11 10	1 2	10 10	110 100	70 70	130			
trans-1,2-Dichloroethene	10.6	1	10	106	70	130			
Methyl tert-butyl ether (MTBE)	9.14	0.5	10	91	62	136			
1,1-Dichloroethane	10.5	1	10	105	70	130			
cis-1,2-Dichloroethene	10.9	1	10	109	70	130			
Bromochloromethane	10.8	1	10	108	70	130			
Chloroform 2,2-Dichloropropane	9.91 9.92	1	10	99 99	70 70	130 130			
1,2-Dichloroptopane 1,2-Dichloroethane	9.92 9.92	1	10 10	99	70 70	130			
1,1,1-Trichloroethane	10.8	1	10	108	70 70	130			
1,1-Dichloropropene	11	1	10	110	70	130			
Carbon tetrachloride	10.7	1	10	107	70	130			
Benzene	9.66	0.5	10	97	70	130			
Dibromomethane	10.2	1	10	102	70 70	130			
1,2-Dichloropropane Trichloroethene	9.92 11.2	1	10 10	99 112	70 70	130 130			
Bromodichloromethane	10.4	1	10	104	70	130			
cis-1,3-Dichloropropene	10.3	1	10	103	70	130			
trans-1,3-Dichloropropene	9.84	1	10	98	70	130			
1,1,2-Trichloroethane	9.25	1	10	93	70	130			
Toluene	9.82	0.5	10	98	70	130			
1,3-Dichloropropane Dibromochloromethane	8.91 10.1	1 1	10 10	89 101	70 70	130 130			
1,2-Dibromoethane (EDB)	18.6	2	20	93	70	130			
Tetrachloroethene	10.7	1	10	107	70	130			
1,1,1,2-Tetrachloroethane	9.87	1	10	99	70	130			
Chlorobenzene	9.61	1	10	96	70	130			
Ethylbenzene	9.91	0.5	10	99	70	130			
m,p-Xylene	10.1	0.5	10	101	70	130			
Bromoform Styrene	9.31 9.78	1 1	10 10	93 98	70 70	130 130			
o-Xylene	9.87	0.5	10	99	70	130			
1,1,2,2-Tetrachloroethane	8.29	1	10	83	70	130			
1,2,3-Trichloropropane	17.9	2	20	89	70	130			
Isopropylbenzene	9.98	1	10	99.8	70	130			
Bromobenzene	9.39	1	10	94	70 70	130			
n-Propylbenzene 4-Chlorotoluene	9.91 10.2	1	10 10	99 102	70 70	130 130			
2-Chlorotoluene	10	1	10	100	70	130			
1,3,5-Trimethylbenzene	9.77	1	10	98	70	130			
tert-Butylbenzene	9.65	1	10	97	70	130			
1,2,4-Trimethylbenzene	9.84	1	10	98	70	130			
sec-Butylbenzene	9.67	1	10	97	70	130			
1,3-Dichlorobenzene 1,4-Dichlorobenzene	9.71	1	10	97 94	70 70	130 130			
4-Isopropyltoluene	9.39 9.91	י 1	10 10	99	70 70	130			
1,2-Dichlorobenzene	9.21	1	10	92	70 70	130			
n-Butylbenzene	10.1	1	10	101	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	44.5	3	50	89	70	130			
1,2,4-Trichlorobenzene	11.4	2		114	70	130			
Naphthalene Hexachlorobutadiene	9.71	2		97	70 70	130			
1,2,3-Trichlorobenzene	20 11.8	2 2		100 118	70 70	130 130			
Surr: 1,2-Dichloroethane-d4	9.66	2	10	97	70	130			
Surr: Toluene-d8	10.2		10	102	70	130			
edit: Toldelle do									



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Date: Work Order: QC Summary Report 17**-**Feb-09 09020504

Sample Matrix Spike		Type MS	Te	st Code:					
File ID: 09020908.D			Bat	tch ID: MS1	5W020	9M	Analysis Date	: 02/09/2009 11:14	
Sample ID: 09020504-03AMS	Units : µg/L	Ri	un ID: MS	D_15_0902	09B		Prep Date:	02/09/2009	
Analyte	Result	PQL	SpkVal :	SpkRefVal	%REC	LCL(ME)	UCL(ME) RPDRe	fVal %RPD(Limit)	Qu
Dichlorodifluoromethane	51.3	2.5	50	0	103	13	167		
Chloromethane	41.6	10	50	0	83	28	145		
Vinyl chloride	50.2	2.5	50	0	100	43	134		
Chloroethane	45	2.5	50	0	90	39	154		
Bromomethane	44.4	10	50	0	89	19	176		
Trichlorofluoromethane	56.2	2.5	50	0	112	34	160		
1,1-Dichloroethene	49.3	2.5	50	0	99	60	130		
Dichloromethane	46.2	10	50	0	92	68	130		
trans-1,2-Dichloroethene	48.7	2.5	50	0	97	63	130		
Methyl tert-butyl ether (MTBE)	46.7	1.3	50	0	93	56	141		
1,1-Dichloroethane	49	2.5	50	0	98	61	130		
cis-1,2-Dichloroethene	50.9	2.5	50	0	102	70	130		
Bromochloromethane	52.3	2.5	50	0	105	70	130		
Chloroform	47.1	2.5	50	0.7	93	67	130		
2,2-Dichloropropane	43.6	2.5	50	0	87	30	152		
1,2-Dichloroethane	48.7	2.5	50	0	97	60 50	135		
1,1,1-Trichloroethane	50.6	2.5	50	0	101	59	137		
1,1-Dichloropropene	50.6	2.5	50	0	101	63	130		
Carbon tetrachloride	49.5	2.5	50	0	99	50	147		
Benzene	45.1	1.3	50	0	90	67	130		
Dibromomethane 1,2-Dichloropropane	50.7	2.5	50	0	101	69 60	133		
Trichloroethene	46.6	2.5	50	0	93	69 60	130		
Bromodichloromethane	51.2	2.5	50 50	0	102 99.6	69 66	130 134		
cis-1,3-Dichloropropene	50.8 47.6	2.5	50	1.01	99.6 95	66 63	130		
trans-1,3-Dichloropropene		2.5 2.5	50	0	98	66	131		
1,1,2-Trichloroethane	49 46	2.5 2.5	50 50	0	92	68	130		
Toluene	44.9	1.3	50 50	0	90	66	130		
1,3-Dichloropropane	43.6	2.5	50 50	0	87	70	130		
Dibromochloromethane	50.3	2.5	50 50	1.07	98	70	130		
1,2-Dibromoethane (EDB)	91.2	10	100	0	91	70	130		
Tetrachloroethene	48.2	2.5	50	0	96	61	134		
1,1,1,2-Tetrachloroethane	46.3	2.5	50	0	93	70	130		
Chlorobenzene	44.8	2.5	50	Ö	90	70	130		
Ethylbenzene	45.6	1.3	50	Ō	91	68	130		
m,p-Xylene	46.3	1.3	50	0	93	64	130		
Bromoform	45.5	2.5	50	Ŏ	91	64	138		
Styrene	45.5	2.5	50	0	91	69	130		
o-Xylene	45.4	1.3	50	0	91	70	130		
1,1,2,2-Tetrachloroethane	40.9	2.5	50	0	82	65	131		
1,2,3-Trichloropropane	84.8	10	100	0	85	70	130		
Isopropylbenzene	46.7	2.5	50	0	93	64	138		
Bromobenzene	46.1	2.5	50	0	92	70	130		
n-Propylbenzene	46.5	2.5	50	0	93	66	132		
4-Chlorotoluene	48.8	2.5	50	0	98	70	130		
2-Chlorotoluene	47.5	2.5	50	0	95	70	130		
1,3,5-Trimethylbenzene	46	2.5	50	0	92	66	136		
tert-Butylbenzene	45.4	2.5	50	0	91	65	137		
1,2,4-Trimethylbenzene	47	2.5	50	0	94	65	137		
sec-Butylbenzene	45.7	2.5	50	0	91	66	134		
1,3-Dichlorobenzene	47	2.5	50	0	94	70	130		
1,4-Dichlorobenzene	45	2.5	50	0	90	70	130		
4-Isopropyltoluene	47.1	2.5	50	0	94	66	137		
1,2-Dichlorobenzene	44.7	2.5	50	0	89	70	130		
n-Butylbenzene	47.5	2.5	50	0	95	60	142		
1,2-Dibromo-3-chloropropane (DBCP)	217	15	250	0	87	67	130		
1,2,4-Trichlorobenzene	51.5	10	50	0	103	61	137		
Naphthalene	43.8	10	50	0	88	40	167		
Hexachlorobutadiene	99	10	100	0	99	61	130		
1,2,3-Trichlorobenzene	51.1	10	50	0	102	51	144		
Surr: Taluana de	46.7		50		93	70 70	130		
Surr: Toluene-d8	50.5		50		101	70 70	130		
Surr: 4-Bromofluorobenzene	49.5		50		99	70	130		



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Date: 17-Feb-09 QC Summary Report Work Order: 09020504

Sample Matrix Spike Duplicate Type MSD Test Code: ______

Sample Matrix Spike Duplicate		Type MSD		st Code:						
File ID: 09020909.D		_		tch ID: MS1		09M	-		2/09/2009 11:36	i
Sample ID: 09020504-03AMSD	Units : µg/L			SD_15_0902			Prep [/09/2009	•
Analyte	Result	PQL S	SpkVal	SpkRefVal					%RPD(Limit)	Qua
Dichlorodifluoromethane	51.3	2.5	50	0	103	13	167	51.26	0.1(20)	
Chloromethane	42.9	10	50	0	86	28	145	41.58	3.1(20)	
Vinyl chloride Chloroethane	50.3	2.5	50 50	0	101 99	43 39	134 154	50.2 45.01	0.1(20) 9.8(20)	
Bromomethane	49.7 49.1	2.5 10	50 50	0	98	19	176	44.35	10.1(20)	
Trichlorofluoromethane	56.5	2.5	50	0	113	34	160	56.22	0.6(20)	
1.1-Dichloroethene	50.8	2.5	50	0	102	60	130	49.33	2.9(20)	
Dichloromethane	48.2	10	50	Ō	96	68	130	46.15	4.2(20)	
trans-1,2-Dichloroethene	50.9	2.5	50	0	102	63	130	48.66	4.4(20)	
Methyl tert-butyl ether (MTBE)	49.4	1.3	50	0	99	56	141	46.74	5.5(20)	
1,1-Dichloroethane	50.4	2.5	50	0	101	61	130	48.96	2.8(20)	
cis-1,2-Dichloroethene	51.7	2.5	50	0	103	70	130	50.87	1.6(20)	
Bromochloromethane	54.5	2.5	50	0	109	70	130	52.32	4.2(20)	
Chloroform 2,2-Dichloropropane	48.5 45.1	2.5 2.5	50 50	0.7 0	96 90	67 30	130 152	47.05 43.57	2.9(20) 3.3(20)	
1,2-Dichloroethane	50.3	2.5	50	0	101	60	135	48.73	3.3(20)	
1,1,1-Trichloroethane	51.8	2.5	50	0	104	59	137	50.63	2.4(20)	
1,1-Dichloropropene	51.5	2.5	50	Ö	103	63	130	50.56	1.8(20)	
Carbon tetrachloride	51.1	2.5	50	0	102	50	147	49.48	3.2(20)	
Benzene	46.3	1.3	50	0	93	67	130	45.09	2.5(20)	
Dibromomethane	53.4	2.5	50	0	107	69	133	50.74	5.1(20)	
1,2-Dichloropropane	47.8	2.5	50	0	96	69	130	46.57	2.7(20)	
Trichloroethene	52.2	2.5	50	0	104	69	130	51.24	1.8(20)	
Bromodichloromethane	53.1	2.5	50	1.01	104	66	134	50.81	4.4(20)	
cis-1,3-Dichloropropene	49.3	2.5	50	0	99	63	130	47.59	3.4(20)	
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	50.4 46.2	2.5	50 50	0	101 92	66 68	131 130	49.02 45.99	2.7(20) 0.5(20)	
Toluene	45.4	2.5 1.3	50 50	0	91	66	130	44.9	1.0(20)	
1,3-Dichloropropane	45.2	2.5	50	0	90	70	130	43.6	3.5(20)	
Dibromochloromethane	51.8	2.5	50	1.07	101	70	130	50.3	2.9(20)	
1,2-Dibromoethane (EDB)	93.8	10	100	0	94	70	130	91.16	2.9(20)	
Tetrachloroethene	48.9	2.5	50	0	98	61	134	48.24	1.4(20)	
1,1,1,2-Tetrachloroethane	47.1	2.5	50	0	94	70	130	46.3	1.7(20)	
Chlorobenzene	45.9	2.5	50	0	92	70	130	44.84	2.3(20)	
Ethylbenzene	46.4	1.3	50	0	93	68	130	45.59	1.8(20)	
m,p-Xylene	47.3	1.3	50	0	95	64	130	46.31	2.1(20)	
Bromoform Styrono	47.5	2.5	50	0	95 93	6 4 69	138 130	45.54 45.47	4.3(20) 2.8(20)	
Styrene o-Xylene	46.7 47	2.5 1.3	50 50	0	93 94	70	130	45.43	3.4(20)	
1,1,2,2-Tetrachloroethane	42.9	2.5	50	0	86	65	131	40.88	4.9(20)	
1,2,3-Trichloropropane	90	10	100	ő	90	70	130	84.79	5.9(20)	
Isopropylbenzene	47.2	2.5	50	Ō	94	64	138	46.68	1.2(20)	
Bromobenzene	46.6	2.5	50	0	93	70	130	46.07	1.1(20)	
n-Propylbenzene	47.7	2.5	50	0	95	66	132	46.5	2.5(20)	
4-Chlorotoluene	49.4	2.5	50	0	99	70	130	48.81	1.2(20)	
2-Chlorotoluene	47.3	2.5	50	0	95	70	130	47.46	0.3(20)	
1,3,5-Trimethylbenzene	46.6	2.5	50	0	93	66	136	46.02	1.2(20)	
tert-Butylbenzene	46.2	2.5	50	0	92 95	65 65	137 137	45.4 46.99	1.8(20) 0.6(20)	
1,2,4-Trimethylbenzene sec-Butylbenzene	47.3 46.4	2.5 2.5	50 50	0	93	66	137	45.73	1.5(20)	
1,3-Dichlorobenzene	45.4 47.8	2.5 2.5	50	0	96	70	134	46.95	1.9(20)	
1,4-Dichlorobenzene	45.6	2.5	50	0	91	70	130	44.96	1.5(20)	
4-Isopropyltoluene	47.3	2.5	50	ő	95	66	137	47.13	0.3(20)	
1,2-Dichlorobenzene	45.9	2.5	50	ō	92	70	130	44.69	2.6(20)	
n-Butylbenzene	48.2	2.5	50	0	96	60	142	47.49	1.6(20)	
1,2-Dibromo-3-chloropropane (DBCP)	225	15	250	0	90	67	130	217.4	3.2(20)	
1,2,4-Trichlorobenzene	56.8	10	50	0	114	61	137	51.51	9.8(20)	
Naphthalene	48.2	10	50	0	96	40	167	43.8	9.5(20)	
Hexachlorobutadiene	101	10	100	0	101	61 51	130	98.98	1.6(20)	
1,2,3-Trichlorobenzene Surr: 1,2-Dichloroethane-d4	58.4 48.1	10	50 50	0	117 96	51 70	144 130	51.07	13.5(20)	
Surr: Toluene-d8	48.1 50		50 50		99.9	70 70	130			
SUIT TOTHERE-OX					JJ.J	, ,				



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

Date: QC Summary Report Work Order: 09020504

Comments:

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

Alpha uses descriptive data qualifier flags, which could be replaced with either a DOD Q or J flag. L51 = Analyte recovery was above acceptance limits for the LCS, but was acceptable in the MS/MSD.

Billing Information:

505 King Avenue

Columbus, OH 43201

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201

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 Shane Walton Phone Number (614) 424-4117 x (614) 424-4899 x (619) 574-4827 x waltons@battelle.org connerd@battelle.org cutiee@batelle.org EMail Address

WorkOrder: BMI09020504

Page: 1 of 1

Report Due By: 5:00 PM On: 19-Feb-2009

EDD Required: Yes

Sampled by: Client Cooler Temp

Samples Received 05-Feb-2009

05-Feb-2009 Date Printed

Client's COC #: 24138 QC Level: S4 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates G005862/JPL Groundwater Monitoring 4 0 0

BMI09020504-09A BMI09020504-08A EB-09-02/04/09 BMI09020504-07A MW-4-1 BMI09020504-06A MW-4-2 BMI09020504-05A MW-4-3 Sample ID BMI09020504-04A DUPE-5-1Q09 BMI09020504-03A MW-3-2 BMI09020504-02A MW-3-3 BMI09020504-01A TB-09-02/04/09 MW-3-4 Client Sample ID Š Š Ş å å ð Š å å 02/04/09 00:00 02/04/09 08:02 02/04/09 08:12 02/04/09 07:46 02/04/09 07:26 02/04/09 10:42 02/04/09 10:01 02/04/09 09:34 02/04/09 00:00 Collection No. of Bottles Alpha G S S 5 G S S G Sub 0 0 0 0 0 0 0 0 ΤAΤ 6 5 5 6 5 6 5 5 6 Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate Perchlorate 314_W METALS_D VOC_TIC_ Ç Ç Ω Ç Ç Ω VOC by 524 VOC by 524 Criteria Criteria Requested Tests VOC_W Reno Trip Blank 1/6/09 Sample Remarks MS/MSD

Comments:

No security seals. Frozen ice, Temp Blank #7650 received @ 4°. Samples should be used as the control spike sample if possible (LE.: MS/MSD). Level IV QC. Perchlorate RL of 1.0 ug/L.:

Logged in by: apputh (Idicox Elizabeth 14dcax Alpha Analytical, Inc. Company 2509 1120 Date/Time

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report 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. Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Name GERALY TOMPKION	255 Glei	255 Glendale Avenue, Suite 21	ID OR OTHER	Page # / of
tate, Zip COLUMISUS,	Sparks, Phone (Fax (77)	Sparks, Nevada 89431-5778 Phone (775) 355-1044 Fax (775) 355-0406	Analyses Required	red
Client Name	PO.# 218013	Job# (205867	2) (0)	quired QC Lev
Address OLD TOWN AVE, C-205	EMail Address		24.	
MECTO, CA 92/10	Phone # 619-726-7311	+ax #	1 (5) CE	EDD / EDF? YES NO
te Matrix* Sampled by	Report Attention	Total and type of containers	C TAIL OF	Global ID #
- 6-	Sample Description	TAT Filtered ** See below	X ZC C	HEMAHKS
BMT0902	MW-3-4	2	×××	
	Mw-3-3	1	XXX	
73	Mw-3-2	10	×××	MS/MOD
	6081-5-3dng	7	×	DUPHONE
326	MW-4-3	2	XXX	
746	MW-4-2		XXX	
812 - 07	MW-4-1		X	
SOT	EB-09-02/04/09		×	
	TB-09-02/04/09		X	
ADDITIONAL INSTRUCTIONS:				
Cionatura	Print Name		Company	Date Time
Relinquished by	MARGO RIENDO LA		18881	2/4/30 /235
Received by Carobath (data)	Flizabish Hocax		Stoha	0711 10.C.7
Received by				
Relinquished by				
Received by				D Dispario OT Other

of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

Ø



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Date: 16-Feb-09

David Conner

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 (619) 574-4827 **CASE NARRATIVE**

Project:

G005862/JPL Groundwater Monitoring

Work Order: E

BMI09020652

Cooler Temp:

4°C

		-
Alpha's Sample ID	Client's Sample ID	Matrix
09020652-01A	MW-22-3	Aqueous
09020652-02A	MW-22-2	Aqueous
09020652-03A	MW-22-1	Aqueous
09020652-04A	MW-11-4	Aqueous
09020652-05A	MW-11-3	Aqueous
09020652-06A	MW-11-2	Aqueous
09020652-07A	MW-11-1	Aqueous
09020652-08A	EB-10-02/05/09	Aqueous
09020652-09A	TB-10-02/05/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	<u>Analyte</u>
09020652-01A	EPA Method 314.0	Perchlorate
09020652-02A	EPA Method 314.0	Perchlorate
09020652-03A	EPA Method 314.0	Perchlorate
09020652-04A	EPA Method 314.0	Perchlorate

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

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

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

Roger Scholl

Kandy Saulner

Walter Hirihrun



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ANALYTICAL REPORT

Battelle Memorial Institute 505 King Avenue Columbus, OH 43201

Attn: David Conner

Phone: (619) 574-4827

Fax:

(614) 458-6641

Date Received: 02/06/09

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-11-1	Nitrite (NO2) - N	ND	0.25 mg/L	02/05/09 11:56	02/06/09 15:37
Lab ID: BMI09020652-07A	Nitrate (NO3) - N	1.1	0.25 mg/L	02/05/09 11:56	02/06/09 15:37
140 15 . BM107020032-07A	Phosphate, ortho - P	ND	0.25 mg/L	02/05/09 11:56	02/06/09 15:37

ND = Not Detected

Roger Scholl Kandy Salma

Walter Firedus

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

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

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

2/19/09



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue

Columbus, OH 43201

Attn:

David Conner

Phone: (619) 574-4827

Fax:

(614) 458-6641

Date Received: 02/06/09

Job#:

G005862/JPL Groundwater Monitoring

Anions by IC

EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting	Date	Date
				Limit	Sampled	Analyzed
Client ID:	MW-11-1					
Lab ID:	BMI09020652-07A	Chloride	26	0.50 mg/L	02/05/09	02/06/09
		Sulfate (SO4)	55	0.50 mg/L	02/05/09	02/06/09

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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201 Attn: David Conner

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

Date Received: 02/06/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography

EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID: Lab ID:	MW-22-3 BMI09020652-01A	Perchlorate	3.18	1.00 μg/L	02/05/09	02/12/09
Client ID: Lab ID:	MW-22-2 BMI09020652-02A	Perchlorate	2.32	1.00 μg/L	02/05/09	02/12/09
Client ID : Lab ID :	MW-22-1 BMI09020652-03A	Perchlorate	2.48	1.00 µg/L	02/05/09	02/12/09
Client ID: Lab ID:	MW-11-4 BMI09020652-04A	Perchlorate	1.86	1.00 μg/L	02/05/09	02/12/09
Client ID : Lab ID :	MW-11-3 BMI09020652-05A	Perchlorate	ND	1.00 μg/L	02/05/09	02/12/09
Client ID : Lab ID :	MW-11-2 BMI09020652-06A	Perchlorate	ND	1.00 µg/L	02/05/09	02/12/09
Client ID : Lab ID :	MW-11-1 BMI09020652-07A	Perchlorate	ND	1.00 μg/L	02/05/09	02/12/09
Client ID : Lab ID :	EB-10-02/05/09 BMI09020652-08A	Perchlorate	ND	1.00 µg/L	02/05/09	02/12/09

ND = Not Detected

Roger Scholl KundgeSaulur

Walter Acredon

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

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2/19/09



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue

Columbus, OH 43201

Attn:

David Conner

Phone:

(619) 574-4827

Fax:

(614) 458-6641

Date Received: 02/06/09

Job#:

G005862/JPL Groundwater Monitoring

Metals by ICPMS EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : Lab ID :	MW-22-3 BMI09020652-01A	Chromium (Cr)	ND	0.0050 mg/L	02/05/09	02/13/09
Client ID: Lab ID:	MW-22-2 BMI09020652-02A	Chromium (Cr)	ND	0.0050 mg/L	02/05/09	02/13/09
Client ID: Lab ID:	MW-22-1 BMI09020652-03A	Chromium (Cr)	ND	0.0050 mg/L	02/05/09	02/14/09
Client ID: Lab ID:	MW-11-3 BMI09020652-05A	Chromium (Cr)	ND	0.0050 mg/L	02/05/09	02/14/09
Client ID: Lab ID:	MW-11-2 BMI09020652-06A	Chromium (Cr)	ND	0.0050 mg/L	02/05/09	02/14/09
Client ID: Lab ID:	MW-11-1 BMI09020652-07A	Chromium (Cr)	ND	0.0050 mg/L	02/05/09	02/14/09
Client ID: Lab ID:	EB-10-02/05/09 BMI09020652-08A	Chromium (Cr)	ND	0.0050 mg/L	02/05/09	02/14/09

ND = Not Detected

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

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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue

Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Attn: David Conner

Phone: (619) 574-4827

(614) 458-6641 Fax:

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID : Lab ID :	MW-22-3 BMI09020652-01A	*** None Found ***	ND	2.0 μg/L	02/06/09	02/05/09	02/11/09
Client ID : Lab ID :	MW-22-2 BMI09020652-02A	*** None Found ***	ND	2.0 μg/L	02/06/09	02/05/09	02/11/09
Client ID : Lab ID :	MW-22-1 BMI09020652-03A	*** None Found ***	ND	2.0 μg/L	02/06/09	02/05/09	02/11/09
Client ID: Lab ID:	MW-11-4 BMI09020652-04A	Sulfur dioxide	24	2.0 μg/L	02/06/09	02/05/09	02/11/09
Client ID: Lab ID:	MW-11-3 BMI09020652-05A	Sulfur dioxide	28	2.0 μg/L	02/06/09	02/05/09	02/11/09
Client ID : Lab ID :	MW-11-2 BMI09020652-06A	Sulfur dioxide	21	2.0 μg/L	02/06/09	02/05/09	02/11/09
Client ID: Lab ID:	MW-11-1 BMI09020652-07A	Sulfur dioxide	15	2.0 μg/L	02/06/09	02/05/09	02/11/09
Client ID : Lab ID :	EB-10-02/05/09 BMI09020652-08A	*** None Found ***	ND	2.0 μg/L	02/06/09	02/05/09	02/11/09
Client ID: Lab ID:	TB-10-02/05/09 BMI09020652-09A	*** None Found ***	ND	2.0 μg/L	02/06/09	02/05/09	02/11/09

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

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

Alpha Analytical Number: BMI09020652-01A

Client I.D. Number: MW-22-3

David Conner Attn:

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/05/09

Received: 02/06/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%RE
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	104	(70-130)	%RE
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%RE
32	1,3-Dichloropropane	ND	0.50	μg/L			•		
33	Dibromochloromethane	ND	0.50	ua/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

34 1,2-Dibromoethane (EDB)

ND

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

μg/L

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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Iob#: G005862/II

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020652-02A

Client I.D. Number: MW-22-2

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/05/09

Received: 02/06/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xvlene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-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	DN	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	97	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L			,	, ,	
33	Dibromochloromethane	ND	0.50	μα/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

34 1,2-Dibromoethane (EDB)

Roger Scholl Kandy San

Walter Hirihour

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.

1.0

μg/L

2/19/09 Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G0058

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020652-03A

Client I.D. Number: MW-22-1

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/05/09

Received: 02/06/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	104	(70-130)	%RE
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%RE
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%RE
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	ua/l.					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

34 1,2-Dibromoethane (EDB)

Roger Scholl Kandy Sadmir

Walter Aurelin

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

1.0

μg/L

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

2/16/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

G005862/JPL Groundwater Monitoring

Client I.D. Number: MW-11-4

Alpha Analytical Number: BMI09020652-04A

David Conner Attn: Phone: (619) 574-4827

Fax:

(614) 458-6641

Sampled: 02/05/09 Received: 02/06/09

Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC		2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	97	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

Tetrachloroethene

ND

1.0

0.50

μg/L

μg/L

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / info@alpha-analytical.com Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples. 2/19/09

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020652-05A

Client I.D. Number: MW-11-3

David Conner Attn:

Phone: (619) 574-4827

(614) 458-6641 Fax:

Sampled: 02/05/09

Received: 02/06/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	94	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

Tetrachloroethene

ND

ND

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

μg/L

μg/L

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

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020652-06A

Client I.D. Number: MW-11-2

David Conner Attn:

Phone: (619) 574-4827

(614) 458-6641 Fax:

Sampled: 02/05/09

Received: 02/06/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xvlene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xvlene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	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	DN	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

Tetrachloroethene

ND

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

μg/L

μg/L

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

2/19/09

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020652-07A

Client I.D. Number: MW-11-1

David Conner Attn:

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/05/09

Received: 02/06/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	. ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	107	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
~ .		1							

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

34 1,2-Dibromoethane (EDB)

Tetrachloroethene

ND

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager •

1.0

µg/L

μg/L

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Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09020652-08A

Client I.D. Number: EB-10-02/05/09

Attn: David Conner

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/05/09 Received: 02/06/09

Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	µg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	µg/L	38	Ethylbenzene	ND	0.50	µg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	µg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
		1							

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

34 1,2-Dibromoethane (EDB)

Roger Scholl

ND

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

μg/L

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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

Client I.D. Number: TB-10-02/05/09

Alpha Analytical Number: BMI09020652-09A

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/05/09 Received: 02/06/09

Analyzed: 02/11/09

Volatile Organics by GC/MS

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

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

34 1,2-Dibromoethane (EDB)

ND

ND

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

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

0.50

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μg/L

μg/L

Report Date



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VOC Sample Preservation Report

Work Order: BMI09020652 Project: G005862/JPL Groundwater Monitoring

_	Alpha's Sample ID	Client's Sample ID	Matrix	рН	
	09020652-01A	MW-22-3	Aqueous	2	
	09020652-02A	MW-22-2	Aqueous	2	
	09020652-03A	MW-22-1	Aqueous	2	
	09020652-04A	MW-11-4	Aqueous	2	
	09020652-05A	MW-11-3	Aqueous	2	
	09020652-06A	MW-11-2	Aqueous	2	
	09020652-07A	MW-11-1	Aqueous	2	
	09020652-08A	EB-10-02/05/09	Aqueous	2	
	09020652-09A	TB-10-02/05/09	Aqueous	2	



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Date: 16-Feb-09	C)C Sı	ımmary	y Repor	t				Work Orde 09020652	
Method Blank File ID: 26		Type N		est Code: El		hod 300.0		sis Date:	02/06/2009 14:42	
Sample ID: MB-21469 Analyte	Units : mg/L Result	PQL	Run ID: IC	_1_090206	\	I CL (ME)	Prep [Date:	02/06/2009 /al %RPD(Limit)	Qual
Nitrite (NO2) - N Nitrate (NO3) - N Phosphate, ortho - P	ND ND ND	0.25 0.25 0.25		Spriverval	MINEO	LOL(WL)	OOL(ML)	TO DITCH	ar 70 th O(Entity)	
Laboratory Fortified Blank Duplicate		Type L	FBD Te	est Code: El	PA Met	hod 300.0	/ 9056			
File ID: 28 Sample ID: LFBD-21469	Units : mg/L			atch ID: 214 0 _ 1_090206			Analy: Prep [02/06/2009 15:19 02/06/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %RPD(Limit)	Qual
Nitrite (NO2) - N Nitrate (NO3) - N Phosphate, ortho - P	1.29 1.36 1.32	0.25 0.25 0.25	1.25		103 109 105	90 90 90	110 110 110	1.349 1.385 1.366	2.0(10)	
Sample Matrix Spike		Type L	FM Te	est Code: El	PA Met	hod 300.0	/ 9056			_
File ID: 30		,		atch ID: 214	69A		Analy	sis Date:	02/06/2009 15:56	
Sample ID: 09020652-07ALFM	Units : mg/L		Run ID: IC	_1_090206	4		Prep (Date:	02/06/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	/al %RPD(Limit)	Qual
Nitrite (NO2) - N Nitrate (NO3) - N Phosphate, ortho - P	1.34 2.39 1.33	0.25 0.25 0.25	1.25	0 1.059 0	107 106 106	80 80 80	120 120 120			
Sample Matrix Spike Duplicate		Type L	FMD Te	est Code: El	PA Met	hod 300.0	/ 9056			
File ID: 31			Ва	atch ID: 214	69A		Analy	sis Date:	02/06/2009 16:14	
Sample ID: 09020652-07ALFMD Analyte	Units : mg/L Result	PQL		_ 1_090206 / SpkRefVal		LCL(ME)	Prep I UCL(ME)		02/06/2009 /al_%RPD(Limit)	Qual
Nitrite (NO2) - N Nitrate (NO3) - N Phosphate, ortho - P	1.42 2.39 1.29	0.25 0.25 0.25	1.25	0 1.059 0	114 106 103	80 80 80	120 120 120	1.338 2.386 1.326	0.0(10)	

Comments:



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

Date: 16-Feb-09		(Work Order: 09020652							
Method Blank File ID: 26			Туре І	MBLK	Test Code:		thod 300.0		/sis Date:	02/06/2009 14:42	
Sample ID: MB	-21469	Units : mg/L		Run ID:	IC_1_09020			,	Date:	02/06/2009	
Analyte		Result	PQL				C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Sulfate (SO4)		ND	0.	5							
Laboratory Fort	ified Blank Duplicate		Type I	FBD	Test Code:	EPA Me	thod 300.0	/ 9056			
File ID: 28	•				Batch ID: 2	1469B		Analy	/sis Date:	02/06/2009 15:19	
Sample ID: LFE	3D-21469	Units : mg/L		Run ID:	IC_1_09020	6A		Prep	Date:	02/06/2009	
Analyte		Result	PQL	SpkV	al SpkRef\	al %RE0	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Sulfate (SO4)		10.4	0.9	5 ′	10	104	90	110	10.6	1.8(10)	
Sample Matrix S	spike		Type I	_FM	Test Code:	EPA Me	thod 300.0	/ 9056			
File ID: 30					Batch ID: 2	1469B		Analy	/sis Date:	02/06/2009 15:56	
Sample ID: 090	20652-07ALFM	Units: mg/L		Run ID:	IC_1_09020	6A		Prep	Date:	02/06/2009	
Analyte		Result	PQL	SpkV	al SpkRef\	al %RE0	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Sulfate (SO4)		65.5	0.9	5	10 54	.5 110	80	120			
Sample Matrix S	pike Duplicate		Type I	.FMD	Test Code:	EPA Me	thod 300.0	/ 9056			
File ID: 31	•				Batch ID: 2	1469B		Analy	ysis Date:	02/06/2009 16:14	
Sample ID: 090	20652-07ALFMD	Units : mg/L		Run ID:	IC_1_09020	6A		Prep	Date:	02/06/2009	
Analyte		Result	PQL	SpkV	al SpkRef\	al %RE0	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Sulfate (SO4)		66.1	0.9	5	10 54	.5 116	80	120	65.4	6 1.0(10)	

Comments:



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

	QC Summary Report									Work Order: 09020652		
Method Blank			Type N	/BLK	Tes	t Code: EP	A Meti	nod 300.0	/ 9056			
File ID: 26					Bate	ch ID: 2146	9C		Analy	sis Date:	02/06/2009 14:42	<i>!</i>
Sample ID: M	B-21469	Units : mg/L		Run ID:	IC_	1_090206A			Prep	Date:	02/06/2009	
Analyte		Result	PQL	Spk\	/al S	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef\	Val %RPD(Limit)	Qual
Chloride		ND	0.5	5								
Laboratory For	rtified Blank Duplicate		Type L	FBD	Tes	t Code: EP	A Meti	nod 300.0	/ 9056			
File ID: 28					Bat	ch ID: 214 6	9C		Analy	sis Date:	02/06/2009 15:19	ı
Sample ID: LF	FBD-21469	Units : mg/L		Run ID	: IC_	1_090206A			Prep	Date:	02/06/2009	
Analyte		Result	PQL	Spk\	/al S	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Chloride		4.68	0.5	5	5		94	90	110	4.79	7 2.5(10)	
Sample Matrix	Spike		Type 1	-FM	Tes	t Code: EF	A Met	hod 300.0	/ 9056			
File ID: 30	·				Bat	ch ID: 214 6	9C		Analy	sis Date:	02/06/2009 15:56	į.
Sample ID: 09	9020652-07ALFM	Units : mg/L		Run ID	: IC_	1_090206A			Prep	Date:	02/06/2009	
Analyte		Result	PQL	Spk\	/al S	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Chloride		30.7	0.5	5	5	25.62	102	80	120			
Sample Matrix	Spike Duplicate		Type I	FMD	Tes	t Code: EF	A Met	hod 300.0	/ 9056			
File ID: 31	•				Bat	ch ID: 2146	59C		Analy	sis Date:	02/06/2009 16:14	ŀ
Sample ID: 09	9020652-07ALFMD	Units : mg/L		Run ID	: IC_	1_090206A			Prep	Date:	02/06/2009	
Analyte		Result	PQL	Spk\	/al S	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Chloride		30.9	0.	5	5	25.62	105	80	120	30.7	3 0.5(10)	

Comments:



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Date: 16-Feb-09		(QC S	umm	ary Rep	ort				Work Ord 09020652	
Method Bla File ID: 14	nk		Type !	MBLK	Test Code: Batch ID: 2		thod 314.0	Analys	sis Date:	02/12/2009 13:29	
Sample ID:	MB-21508	Units : µg/L		Run ID	: IC_3_0902	12A		Prep D	Date:	02/12/2009	
Analyte		Result	PQL	Spk\	/al SpkRef\	/al %RE0	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		ND		1							
Laboratory	Fortified Blank		Type I	LFB			thod 314.0	A a l	in Data.	00/40/2000 42:47	
Sample ID:	LFB-21508	l leite a seeff		D 1D	Batch ID: 2			Prep E		02/12/2009 13:47 02/12/2009	
Analyte	LFB-21306	Units : µg/L Result	PQL		: IC_3_0902 /al SpkRef\		C LCL(ME)	•		Val %RPD(Limit)	Qual
Perchlorate		24.7	:	2	25	99	85	115			
Sample Mat	trix Spike		Type I	LFM	Test Code:	EPA Me	thod 314.0				
File ID: 22					Batch ID: 2	1508		Analys	sis Date:	02/12/2009 15:56	
Sample ID:	09021103-02ALFM	Units : µg/L		Run ID	: IC_3_0902	12A		Prep D	Date:	02/12/2009	
Analyte		Result	PQL	Spk\	/al SpkRef\	/al %RE	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		41.6		2	25 18.	04 94	80	120			
Sample Mat	rix Spike Duplicate		Type I	LFMD	Test Code:	EPA Me	thod 314.0				
File ID: 23					Batch ID: 2	1508		Analys	sis Date:	02/12/2009 16:14	
Sample ID:	09021103-02ALFMD	Units : µg/L		Run ID	: IC_3_0902	12A		Prep D	Date:	02/12/2009	
Analyte		Result	PQL	Spk\	/al SpkRef\	/al %RE0	C LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		43.4		2	25 18.	04 102	80	120	41.6	2 4.2(15)	

Comments:



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Date: 18-Feb-09	QC	Summ	ary Repor	t			Work Orde 09020652	
Method Blank File ID: 021309.B\091SMPL.D\ Sample ID: MB-21494 Analyte	Typ Units : mg/L Result P0		Test Code: EI Batch ID: 214: : ICP/MS_0902 /al SpkRefVal	94K 13C		Prep Date:	: 02/13/2009 21:24 02/11/2009 fVal %RPD(Limit)	Qual
Chromium (Cr)	ND 0	.005	·					
Laboratory Control Spike File ID: 021309.B\092_LCS.D\ Sample ID: LCS-21494	Тур Units : mg/L	e LCS Run ID	Test Code: EI Batch ID: 214	94K	hod 200.8	Analysis Date Prep Date:	: 02/13/2009 21:29 02/11/2009	
Analyte	Result PO	QL Spk\	√al SpkRefVal	%REC	LCL(ME)	JCL(ME) RPDRe	fVal %RPD(Limit)	Qual
Chromium (Cr)	0.0557 0	.005 0.	.05	111	80	120		
Sample Matrix Spike File ID: 021309.B\096SMPL.D\ Sample ID: 09020504-03AMS Analyte	Units : mg/L		Test Code: EI Batch ID: 214: : ICP/MS_0902 /al SpkRefVal	94K 13C		Prep Date:	: 02/13/2009 21:52 02/11/2009 fVal %RPD(Limit)	Qual
Chromium (Cr)	0.0489 0	.005 0.	.05 0	98	80	120		
Sample Matrix Spike Duplicate File ID: 021309.B\097SMPL.D\	Тур	e MSD	Test Code: El Batch ID: 214		hod 200.8		: 02/13/2009 21:58	
Sample ID: 09020504-03AMSD	Units : mg/L		: ICP/MS_0902			Prep Date:	02/11/2009	
Analyte Chromium (Cr)	0.0492 0		Val SpkRefVal	%REC	ELCL(ME) U	JCL(ME) RPDRe 120 0.048	fVal %RPD(Limit) 391 0.7(20)	Qual
	•		• • • • • • • • • • • • • • • • • • • •				, ,	

Comments:



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Date: 17-Feb-09	(QC Sui	nmary Report	Work Ord 0902065	
Method Blank		Туре МВ			
File ID: 09021106.D			Batch ID: MS15W0211M	Analysis Date: 02/11/2009 10:17	,
Sample ID: MBLK MS15W0211M	Units : µg/L	R	ın ID: MSD_15_090211A	Prep Date: 02/11/2009	
Analyte	Result	PQL	SpkVal SpkRefVal %REC LC	L(ME) UCL(ME) RPDRefVal %RPD(Limit)	Qua
Dichlorodifluoromethane	ND	0.5			
Chloromethane	ND	1			
Vinyl chloride	ND	0.5			
Chloroethane	ND	0.5			
Bromomethane Trichlorofluoromethane	ND ND	1 0.5			
1.1-Dichloroethene	ND ND	0.5			
Dichloromethane	ND	1			
Freon-113	ND	0.5			
trans-1,2-Dichloroethene	ND	0.5			
Methyl tert-butyl ether (MTBE)	ND	0.5			
1,1-Dichloroethane 2-Butanone (MEK)	ND	0.5			
cis-1,2-Dichloroethene	ND ND	10 0.5			
Bromochloromethane	ND	0.5			
Chloroform	ND	0.5			
2,2-Dichloropropane	ND	0.5			
1,2-Dichloroethane	ND	0.5			
1,1,1-Trichloroethane 1,1-Dichloropropene	ND	0.5			
Carbon tetrachloride	ND ND	0.5 0.5			
Benzene	ND	0.5			
Dibromomethane	ND	0.5			
1,2-Dichloropropane	ND	0.5			
Trichloroethene	ND	0.5			
Bromodichloromethane	ND	0.5			
4-Methyl-2-pentanone (MIBK) cis-1,3-Dichloropropene	ND ND	2.5 0.5			
trans-1,3-Dichloropropene	ND	0.5			
1,1,2-Trichloroethane	ND	0.5			
Toluene	ND	0.5			
1,3-Dichloropropane	ND	0.5			
Dibromochloromethane	ND	0.5			
1,2-Dibromoethane (EDB) Tetrachloroethene	ND ND	1 0.5			
1,1,1,2-Tetrachloroethane	ND ND	0.5			
Chlorobenzene	ND	0.5			
Ethylbenzene	ND	0.5			
m,p-Xylene	ND	0.5			
Bromoform	ND	0.5			
Styrene o-Xylene	ND	0.5			
1,1,2,2-Tetrachloroethane	ND ND	0.5 0.5			
1,2,3-Trichloropropane	ND	1			
isopropylbenzene	ND	0.5			
Bromobenzene	ND	0.5			
n-Propylbenzene	ND	0.5			
4-Chlorotoluene 2-Chlorotoluene	ND ND	0.5			
1,3,5-Trimethylbenzene	ND ND	0.5 0.5			
tert-Butylbenzene	ND	0.5			
1,2,4-Trimethylbenzene	ND	0.5			
sec-Butylbenzene	ND	0.5			
1,3-Dichlorobenzene	ND	0.5			
1,4-Dichlorobenzene 4-Isopropyltoluene	ND ND	0.5			
1,2-Dichlorobenzene	ND ND	0.5 0.5			
n-Butylbenzene	ND ND	0.5			
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5			
1,2,4-Trichlorobenzene	ND	1			
Naphthalene	ND	1			
Hexachlorobutadiene	ND	1			
1,2,3-Trichlorobenzene Surr: 1,2-Dichloroethane-d4	ND 10.1	1	10 101	70 130	
Surr: Toluene-d8	10.1		10 101	70 130	



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Date: 17-Feb-09	(QC Sur	nmary Re	port			Work Ord 0902065	
Surr: 4-Bromofluorobenzene	9.58		10	96	70	130		
Laboratory Control Spike		Type LCS	Test Cod	de:				
File ID: 09021104.D			Batch ID	: MS15W0211	IM	Analysis D	oate: 02/11/2009 09:13	
Sample ID: LCS MS15W0211M	Units : µg/L	Rı	in ID: MSD_15	_090211A		Prep Date	: 02/11/2009	
Analyte	Result	PQL	SpkVal SpkRe	efVal %REC	LCL(ME) UCL(ME) RPD	RefVal %RPD(Limit)	Qu
Dichlorodifluoromethane	12.2	1	10	122	70	130		
Chloromethane	10	2	10	100	70	130		
Vinyl chloride	10.9	1	10	109	70	130		
Chloroethane	9.66	1	10	97	70	130		
Bromomethane Trichlorofluoromethane	9.59	2	10	96	70 70	130		
1,1-Dichloroethene	11.1 10.9	1 1	10 10	111 109	70 70	130 130		
Dichloromethane	10.9	2	10	109	70	130		
trans-1,2-Dichloroethene	11	1	10	110	70	130		
Methyl tert-butyl ether (MTBE)	10.6	0.5	10	106	62	136		
1,1-Dichloroethane	10.7	1	10	107	70	130		
cis-1,2-Dichloroethene	11.2	1	10	112	70	130		
Bromochloromethane	11.4	1	10	114	70	130		
Chloroform	9.97	1	10	99.7	70	130		
2,2-Dichloropropane	9.18	1	10	92	70 70	130		
1,2-Dichloroethane 1,1.1-Trichloroethane	10.3	1 1	10 10	103 106	70 70	130 130		
1,1-Dichloropropene	10.6 11.2	1	10	112	70	130		
Carbon tetrachloride	10.3	1	10	103	70	130		
Benzene	10.1	0.5	10	101	70	130		
Dibromomethane	11.1	1	10	111	70	130		
1,2-Dichloropropane	10.6	1	10	106	70	130		
Trichloroethene	11.2	1	10	112	70	130		
Bromodichloromethane	10.7	1	10	107	70	130		
cis-1,3-Dichloropropene	11	1	10	110	70 70	130 130		
trans-1,3-Dichloropropene 1,1,2-Trichloroethane	10.9 10.2	1 1	10 10	109 102	70 7 0	130		
Toluene	10.4	0.5	10	104	70	130		
1,3-Dichloropropane	10.2	1	10	102	70	130		
Dibromochloromethane	11	1	10	110	70	130		
1,2-Dibromoethane (EDB)	20.8	2	20	104	70	130		
Tetrachloroethene	11.1	1	10	111	70	130		
1,1,1,2-Tetrachloroethane	10.6	1	10	106	70	130		
Chlorobenzene Ethylbenzene	10.3	1	10	103	70 70	130		
m,p-Xylene	10.5 10.9	0.5 0.5	10 10	105 109	70 70	130 130		
Bromoform	10.9	0.5 1	10	103	70	130		
Styrene	10.6	1	10	106	70	130		
o-Xylene	10.5	0.5	10	105	70	130		
1,1,2,2-Tetrachloroethane	9.26	1	10	93	70	130		
1,2,3-Trichloropropane	19.5	2	20	98	70	130		
Isopropylbenzene	10.4	1	10	104	70	130		
Bromobenzene n-Propylbenzene	10.3	1	10	103	70 70	130 130		
4-Chlorotoluene	10.6 10.7	1 1	10 10	106 107	70 70	130		
2-Chlorotoluene	10.7	1	10	107	70	130		
1,3,5-Trimethylbenzene	10.2	1	10	102	70	130		
tert-Butylbenzene	9.98	1	10	99.8	70	130		
1,2,4-Trimethylbenzene	10.5	1	10	105	70	130		
sec-Butylbenzene	10	1	10	100	70	130		
1,3-Dichlorobenzene	10.2	1	10	102	70	130		
1,4-Dichlorobenzene	9.76	1	10	98	70 70	130		
4-Isopropyltoluene 1,2-Dichlorobenzene	10.3	1	10 10	103 99	70 70	130 130		
n-Butylbenzene	9.86 10.2	1	10 10	99 102	70 70	130		
1,2-Dibromo-3-chloropropane (DBCP)	47	3	50	94	70	130		
1,2,4-Trichlorobenzene	10.9	2	10	109	70	130		
Naphthalene	9.85	2	10	99	70	130		
Hexachlorobutadiene	20	2	20	99.9	70	130		
1,2,3-Trichlorobenzene	10.8	2	10	108	70	130		
Surr: 1,2-Dichloroethane-d4	9.14		10	91	70 70	130		
Surr: Toluene-d8	10.3		10	103	70	130		



Surr: Toluene-d8

Surr: 4-Bromofluorobenzene

Alpha Analytical, Inc.

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Date: 17-Feb-09 QC Summary Report Work Order: 09020652

	Batch ID: MS1 ID: MSD_15_0902 okVal SpkRefVal 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50	%REC LC 86 80 98 89 104 111 98		Prep Da	te: 02 / PDRefVal 40 38.06 46.62 44.62	7.5(20) 4.5(20) 4.8(20)	Qua
Analyte Result PQL S Dichlorodifluoromethane 43.1 2.5 Chloromethane 39.8 10 Vinyl chloride 48.9 2.5 Chloroethane 46.9 2.5 Bromomethane 51.8 10	bkVal SpkRefVal 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0	%REC LC 86 80 98 89 104 111 98	13 28 43 39 19	167 145 134 154	40 38.06 46.62 44.62	%RPD(Limit) 7.5(20) 4.5(20) 4.8(20)	Qua
Analyte Result PQL S Dichlorodifluoromethane 43.1 2.5 Chloromethane 39.8 10 Vinyl chloride 48.9 2.5 Chloroethane 46.9 2.5 Bromomethane 51.8 10	bkVal SpkRefVal 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0	%REC LC 86 80 98 89 104 111 98	13 28 43 39 19	167 145 134 154	40 38.06 46.62 44.62	%RPD(Limit) 7.5(20) 4.5(20) 4.8(20)	Qua
Dichlorodifluoromethane 43.1 2.5 Chloromethane 39.8 10 Vinyl chloride 48.9 2.5 Chloroethane 46.9 2.5 Bromomethane 51.8 10	50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0	86 80 98 89 104 111 98	13 28 43 39 19	167 145 134 154	40 38.06 46.62 44.62	7.5(20) 4.5(20) 4.8(20)	
Chloromethane 39.8 10 Vinyl chloride 48.9 2.5 Chloroethane 46.9 2.5 Bromomethane 51.8 10	50 0 50 0 50 0 50 0 50 0 50 0 50 0 50 0	80 98 89 104 111 98	28 43 39 19	145 134 154	38.06 46.62 44.62	4.5(20) 4.8(20)	
Vinyl chloride 48.9 2.5 Chloroethane 46.9 2.5 Bromomethane 51.8 10	50 0 50 0 50 0 50 0 50 0 50 0 50 0	98 89 104 111 98	43 39 19	134 154	46.62 44.62	4.8(20)	
Bromomethane 51.8 10	50 0 50 0 50 0 50 0 50 0	104 111 98	19				
	50 0 50 0 50 0 50 0	111 98		176	45.04	5.0(20)	
Trichlorofluoromethane 55.4 2.5	50 0 50 0 50 0	98	3/		45.04	13.9(20)	
2011	50 0 50 0			160	49	12.2(20)	
1,1-Dichloroethene 49 2.5 Dichloromethane 46 10	50 0		60	130	45.84	6.6(20)	
Dichloromethane 46 10 trans-1,2-Dichloroethene 51.1 2.5		92 102	68 63	130 130	44.51 50.16	3.3(20) 1.9(20)	
Methyl tert-butyl ether (MTBE) 47.3 1.3	50 0	95	56	141	45.86	3.1(20)	
1,1-Dichloroethane 49.5 2.5	50 0	99	61	130	47.84	3.3(20)	
cis-1,2-Dichloroethene 50.7 2.5	50 0	101	70	130	49.6	2.2(20)	
Bromochloromethane 52.9 2.5	50 0	106	70	130	50.79	4.1(20)	
Chloroform 46 2.5	50 0	92	67	130	44.93	2.4(20)	
2,2-Dichloropropane 45.5 2.5	50 0	91	30	152	44.15	3.0(20)	
1,2-Dichloroethane 48.2 2.5	50 0	96	60	135	46.32	4.0(20)	
1,1,1-Trichloroethane 51.3 2.5 1,1-Dichloropropene 51.6 2.5	50 0	103	59	137	49.37	3.9(20)	
1,1-Dichloropropene51.62.5Carbon tetrachloride50.72.5	50 0 50 0	103 101	63 50	130 147	49.64 48.05	3.8(20) 5.3(20)	
Benzene 46.1 1.3	50 0	92	50 67	130	44.39	3.8(20)	
Dibromomethane 49.8 2.5	50 0	99.6	69	133	49.46	0.7(20)	
1,2-Dichloropropane 47.2 2.5	50 0	94	69	130	45.76	3.2(20)	
Trichloroethene 52.5 2.5	50 0	105	69	130	51.04	2.8(20)	
Bromodichloromethane 49.2 2.5	50 0	98	66	134	47.64	3.3(20)	
cis-1,3-Dichloropropene 47.9 2.5	50 0	96	63	130	46.25	3.6(20)	
trans-1,3-Dichloropropene 47.7 2.5	50 0	95	66	131	44.32	7.3(20)	
1,1,2-Trichloroethane 44.5 2.5 Toluene 46.3 1.3	50 0	89 93	68	130	42.95	3.6(20)	
Toluene 46.3 1.3 1,3-Dichloropropane 43.1 2.5	50 0 50 0	93 86	66 70	130 130	45.4 42.44	2.1(20) 1.6(20)	
Dibromochloromethane 48.4 2.5	50 0	97	70	130	46.42	4.2(20)	
1,2-Dibromoethane (EDB) 91.3 10	100 0	91	70	130	88.96	2.6(20)	
Tetrachloroethene 50.8 2.5	50 0	102	61	134	49.63	2.4(20)	
1,1,1,2-Tetrachloroethane 47.8 2.5	50 0	96	70	130	46.45	2.9(20)	
Chlorobenzene 46.1 2.5	50 0	92	70	130	45.23	1.8(20)	
Ethylbenzene 47.2 1.3	50 0	94	68	130	46.23	2.0(20)	
m,p-Xylene 47.9 1.3 Bromoform 45.6 2.5	50 0	96	64	130	47.12	1.7(20)	
Bromoform 45.6 2.5 Styrene 47.1 2.5	50 0 50 0	91 94	64 69	138 130	42.6 45.74	6.7(20) 2.9(20)	
o-Xylene 47.1 2.3	50 0	94	70	130	45.65	3.0(20)	
1,1,2,2-Tetrachloroethane 40.4 2.5	50 0	81	65	131	39.01	3.5(20)	
1,2,3-Trichloropropane 83.9 10	100 0	84	70	130	84.23	0.3(20)	
Isopropylbenzene 48.1 2.5	50 0	96	64	138	45.88	4.8(20)	
Bromobenzene 46.6 2.5	50 0	93	70	130	45.02	3.4(20)	
n-Propylbenzene 48.7 2.5	50 0	97	66	132	46.51	4.6(20)	
4-Chlorotoluene 49.3 2.5	50 0	99	70	130	46.78	5.3(20)	
2-Chlorotoluene 48.8 2.5 1,3,5-Trimethylbenzene 47.5 2.5	50 0	98 95	70	130	46.49 45.13	4.9(20)	
1,3,5-Trimethylbenzene 47.5 2.5 tert-Butylbenzene 47.2 2.5	50 0 50 0	95 94	66 65	136 137	44.77	5.0(20) 5.4(20)	
1,2,4-Trimethylbenzene 48.5 2.5	50 0	9 7	65	137	46.22	4.9(20)	
sec-Butylbenzene 47.8 2.5	50 0	96	66	134	45.5	5.0(20)	
1,3-Dichlorobenzene 47.8 2.5	50 0	96	70	130	45.38	5.2(20)	
1,4-Dichlorobenzene 45.5 2.5	50 0	91	70	130	43.34	4.9(20)	
4-Isopropyltoluene 48.6 2.5	50 0	97	66	137	46.06	5.5(20)	
1,2-Dichlorobenzene 45.7 2.5	50 0	91	70	130	43.42	5.1(20)	
n-Butylbenzene 49.2 2.5	50 0	98	60 67	142	45.86	7.0(20)	
1,2-Dibromo-3-chloropropane (DBCP) 208 15 1,2,4-Trichlorobenzene 53.4 10	250 0 50 0	83 107	67 61	130 137	203.8 47.38	2.1(20) 11.9(20)	
1,2,4-Trichlorobenzene 53.4 10 Naphthalene 42.5 10	50 0 50 0	85	40	167	40.37	5.1(20)	
Hexachlorobutadiene 102 10	100 0	102	61	130	94.13	7.6(20)	
1,2,3-Trichlorobenzene 52.3 10	50 0	105	51	144	46.41	11.9(20)	
Surr: 1,2-Dichloroethane-d4 46.2	50	92	70	130	* *	` ,	
Surr: Toluene-d8 50.8	50	102	70	130			
Surr: 4-Bromofluorobenzene 49.1	50	98	70	130			



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Date: 17-Feb-09

QC Summary Report

Work Order: 09020652

Comments:

Billing Information:

Battelle

505 King Avenue

Columbus, OH 43201

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201

Shane Walton Betsy Cutie

> Client's COC #: 24137 PO: 218013

= Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates G005862/JPL Groundwater Monitoring : **q**of QC Level: S4

CHAIN-OF-CUSTODY RECORD

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

Alpha Analytical, Inc.

TEL: (775) 355-1044 FAX: (775) 355-0406

Page: 1 of 1

WorkOrder: BMI09020652

Report Due By: 5:00 PM On: 20-Feb-09

EDD Required: Yes

connerd@battelle.org

(619) 574-4827 x (614) 424-4899 x (614) 424-4117 x

Phone Number

Report Attention David Conner

EMail Address

waltons@battelle.org cutiee@batelle.org

Sampled by: Client

Date Printed 06-Feb-09 Samples Received 06-Feb-09 Cooler Temp 4 °C

										Requested Tests	ed Tests			
Alpha	Client		Collection No. of Bottles	No. o	Bottles		300_0(A)_	300_0(A) 300_0(B)	300_0(C)_	314_W	METALS_D	METALS_D VOC_TIC_	w_oov_w	
Sample ID	Sample ID	Matri	Matrix Date	Alpha Sub	Sub	TAT	•		:		:			Sample Remarks
BMI09020652-01A	MW-22-3	ЧΟ	02/05/09 07:58	5	0	9				Perchlorate	ర్	VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria Criteria	
BMI09020652-02A	MW-22-2	φ	02/05/09 08:25	သ	0	9				Perchlorate	ర	VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria Criteria	
BMI09020652-03A	MW-22-1	ΑQ	02/05/09 08:54	သ	0	9				Perchlorate	ರ	VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria Criteria	
BMI09020652-04A	MW-11-4	Ą	02/05/09 10:16	4	0	9				Perchlorate		VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria Criteria	
BMI09020652-05A	MW-11-3	Ą	02/05/09 10:43	2	0	10		"		Perchlorate	ర	VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria Criteria	
BMI09020652-06A	MW-11-2	AQ	02/05/09	2	0	6				Perchlorate	ರ	VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria Criteria	
BMI09020652-07A	MW-11-1	Ą	02/05/09 11:56	ည	0	10	NO2, NO3, PO4, CI, SO4	NO2, NO3, NO2, NO3, NO2, NO3, PO4, CI, SO4 PO4, CI, SO4		Perchlorate	ರ	VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria	
BMI09020652-08A	EB-10-02/05/09	ΑQ	02/05/09 08:42	ഹ	0	10				Perchlorate	ڻ	VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria Criteria	Equipment Blank
BMI09020652-09A	TB-10-02/05/09	AQ	02/02/09	-	0	10						VOC by 524 Criteria	VOC by 524 VOC by 524 Criteria Criteria	Reno 8260 TB, 1/6/09.

Comments:

No security seals. Frozen ice. Temp Blank #8704 received @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV OC. Perchlorate RL of 1.0 ug/L.:

Logged in by:

Alpha Analytical, Inc. Company

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. 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.

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

AZ CA X NV WA Date: 24 AZ CA X NV WA DATE: 25 AZ CA X NV WA DATE: 2	Required /	, oor = / / / ^
AZ CA X NV ID OR OTHER	Analyses Required	000
Alpha Analytical, Inc. 255 Glendale Avenue, Suite 21	Sparks, Nevada 894-31-5778 Phone (775) 355-1044 Fax (775) 355-0406	# dol.]
TOMPKINS	500 201 (C.) Fax	# Cd
lling Information:	Address 505 KINC City, State, Zip COLUMNISMS, C Phone Number	

							7						T
Client N	ame TV/VA	Client Name CON NET	P.O. # 2 18013	1800281	386	7			(2) (8)	(o.a	_	Required QC Level?	٠.
Address 35	2008	Address Address A 12 0 - 205	EMail Address)	•		\ <u>\</u>	\ \.	1) { S	\0.00 \0.00	<u> </u>	/ ' " (III) II /	
City Sta	te, Zip	City, State, Zip	Phone # 9-726-75// Fa	Fax#			\ \{\sqrt{\sq}}\ext{\sqrt{\sq}}\signt{\sqrt{\sq}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	ン - 20 20		Tank To	<u> </u>	EDD / EDF? YES NO	1
Time	Date Matri)	x* Sampled by	Report Attention		Tota	Total and type of		TV	30	× × × × × × × × × × × × × × × × × × ×	_	Global ID #	ī
Sampled	Sampled See K Belov	Sampled Sampled See Key Lab ID Number (Use Only)	Sample Description	TAT	Field **	** See below	M	70	13	30	4	REMARKS	
12/28210	45 to 45	2 - 12-M 102005201 MW-22-3	MW-22-3			4	X	X	\				
828		70	-02 MW-21-2				X	X X	\				
45%		-03	-03 MW-22-1				$\stackrel{\wedge}{\times}$	$\frac{\lambda}{\lambda}$	~				
7/0/		40-	-04 MV-11-4			7	X	$\stackrel{\sim}{\longrightarrow}$	\ <u>\</u>				
2 101		\$	15 MW-11-3			Y	X	$\stackrel{\wedge}{\times}$	X				
1108		200-	-020 mm-11-2				X	$\frac{\lambda}{\lambda}$					
1156		-03	1-11- MM -11-1			_	λ	$\frac{\lambda}{\lambda}$	X				
11,80		80-	-08 83-10-02/05/09		•	1	^ Х	\ \	X		-	EQUIPMENT BLA	3
)_		60	18-10-02/05/09			7	_		-			TRIP BLOWL	
			•										T
ADDI	TIONAL	ADDITIONAL INSTRUCTIONS:											Γ

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Si	Signature	-(Print Name	lame				Company			Date	Time
Relinquisher		X	JANK E	3,100-7	July 1		1211	MSVEHY CECT	CECT	\ \	2405/00	1330
Received by MALO	MATINA	1	Tale 1/10k	1N80	7		0	Colla			2 16 B	(020)
Relinquisher by)									
Received by												
Relinquished by				T					-			
Received by												
*Key: AQ - Aqueous	SO - Soil	WA - Waste	OT - Other AR	AR - Air	**; L-Liter	V-Voa	V-Voa S-Soil Jar O-Orbo T-Tedlar	O-Orbo	T-Tedlar	dlar B-Brass	P-Plastic	lastic 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.



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

Date: 16-Feb-09
David Conner

Battelle Memorial Institute

09021004-03A

505 King Avenue Columbus, OH 43201 (619) 574-4827 **CASE NARRATIVE**

Perchlorate

roject: ⁷ ork Order:	G005862/JPL Grou BMI09021004	ndwater Monitoring	Cooler Temp: 4 °C	
Alpha's S	Sample ID	Client's Sample ID	Matrix	
090210	004-01A	MW-23-4	Aqueous	
090210	004-02A	MW-23-3	Aqueous	
090210	004-03A	MW-23-2	Aqueous	
090210	004-04A	MW-23-1	Aqueous	
090210	004-05A	EB-11-02/09/09	Aqueous	
090210	004-06A	TB-11-02/09/09	Aqueous	
090210	004-07A	SB-01-1Q09	Aqueous	
		Manually Integrated An	alytes	
Alpha's Sam	ple ID	Test Reference	<u>Analyte</u>	

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.

EPA Method 314.0

Roger Scholl

Kandy Saulner

Walter Hinkow



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: 02/10/09

Job#:

G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography

EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID: Lab ID:	MW-23-3 BMI09021004-02A	Perchlorate	ND	1.00 μg/L	02/09/09	02/12/09
Client ID: Lab ID:	MW-23-2 BMI09021004-03A	Perchlorate	4.18	1.00 μg/L	02/09/09	02/12/09
Client ID: Lab ID:	MW-23-1 BMI09021004-04A	Perchlorate	2.29	1.00 μg/L	02/09/09	02/12/09
Client ID: Lab ID:	EB-11-02/09/09 BMI09021004-05A	Perchlorate	ND	1.00 μg/L	02/09/09	02/12/09
Client ID: Lab ID:	SB-01-1Q09 BMI09021004-07A	Perchlorate	ND	1.00 µg/L	02/09/09	02/12/09

ND = Not Detected

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

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

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

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue

Columbus, OH 43201

Attn:

David Conner

Phone: (619) 574-4827

Fax:

(614) 458-6641

Date Received: 02/10/09

Job#:

G005862/JPL Groundwater Monitoring

Metals by ICPMS

EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : Lab ID :	MW-23-4 BMI09021004-01A	Chromium (Cr)	ND	0.0050 mg/L	02/09/09	02/14/09
Client ID: Lab ID:	MW-23-3 BMI09021004-02A	Chromium (Cr)	ND	0.0050 mg/L	02/09/09	02/14/09
Client ID: Lab ID:	MW-23-2 BMI09021004-03A	Chromium (Cr)	ND	0.0050 mg/L	02/09/09	02/14/09
Client ID: Lab ID:	MW-23-1 BMI09021004-04A	Chromium (Cr)	ND	0.0050 mg/L	02/09/09	02/14/09
Client ID: Lab ID:	EB-11-02/09/09 BMI09021004-05A	Chromium (Cr)	ND	0.0050 mg/L	02/09/09	02/14/09
Client ID : Lab ID :	SB-01-1Q09 BMI09021004-07A	Chromium (Cr)	ND	0.0050 mg/L	02/09/09	02/14/09

ND = Not Detected

Roger Scholl

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

				Estimated			
		Parameter	Estimated	Reporting	Date	Date	Date
			Concentration	Limit	Received	Sampled	Analyzed
Client ID : Lab ID :	MW-23-3 BMI09021004-02A	Sulfur dioxide	10	2.0 μg/L	02/10/09	02/09/09	02/11/09
Client ID: Lab ID:	MW-23-2 BMI09021004-03A	* * * None Found * * *	ND	2.0 μg/L	02/10/09	02/09/09	02/11/09
Client ID: Lab ID:	MW-23-1 BMI09021004-04A	* * * None Found * * *	ND	2.0 μg/L	02/10/09	02/09/09	02/11/09
Client ID : Lab ID :	EB-11-02/09/09 BMI09021004-05A	*** None Found ***	ND	2.0 μg/L	02/10/09	02/09/09	02/11/09
Client ID : Lab ID :	TB-11-02/09/09 BMI09021004-06A	*** None Found ***	ND	2.0 μg/L	02/10/09	02/09/09	02/11/09
Client ID : Lab ID :	SB-01-1Q09 BMI09021004-07A	2-Methyl-1-propene	6.1	2.0 μg/L	02/10/09	02/09/09	02/11/09

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Saulne
Roger I Scholl Ph D. Leberger Director a Pandy Garder Leberger

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

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

Report Date

-



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09021004-02A

Client I.D. Number: MW-23-3

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/09/09

Received: 02/10/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBCl	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	μg/L					
~-									

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

Roger Scholl Kandy Saulner

Walter Airchner

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

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L 2/23/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

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

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09021004-03A

Client I.D. Number: MW-23-2

Attn: David Conner

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

Sampled: 02/09/09

Received: 02/10/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	imit
1	Dichlorodifluoromethane	ND	0.50	µg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	µg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xvlene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBCI	P) ND	2.5	μg/L
25	Trichloroethene	0.83	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%RE
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	105	(70-130)	%RE
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	94	(70-130)	%RE
32	1,3-Dichloropropane	ND	0.50	μg/L			,		
33	Dibromochloromethane	ND	0.50	μg/L					
24	4.0 Dibarra (EDD)		17.7	, 5					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

34 1,2-Dibromoethane (EDB)

Roger Scholl Kandy Soulmer

ND

Walter Hirihum

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

μg/L

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

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

2/23/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09021004-04A

Client I.D. Number: MW-23-1

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/09/09

Received: 02/10/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	l 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	j ND	0.50	μg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	μg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	μg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBCI	P) ND	2.5	μg/L
25	Trichloroethene	1.5	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

Roger Scholl

0.53

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

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223/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09021004-05A

Client I.D. Number: EB-11-02/09/09

Attn: David Conner

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/09/09

Received: 02/10/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting L	imit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xvlene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1.1.2.2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	μg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	μg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	μg/L
21	Carbon tetrachloride	ND	0.50	μg/L	56	4-Isopropyltoluene	ND	0.50	μg/L
22	Benzene	ND	0.50	μg/L	57	1,2-Dichlorobenzene	ND	0.50	μg/L
23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBCI	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	μg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	μg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1.2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	97	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L				, ,	
33	Dibromochloromethane	ND	0.50	μg/L					
0.4	4.0 Dibanas - (EDD)			, 0					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

34 1,2-Dibromoethane (EDB)

ND

ND

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

1.0

μg/L

μg/L

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2/23/09

Report Date



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ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

Job#: G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09021004-06A

Client I.D. Number: TB-11-02/09/09

Attn: David Conner

Phone: (619) 574-4827

Fax: (614) 458-6641

Sampled: 02/09/09

Received: 02/10/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

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

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

35 Tetrachloroethene

34 1,2-Dibromoethane (EDB)

Roger Scholl Kandy Saulur

Walter Hirehour

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

μg/L

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2/23/09

Report Date



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

ANALYTICAL REPORT

Battelle Memorial Institute

505 King Avenue Columbus, OH 43201

G005862/JPL Groundwater Monitoring

Alpha Analytical Number: BMI09021004-07A

Client I.D. Number: SB-01-1Q09

Attn: David Conner

Phone: (619) 574-4827 Fax:

(614) 458-6641

Sampled: 02/09/09

Received: 02/10/09 Analyzed: 02/11/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting	Limit		Compound	Concentration	Reporting Li	mit
1	Dichlorodifluoromethane	ND	0.50	μg/L	36	1,1,1,2-Tetrachloroethane	ND	0.50	μg/L
2	Chloromethane	ND	1.0	μg/L	37	Chlorobenzene	ND	0.50	μg/L
3	Vinyl chloride	ND	0.50	μg/L	38	Ethylbenzene	ND	0.50	μg/L
4	Chloroethane	ND	0.50	μg/L	39	m,p-Xylene	ND	0.50	μg/L
5	Bromomethane	ND	1.0	μg/L	40	Bromoform	ND	0.50	μg/L
6	Trichlorofluoromethane	ND	0.50	μg/L	41	Styrene	ND	0.50	μg/L
7	1,1-Dichloroethene	ND	0.50	μg/L	42	o-Xylene	ND	0.50	μg/L
8	Dichloromethane	ND	1.0	μg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	μg/L
9	Freon-113	ND	0.50	μg/L	44	1,2,3-Trichloropropane	ND	1.0	μg/L
10	trans-1,2-Dichloroethene	ND	0.50	μg/L	45	Isopropylbenzene	ND	0.50	μg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	μg/L	46	Bromobenzene	ND	0.50	μg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	μg/L
13	2-Butanone (MEK)	ND	10	μg/L	48	4-Chlorotoluene	ND	0.50	μg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	μg/L
15	Bromochloromethane	ND	0.50	μg/L	50	1,3,5-Trimethylbenzene	ND	0.50	μg/L
16	Chloroform	ND	0.50	μg/L	51	tert-Butylbenzene	ND	0.50	μg/L
17	2,2-Dichloropropane	ND	0.50	μg/L	52	1,2,4-Trimethylbenzene	ND	0.50	μg/L
18	1,2-Dichloroethane	ND	0.50	μg/L	53	sec-Butylbenzene	ND	0.50	μg/L
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21	Carbon tetrachloride	ND	0.50	μg/L	56	4-isopropyltoluene	ND	0.50	μg/L
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23	Dibromomethane	ND	0.50	μg/L	58	n-Butylbenzene	ND	0.50	μg/L
24	1,2-Dichloropropane	ND	0.50	μg/L	59	1,2-Dibromo-3-chloropropane (DBC	P) ND	2.5	μg/L
25	Trichloroethene	ND	0.50	μg/L	60	1,2,4-Trichlorobenzene	ND	1.0	μg/L
26	Bromodichloromethane	ND	0.50	μg/L	61	Naphthalene	ND	1.0	μ g /L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	μg/L
28	cis-1,3-Dichloropropene	ND	0.50	μg/L	63	1,2,3-Trichlorobenzene	ND	1.0	μg/L
29	trans-1,3-Dichloropropene	ND	0.50	μg/L	64	Surr: 1,2-Dichloroethane-d4	104	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	μg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND	0.50	μg/L	66	Surr: 4-Bromofluorobenzene	94	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	μg/L					
33	Dibromochloromethane	ND	0.50	μg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	μg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Tetrachloroethene

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

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / info@alpha-analytical.com Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples

2/23/09 Report Date



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

VOC Sample Preservation Report

Work Order: BMI09021004 Project: G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	рН	
09021004-02A	MW-23-3	Aqueous	2	
09021004-03A	MW-23-2	Aqueous	2	
09021004-04A	MW-23-1	Aqueous	2	
09021004-05A	EB-11-02/09/09	Aqueous	2	
09021004-06A	TB-11-02/09/09	Aqueous	2	
09021004-07A	SB-01-1Q09	Aqueous	2	

2/23/09

Report Date



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

Date: 16-Feb-09		(QC S	Summ	ary	Repor	t				Work Ord 09021004	
Method Bla File ID: 14	nk		Type	MBLK		Code: E F h ID: 215 (thod 314.0	Analy	sis Date:	02/12/2009 13:29	
Sample ID:	MB-21508	Units : µg/L		Run 1D	: IC_3	_090212 <i>A</i>			Prep	Date:	02/12/2009	
Analyte		Result	PQL	Spk'	Val S	kRefVal	%REC	CLCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		ND		1						•		
•	Fortified Blank		Туре	LFB	Test	Code: EF	A Met	thod 314.0				
File ID: 15					Batc	h ID: 215 0	8		Analy	sis Date:	02/12/2009 13:47	
Sample ID:	LFB-21508	Units : µg/L		Run ID	: IC_3	_0902124	١		Prep	Date:	02/12/2009	
Analyte		Result	PQL	Spk'	Val Sp	kRefVal	%REC	CLCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		24.7		2	25		99	85	115			
Sample Mat	rix Spike		Туре	LFM	Test	Code: EF	A Met	thod 314.0				
File ID: 22					Batc	h ID: 215 0	08		Analy	sis Date:	02/12/2009 15:56	
Sample ID:	09021103-02ALFM	Units : µg/L		Run ID	: IC_3	_090212 <i>A</i>	١.		Prep	Date:	02/12/2009	
Analyte		Result	PQL	Spk'	Val Sp	okRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		41.6		2	25	18.04	94	80	120			
Sample Mat	rix Spike Duplicate		Туре	LFMD	Test	Code: EF	A Met	thod 314.0				
File ID: 23					Batc	h ID: 215 0	8		Analy	sis Date:	02/12/2009 16:14	
Sample ID:	09021103-02ALFMD	Units : µg/L		Run ID	: IC_3	_090212 <i>A</i>	١		Prep	Date:	02/12/2009	
Analyte		Result	PQL					LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Perchlorate		43.4		2	25	18.04	102	80	120	41.6	2 4.2(15)	

Comments:



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Date: 19-Feb-09	(QC S	ummary	y Repor	t				Work Ord 09021004	
Method Blank File ID: 021309.B\136SMPL.D\ Sample ID: MB-21512	Units : mg/L	Type N	Ва	est Code: EF atch ID: 215 ²	12K	thod 200.8	Analy Prep		02/14/2009 01:39 02/12/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Chromium (Cr)	ND	0.005	5							
Laboratory Control Spike File ID: 021309.B\138_LCS.D\		Type L		est Code: EF		thod 200.8	Anaiy	sis Date:	02/14/2009 01:51	
Sample ID: LCS-21512	Units : mg/L		Run ID: IC	P/MS_0902 ⁻	13D		Prep	Date:	02/12/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Chromium (Cr)	0.0494	0.005	0.05		99	80	120			
Sample Matrix Spike File ID: 021309.B\142SMPL.D\	. =	Type N		est Code: EF		thod 200.8	Analy	/sis Date:	02/14/2009 02:14	
Sample ID: 09021004-02AMS	Units : mg/L		Run ID: IC	P/MS_0902 ⁻	13D		Prep	Date:	02/12/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Chromium (Cr)	0.0504	0.005	0.05	0	101	80	120			
Sample Matrix Spike Duplicate		Type N		est Code: EF		thod 200.8				
File ID: 021309.B\143SMPL.D\				tch ID: 2151			,		02/14/2009 02:19	
Sample ID: 09021004-02AMSD	Units : mg/L		Run ID: IC	P/MS_0902 ⁻	13D		Prep	Date:	02/12/2009	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRef	Val %RPD(Limit)	Qual
Chromium (Cr)	0.0518	0.005	0.05	0	104	80	120	0.050	35 2.9(20)	

Comments:



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Date: 17-Feb-09		QC Sumn	nary Report		Work Order 09021004	·:
Method Blank		Type MBLK	Test Code:			
File ID: 09021106.D			Batch ID: MS15W0211M	Analysis Date:	02/11/2009 10:17	
Sample ID: MBLK MS15W0211M	Units : µg/L	Run I	D: MSD_15_090211A	Prep Date:	02/11/2009	
Analyte	Result	PQL Spl	·Val SpkRefVal %REC LCL(M	(E) UCL(ME) RPDRef	Val %RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5		<u> </u>	· · · · · · · · · · · · · · · · · · ·	_
Chloromethane	ND	1				
Vinyl chloride	ND	0.5				
Chloroethane	ND	0.5				
Bromomethane	ND	1				
Trichlorofluoromethane	ND	0.5				
1,1-Dichloroethene	ND	0.5				
Dichloromethane Freon-113	ND	1 0.5				
trans-1,2-Dichloroethene	ND ND	0.5				
Methyl tert-butyl ether (MTBE)	ND	0.5				
1,1-Dichloroethane	ND	0.5				
2-Butanone (MEK)	ND	10				
cis-1,2-Dichloroethene	ND	0.5				
Bromochloromethane	ND	0.5				
Chloroform	ND	0.5				
2,2-Dichloropropane	ND ND	0.5				
1,2-Dichloroethane 1,1,1-Trichloroethane	ND ND	0.5 0.5				
1,1-Dichloropropene	ND ND	0.5 0.5				
Carbon tetrachloride	ND	0.5				
Benzene	ND	0.5				
Dibromomethane	ND	0.5				
1,2-Dichloropropane	ND	0.5				
Trichloroethene	ND	0.5				
Bromodichloromethane	ND	0.5				
4-Methyl-2-pentanone (MIBK)	ND	2.5				
cis-1,3-Dichloropropene trans-1,3-Dichloropropene	ND ND	0.5 0.5				
1,1,2-Trichloroethane	ND ND	0.5				
Toluene	ND	0.5				
1,3-Dichloropropane	ND	0.5				
Dibromochloromethane	ND	0.5				
1,2-Dibromoethane (EDB)	ND	1				
Tetrachloroethene	ND	0.5				
1,1,1,2-Tetrachloroethane	ND	0.5				
Chlorobenzene Ethylbenzene	ND	0.5				
m,p-Xylene	ND ND	0.5 0.5				
Bromoform	ND	0.5				
Styrene	ND	0.5				
o-Xylene	ND	0.5				
1,1,2,2-Tetrachloroethane	ND	0.5				
1,2,3-Trichloropropane	ND	1				
Isopropylbenzene	ND	0.5				
Bromobenzene	ND	0.5				
n-Propylbenzene 4-Chlorotoluene	ND ND	0.5				
2-Chlorotoluene	ND ND	0.5 0.5				
1,3,5-Trimethylbenzene	ND ND	0.5 0.5				
tert-Butylbenzene	ND	0.5				
1,2,4-Trimethylbenzene	ND	0.5				
sec-Butylbenzene	ND	0.5				
1,3-Dichlorobenzene	ND	0.5				
1,4-Dichlorobenzene	ND	0.5				
4-Isopropyltoluene	ND	0.5				
1,2-Dichlorobenzene n-Butylbenzene	ND ND	0.5				
1,2-Dibromo-3-chloropropane (DBCP)	ND ND	0.5 2.5				
1,2,4-Trichlorobenzene	ND ND	2.5 1				
Naphthalene	ND	1				
Hexachlorobutadiene	ND	1				
1,2,3-Trichlorobenzene	ND	1				
Surr: 1,2-Dichloroethane-d4	10.1		10 101 70			
Surr: Toluene-d8	10.2		10 102 70	130		



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Surr: 4-Bromofluorobenzene 9.58 10 96 70 130 Laboratory Control Spike Type LCS Test Code:		
File ID: 09021104.D Batch ID: MS15W0211M Analysis Da		
	te: 02/11/2009 09:13	
Sample ID: LCS MS15W0211M Units: µg/L Run ID: MSD_15_090211A Prep Date:	02/11/2009	
Analyte Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDF	RefVal %RPD(Limit)	Qua
Dichlorodifluoromethane 12.2 1 10 122 70 130		
Chloromethane 10 2 10 100 70 130		
Vinyl chloride 10.9 1 10 109 70 130 Chloroethane 9.66 1 10 97 70 130		
Chloroethane 9.66 1 10 97 70 130 Bromomethane 9.59 2 10 96 70 130		
Trichlorofluoromethane 11.1 1 10 111 70 130		
1,1-Dichloroethene 10.9 1 10 109 70 130		
Dichloromethane 10.1 2 10 101 70 130		
trans-1,2-Dichloroethene 11 1 10 110 70 130 Methyl tert-butyl ether (MTBE) 10.6 0.5 10 106 62 136		
1,1-Dichloroethane 10.7 1 10 107 70 130		
cis-1,2-Dichloroethene 11.2 1 10 112 70 130		
Bromochloromethane 11.4 1 10 114 70 130		
Chloroform 9.97 1 10 99.7 70 130		
2,2-Dichloropropane 9.18 1 10 92 70 130 1,2-Dichloroethane 10.3 1 10 103 70 130		
1,2-Dichloroethane 10.3 1 10 103 70 130 1,1,1-Trichloroethane 10.6 1 10 106 70 130		
1,1-Dichloropropene 11.2 1 10 112 70 130		
Carbon tetrachloride 10.3 1 10 103 70 130		
Benzene 10.1 0.5 10 101 70 130		
Dibromomethane 11.1 1 10 111 70 130		
1,2-Dichloropropane 10.6 1 10 106 70 130 Trichloroethene 11.2 1 10 112 70 130		
Bromodichloromethane 10.7 1 10 107 70 130		
cis-1,3-Dichloropropene 11 1 10 110 70 130		
trans-1,3-Dichloropropene 10.9 1 10 109 70 130		
1,1,2-Trichloroethane 10.2 1 10 102 70 130		
Toluene 10.4 0.5 10 104 70 130 1,3-Dichloropropane 10.2 1 10 102 70 130		
1,3-Dichloropropane 10.2 1 10 102 70 130 Dibromochloromethane 11 1 10 110 70 130		
1,2-Dibromoethane (EDB) 20.8 2 20 104 70 130		
Tetrachloroethene 11.1 1 10 111 70 130		
1,1,1,2-Tetrachloroethane 10.6 1 10 106 70 130		
Chlorobenzene 10.3 1 10 103 70 130 Ethylbenzene 10.5 0.5 10 105 70 130		
Ethylbenzene 10.5 0.5 10 105 70 130 m,p-Xylene 10.9 0.5 10 109 70 130		
Bromoform 10.3 1 10 103 70 130		
Styrene 10.6 1 10 106 70 130		
o-Xylene 10.5 0.5 10 105 70 130		
1,1,2,2-Tetrachloroethane 9.26 1 10 93 70 130 1,2,3-Trichloropropane 19.5 2 20 98 70 130		
1,2,3-Trichloropropane 19.5 2 20 98 70 130 Isopropylbenzene 10.4 1 10 104 70 130		
Bromobenzene 10.3 1 10 103 70 130		
n-Propylbenzene 10.6 1 10 106 70 130		
4-Chlorotoluene 10.7 1 10 107 70 130		
2-Chlorotoluene 10.5 1 10 105 70 130 1,3,5-Trimethylbenzene 10.2 1 10 102 70 130		
1,3,5-Trimethylbenzene 10.2 1 10 102 70 130 tert-Butylbenzene 9.98 1 10 99.8 70 130		
1,2,4-Trimethylbenzene 10.5 1 10 105 70 130		
sec-Butylbenzene 10 1 10 100 70 130		
1,3-Dichlorobenzene 10.2 1 10 102 70 130		
1,4-Dichlorobenzene 9.76 1 10 98 70 130		
4-Isopropyltoluene 10.3 1 10 103 70 130 1,2-Dichlorobenzene 9.86 1 10 99 70 130		
1,2-Dichlorobenzene 9.86 1 10 99 70 130 n-Butylbenzene 10.2 1 10 102 70 130		
1,2-Dibromo-3-chloropropane (DBCP) 47 3 50 94 70 130		
1,2,4-Trichlorobenzene 10.9 2 10 109 70 130		
Naphthalene 9.85 2 10 99 70 130		
Hexachlorobutadiene 20 2 20 99.9 70 130 1,2,3-Trichlorobenzene 10.8 2 10 108 70 130		
1,2,3-Trichlorobenzene 10.8 2 10 108 70 130 Surr: 1,2-Dichloroethane-d4 9.14 10 91 70 130		
Surr: Toluene-d8 10.3 10 103 70 130		
Surr: 4-Bromofluorobenzene 9.97 10 99.7 70 130		



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Date:
17-Feb-09QC Summary ReportWork Order:
09021004

Sample Matrix Spike		Type MS	Tes	Code:			····		
File ID: 09021107.D			Bato	h ID: MS1 5	5W021	1M	Analysis Da	te: 02/11/2009 10:39	
Sample ID: 09021004-02AMS	Units : µg/L	Ru	ın ID: MS E	_15_0902 ²	11A		Prep Date:	02/11/2009	
Analyte	Result	PQL				LCL(ME)	UCL(ME) RPDF	tefVal %RPD(Limit)	Qua
Dichlorodifluoromethane	40	2.5	50	0	80	13	167		
Chloromethane	38.1	10	50	0	76	28	145		
Vinyl chloride	46.6	2.5	50	0	93	43	134		
Chloroethane	44.6	2.5	50	0	84	39	154		
Bromomethane	45	10	50	0	90	19	176		
Trichlorofluoromethane	49	2.5	50	0	98	34	160		
1,1-Dichloroethene	45.8	2.5	50	0	92	60	130		
Dichloromethane	44.5	10	50	0	89	68	130		
trans-1,2-Dichloroethene	50.2	2.5	50	0	100	63	130		
Methyl tert-butyl ether (MTBE)	45.9	1.3	50	0	92	56	141		
1,1-Dichloroethane cis-1,2-Dichloroethene	47.8	2.5	50 50	0	96 99	61	130 130		
Bromochloromethane	49.6 50.8	2.5	50 50	0	102	70 70	130		
Chloroform	44.9	2.5 2.5	50 50	0	90	67	130		
2,2-Dichloropropane	44.2	2.5	50 50	0	88	30	152		
1,2-Dichloroethane	46.3	2.5	50 50	0	93	60	135		
1,1,1-Trichloroethane	49.4	2.5	50 50	0	99	59	137		
1,1-Dichloropropene	49.6	2.5	50 50	0	99	63	130		
Carbon tetrachloride	48.1	2.5	50 50	0	96	50	147		
Benzene	44.4	1.3	50	0	89	67	130		
Dibromomethane	49.5	2.5	50	0	99	69	133		
1,2-Dichloropropane	45.8	2.5	50	ő	92	69	130		
Trichloroethene	51	2.5	50	Ö	102	69	130		
Bromodichloromethane	47.6	2.5	50	Ö	95	66	134		
cis-1,3-Dichloropropene	46.3	2.5	50	Ö	93	63	130		
trans-1,3-Dichloropropene	44.3	2.5	50	Ō	89	66	131		
1,1,2-Trichloroethane	43	2.5	50	0	86	68	130		
Toluene	45.4	1.3	50	0	91	66	130		
1,3-Dichloropropane	42.4	2.5	50	0	85	70	130		
Dibromochloromethane	46.4	2.5	50	0	93	70	130		
1,2-Dibromoethane (EDB)	89	10	100	0	89	70	130		
Tetrachloroethene	49.6	2.5	50	0	99	61	134		
1,1,1,2-Tetrachloroethane	46.5	2.5	50	0	93	70	130		
Chlorobenzene	45.2	2.5	50	0	90	70	130		
Ethylbenzene	46.2	1.3	50	0	92	68	130		
m,p-Xylene	47.1	1.3	50	0	94	64	130		
Bromoform	42.6	2.5	50	0	85	64	138		
Styrene	45.7	2.5	50	0	91	69	130		
o-Xylene	45.7	1.3	50	0	91	70	130		
1,1,2,2-Tetrachloroethane	39	2.5	50	0	78	65	131		
1,2,3-Trichloropropane	84.2	10	100	0	84	70	130		
Isopropylbenzene	45.9	2.5	50	0	92	64	138		
Bromobenzene	45	2.5	50	0	90	70	130		
n-Propylbenzene	46.5	2.5	50	0	93	66	132		
4-Chlorotoluene	46.8	2.5	50	0	94	70	130		
2-Chlorotoluene 1,3,5-Trimethylbenzene	46.5	2.5	50	0	93	70	130		
	45.1	2.5	50 50	0	90	66	136		
tert-Butylbenzene 1,2,4-Trimethylbenzene	44.8	2.5	50 50	0	90	65 65	137		
sec-Butylbenzene	46.2	2.5	50 50	0	92 91	65 66	137 134		
1.3-Dichlorobenzene	45.5 45.4	2.5	50 50	0	91	66 70	130		
1,4-Dichlorobenzene	43.3	2.5 2.5	50 50	0	87	70 70	130		
4-Isopropyltoluene	46.1	2.5	50 50	0	92	66	137		
1,2-Dichlorobenzene	43.4	2.5	50 50	0	92 87	70	130		
n-Butylbenzene	45.9	2.5	50 50	0	92	60	142		
1,2-Dibromo-3-chloropropane (DBCP)	204	2.5 15	250	0	82	67	130		
1,2,4-Trichlorobenzene	47.4	10	250 50	0	95	61	137		
Naphthalene	40.4	10	50 50	0	81	40	167		
Hexachlorobutadiene	94.1	10	100	0	94	61	130		
1,2,3-Trichlorobenzene	46.4	10	50	0	93	51	144		
Surr: 1,2-Dichloroethane-d4	46.3	10	50	J	93	70	130		
Surr: Toluene-d8	50.9		50		102	70	130		



1.2-Dichlorobenzene

1,2,4-Trichlorobenzene

1,2,3-Trichlorobenzene

Surr: 1.2-Dichloroethane-d4

Surr: 4-Bromofluorobenzene

Hexachlorobutadiene

Surr: Toluene-d8

1,2-Dibromo-3-chloropropane (DBCP)

n-Butylbenzene

Naphthalene

Alpha Analytical, Inc.

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Date: Work Order: QC Summary Report 17-Feb-09 09021004 Type MSD Test Code: Sample Matrix Spike Duplicate File ID: 09021108.D Batch ID: MS15W0211M Analysis Date: 02/11/2009 11:02 Sample ID: 09021004-02AMSD Prep Date: 02/11/2009 Units: µg/L Run ID: MSD 15 090211A Analyte Result PQL SpkVal SpkRefVal %REC LCL(ME) UCL(ME) RPDRefVal %RPD(Limit) Qual Dichlorodifluoromethane 43.1 2.5 0 86 167 40 7.5(20) 50 13 Chloromethane 39.8 10 50 0 80 28 145 38.06 4.5(20)Vinyl chloride 48.9 2.5 50 0 98 43 134 46.62 4.8(20) Chloroethane 46.9 2.5 50 0 89 39 154 44.62 5.0(20)Bromomethane 51.8 10 50 0 104 19 176 45.04 13.9(20) Trichlorofluoromethane 160 55.4 2.5 50 n 111 34 49 12.2(20) 1,1-Dichloroethene 49 2.5 50 0 98 60 130 45.84 6.6(20)Dichloromethane 46 10 50 0 92 68 130 44.51 3.3(20)trans-1,2-Dichloroethene 51.1 2.5 50 O 102 63 130 50.16 1.9(20) Methyl tert-butyl ether (MTBE) 47.3 1.3 50 0 95 56 141 45.86 3.1(20)1,1-Dichloroethane 49.5 0 3.3(20) 2.5 50 99 61 130 47.84 cis-1,2-Dichloroethene 50.7 2.5 50 0 101 70 130 49.6 2.2(20)Bromochloromethane 52.9 2.5 50 0 106 70 130 50.79 4.1(20)Chloroform 44.93 46 2.5 50 0 92 67 130 2.4(20)2.2-Dichloropropane 45.5 2.5 50 30 44.15 3.0(20)0 91 152 1,2-Dichloroethane 60 135 48.2 2.5 50 0 96 46.32 4.0(20) 1,1,1-Trichloroethane 51.3 2.5 50 n 103 59 137 49.37 3.9(20)1,1-Dichloropropene 51.6 2.5 50 0 103 63 130 49.64 3.8(20)Carbon tetrachloride 50.7 147 48.05 2.5 101 50 5.3(20) 50 O Benzene 46.1 1.3 50 0 92 67 130 44.39 3.8(20) Dibromomethane 49.8 2.5 50 0 99.6 69 133 49.46 0.7(20)1,2-Dichloropropane 47.2 2.5 50 0 94 69 130 45.76 3.2(20)Trichloroethene 52.5 2.5 50 0 105 69 130 51.04 2.8(20)Bromodichloromethane 49.2 2.5 47.64 50 0 98 66 134 3.3(20)cis-1,3-Dichloropropene 47.9 2.5 50 0 96 63 130 46.25 3.6(20)trans-1,3-Dichloropropene 47.7 2.5 50 0 95 66 131 44.32 7.3(20)1,1,2-Trichloroethane 44.5 68 42.95 3.6(20) 2.5 50 O 89 130 Toluene 46.3 50 93 66 130 45.4 2.1(20) 1.3 0 1,3-Dichloropropane 43.1 2.5 50 0 86 70 130 42,44 1.6(20) Dibromochloromethane 48.4 2.5 50 0 97 70 130 46.42 4.2(20)1,2-Dibromoethane (EDB) 91.3 10 100 0 91 70 130 88.96 2.6(20)Tetrachloroethene 50.8 2.5 0 102 61 134 49 63 2.4(20)50 1,1,1,2-Tetrachloroethane 47.8 46.45 2.9(20)2.5 50 0 96 70 130 Chlorobenzene 45.23 46.1 92 2.5 50 0 70 130 1.8(20) Ethylbenzene 47.2 1.3 50 0 94 68 130 46.23 2.0(20)m,p-Xylene 47.9 50 0 96 64 130 47.12 1.7(20) 1.3 Bromoform 45.6 6.7(20) 0 91 64 2.5 50 138 42.6 Styrene 47.1 2.5 50 0 94 69 130 45.74 2.9(20)o-Xvlene 94 47.1 1.3 50 0 70 130 45.65 3.0(20)1.1.2.2-Tetrachloroethane 40.4 2.5 50 n 81 65 131 39.01 3.5(20)1,2,3-Trichloropropane 83.9 10 100 0 84 70 130 84.23 0.3(20)Isopropylbenzene 48.1 2.5 n 96 64 138 45.88 4.8(20)50 Bromobenzene 46.6 2.5 50 0 93 70 130 45.02 3.4(20)n-Propylbenzene 48.7 2.5 50 0 97 66 132 46.51 4.6(20)4-Chlorotoluene 70 46.78 49.3 2.5 50 n 99 130 5.3(20) 2-Chlorotoluene 48.8 2.5 70 130 46.49 4.9(20) 50 0 98 1,3,5-Trimethylbenzene 47.5 2.5 50 O 95 66 136 45.13 5.0(20) tert-Butylbenzene 47.2 2.5 50 0 94 65 137 44.77 5.4(20)1.2,4-Trimethylbenzene 48.5 2.5 50 0 97 65 137 46.22 4.9(20)sec-Butylbenzene 47.8 2.5 96 66 134 45.5 5.0(20)50 n 130 1.3-Dichlorobenzene 47.8 2.5 50 O 96 70 45.38 5.2(20) 1,4-Dichlorobenzene 45.5 2.5 50 0 91 70 4.9(20)130 43.34 4-isopropyltoluene 48.6 2.5 50 0 97 66 137 46.06 5.5(20)

45.7

49.2

208

53.4

42.5

102

52.3

46.2

50.8

49.1

2.5

2.5

15

10

10

10

10

50

50

250

50

50

100

50

50

50

50

0 91

0 98

0

0 107

0 85

0 102

83

105

92

102

98

70

60

67

61

40

61

51

70

70

70

130

142

130

137

167

130

144

130

130

130

43.42

45.86

203.8

47.38

40.37

94.13

46.41

5.1(20)

7.0(20)

2.1(20)

11.9(20)

5.1(20)

7.6(20)

11.9(20)



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Date: 17-Feb-09

QC Summary Report

Work Order: 09021004

Comments:

Billing Information:

Battelle

505 King Avenue

.

Columbus, OH 43201

Client:

Battelle Memorial Institute 505 King Avenue

Columbus, OH 43201

O: 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
 (614) 424-4899 x
 cutice@batelle.org

 Shane Walton
 (614) 424-4117 x
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CA

Page: 1 of 1

WorkOrder: BMI09021004

Report Due By: 5:00 PM On: 24-Feb-2009

EDD Required: Yes

Sampled by : Client

Cooler Temp Samples Received Date Printed
4 °C 10-Feb-2009 10-Feb-2009

QC Level: S4 Client's COC #: 24136 = Final Rpt, MBLK, InitCal/ConCal data, LCS, MS/MSD With Surrogates Job: G005862/JPL Groundwater Monitoring

				50 TO THE REAL PROPERTY.			Requested Tests	
Alpha Sample ID	Client Sample ID	Collection Matrix Date	ction No. of Bottles te Alpha Sub	TAT	314_W	METALS_D W	VOC_TIC_ W	Sample Remarks
BMI09021004-01A	MW-23-4	AQ 02/09/09 08:25	3/09 1 0 25	10		Cr		
BMI09021004-02A	MW-23-3	AQ 02/09/09 08:58	3/09 10 0 58	10	Perchlorate	ଫ	VOC by 524 VOC by 524 Criteria Criteria	MS/MSD
BMI09021004-03A	MW-23-2	AQ 02/09/09 09:59	59 5 0	10	Perchlorate	Cr	VOC by 524 VOC by 524 Criteria Criteria	
BMI09021004-04A	MW-23-1	AQ 02/09/09 10:41	3/09 5 0 41	10	Perchlorate	유	VOC by 524 VOC by 524 Criteria Criteria	
BMI09021004-05A	EB-11-02/09/09	AQ 02/09/09 10:20	3/09 5 0 20	10	Perchlorate	Cr	VOC by 524 VOC by 524 Criteria Criteria	
BMI09021004-06A	TB-11-02/09/09	AQ 02/09/09 00:00	3/09 1 00	10			VOC by 524 VOC by 524 Criteria Criteria	Reno Trip Blank 1/6/09
BMI09021004-07A	SB-01-1Q09	AQ 02/09/09 10:25	1/09 5 0 25	10	Perchlorate	Cr	VOC by 524 VOC by 524 Criteria Criteria	

Comments: No security seals, Frozen ice. Temp Blank #7570 received @ 4°. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC. Perchlorate RL of 1.0 ug/L:

Logged in by:	
Logged in by: Canabath alcox Elizabeth Adox	Signature
Elizabeth Flacox M	Print Na
ha Analytical, Inc. 2-10-09 1100	Date/Time

Matrix Type: AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report 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. Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other