Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-7**						
Lab ID :	BMI09052005-01A	*** None Found ***	ND	2.0 µg/L	05/20/09	05/19/09	05/27/09
Client ID :	**MW-16**						
Lab ID :	BMI09052005-02A	*** None Found ***	ND	2.0 µg/L	05/20/09	05/19/09	05/27/09
Client ID :	**TB-16-05/19/09**						
Lab ID :	BMI09052005-03A	Sulfur dioxide	3.3	2.0 µg/L	05/20/09	05/19/09	05/27/09

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

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 736-7522 / info@alpha-analytical.com
Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

6/3/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09052005-01A
Client I.D. Number: MW-7

Sampled: 05/19/09
Received: 05/20/09
Analyzed: 05/27/09

Volatile Organics by GC/MS

	Compound	Concentration	Reporting Limit		
1	Dichlorodifluoromethane	ND	0.50	µg/L	
2	Chloromethane	ND	1.0	µg/L	
3	Vinyl chloride	ND	0.50	µg/L	
4	Chloroethane	ND	0.50	µg/L	
5	Bromomethane	ND	1.0	µg/L	
6	Trichlorofluoromethane	ND	0.50	µg/L	
7	1,1-Dichloroethene	ND	0.50	µg/L	
8	Dichloromethane	ND	1.0	µg/L	
9	Freon-113	ND	0.50	µg/L	
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	
12	1,1-Dichloroethane	ND	0.50	µg/L	
13	2-Butanone (MEK)	ND	10	µg/L	
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	
15	Bromochloromethane	ND	0.50	µg/L	
16	Chloroform	7.8	0.50	µg/L	
17	2,2-Dichloropropane	ND	0.50	µg/L	
18	1,2-Dichloroethane	ND	0.50	µg/L	
19	1,1,1-Trichloroethane	ND	0.50	µg/L	
20	1,1-Dichloropropene	ND	0.50	µg/L	
21	Carbon tetrachloride	ND	0.50	µg/L	
22	Benzene	ND	0.50	µg/L	
23	Dibromomethane	ND	0.50	µg/L	
24	1,2-Dichloropropane	ND	0.50	µg/L	
25	Trichloroethene	ND	0.50	µg/L	
26	Bromodichloromethane	6.0	0.50	µg/L	
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	
30	1,1,2-Trichloroethane	ND	0.50	µg/L	
31	Toluene	ND	0.50	µg/L	
32	1,3-Dichloropropane	ND	0.50	µg/L	
33	Dibromochloromethane	ND	0.50	µg/L	
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L	
35	Tetrachloroethene	ND	0.50	µg/L	
36	1,1,1,2-Tetrachloroethane	ND	0.50	µg/L	
37	Chlorobenzene	ND	0.50	µg/L	
38	Ethylbenzene	ND	0.50	µg/L	
39	m,p-Xylene	ND	0.50	µg/L	
40	Bromoform	ND	0.50	µg/L	
41	Styrene	ND	0.50	µg/L	
42	o-Xylene	ND	0.50	µg/L	
43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L	
44	1,2,3-Trichloropropane	ND	1.0	µg/L	
45	Isopropylbenzene	ND	0.50	µg/L	
46	Bromobenzene	ND	0.50	µg/L	
47	n-Propylbenzene	ND	0.50	µg/L	
48	4-Chlorotoluene	ND	0.50	µg/L	
49	2-Chlorotoluene	ND	0.50	µg/L	
50	1,3,5-Trimethylbenzene	ND	0.50	µg/L	
51	tert-Butylbenzene	ND	0.50	µg/L	
52	1,2,4-Trimethylbenzene	ND	0.50	µg/L	
53	sec-Butylbenzene	ND	0.50	µg/L	
54	1,3-Dichlorobenzene	ND	0.50	µg/L	
55	1,4-Dichlorobenzene	ND	0.50	µg/L	
56	4-Isopropyltoluene	ND	0.50	µg/L	
57	1,2-Dichlorobenzene	ND	0.50	µg/L	
58	n-Butylbenzene	ND	0.50	µg/L	
59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L	
60	1,2,4-Trichlorobenzene	ND	1.0	µg/L	
61	Naphthalene	ND	1.0	µg/L	
62	Hexachlorobutadiene	ND	1.0	µg/L	
63	1,2,3-Trichlorobenzene	ND	1.0	µg/L	
64	Surr: 1,2-Dichloroethane-d4	99	(70-130)	%REC	
65	Surr: Toluene-d8	103	(70-130)	%REC	
66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC	

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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6/3/09
Report Date

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09052005-02A
Client I.D. Number: MW-16

Sampled: 05/19/09
Received: 05/20/09
Analyzed: 05/27/09

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	9.8	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	6.0	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	9.7	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	104	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	14	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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6/3/09
Report Date

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09052005-03A
Client I.D. Number: TB-16-05/19/09

Sampled: 05/19/09
Received: 05/20/09
Analyzed: 05/27/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	93	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	106	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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6/3/09
Report Date

Alpha Analytical, Inc.

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

VOC Sample Preservation Report

Work Order: BMI09052005 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09052005-01A	MW-7	Aqueous	2
09052005-02A	MW-16	Aqueous	2
09052005-03A	TB-16-05/19/09	Aqueous	2

6/3/09
Report Date

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09052005

Report Due By : 5:00 PM On : 04-Jun-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25538

Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	20-May-2009	**20-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09052005-01A	MW-7	AQ	05/19/09 09:41	5	0	10	NO2, NO3, SO4, Cl, Ortho P	NO2, NO3, SO4, Cl, Ortho P	NO2, NO3, SO4, Cl, Ortho P	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09052005-02A	MW-16	AQ	05/19/09 11:47	5	0	10	NO2, NO3, SO4, Cl, Ortho P	NO2, NO3, SO4, Cl, Ortho P	NO2, NO3, SO4, Cl, Ortho P	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09052005-03A	TB-16-05/19/09	AQ	05/19/09 00:00	1	0	10									Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #7737 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5.20.09 1219

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

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09052005

Report Due By : 5:00 PM On : 04-Jun-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25538 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	20-May-2009	**20-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W							Sample Remarks
BMI09052005-01A	MW-7	AQ	05/19/09 09:41	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria							
BMI09052005-02A	MW-16	AQ	05/19/09 11:47	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria							
BMI09052005-03A	TB-16-05/19/09	AQ	05/19/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria							Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #7737 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5-20-09 1219

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

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

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

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

25538

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

Page # 1 of 1

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

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

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC's (524.2)	TOTAL Cr, LEAD, ARSENIC (200.8)	GEN CHEM. (Na, K, Ca, Mg, Fe) (200.7)	ClO4- (314.0)	GEN CHEM. (300.0, 310.1, 160.1, 150.1)	O-PHOSPHATE (300.0)		REMARKS
0941	5/19/09	AQ	BMI09052005-01	MW-7			5	X	X	X	X	X	X		
1147	|	|	-02	MW-16			5	X	X	X	X	X	X		
~~—~~	~~|~~	~~|~~		~~EB - / /09~~			~~5~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~			~~EQUIPMENT BLANK~~
—	|	|	-03	TB-16-05/19/09			1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHASE BROUGTON	INSIGHT EECI	05/19/09	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	5-20-09	1219
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *28-May-09*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI09051940 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
09051940-01A	MW-26-2	Aqueous
09051940-02A	MW-26-1	Aqueous
09051940-03A	EB-15-05/18/09	Aqueous
09051940-04A	TB-15-05/18/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
09051940-02A	EPA Method 314.0	Perchlorate

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

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

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

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/19/09

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-26-2**	Nitrite (NO2) - N	ND	0.25 mg/L	05/18/09 08:55	05/19/09 13:16
Lab ID : BMI09051940-01A	Nitrate (NO3) - N	0.35	0.25 mg/L	05/18/09 08:55	05/19/09 13:16
Client ID : **MW-26-1**	Nitrite (NO2) - N	ND	0.25 mg/L	05/18/09 09:30	05/19/09 14:12
Lab ID : BMI09051940-02A	Nitrate (NO3) - N	8.3	0.25 mg/L	05/18/09 09:30	05/19/09 14:12
Client ID : **EB-15-05/18/09**	Nitrite (NO2) - N	ND	0.25 mg/L	05/18/09 09:18	05/19/09 14:30
Lab ID : BMI09051940-03A	Nitrate (NO3) - N	ND	0.25 mg/L	05/18/09 09:18	05/19/09 14:30

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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6/2/09
Report Date

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Date Received : 05/19/09

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-26-2**					
Lab ID :	BMI09051940-01A	Chloride	13	0.50 mg/L	05/18/09	05/19/09
		Sulfate (SO4)	17	0.50 mg/L	05/18/09	05/19/09
Client ID :	**MW-26-1**					
Lab ID :	BMI09051940-02A	Chloride	87	2.5 mg/L	05/18/09	05/27/09
		Sulfate (SO4)	100	2.5 mg/L	05/18/09	05/27/09
Client ID :	**EB-15-05/18/09**					
Lab ID :	BMI09051940-03A	Chloride	ND	0.50 mg/L	05/18/09	05/19/09
		Sulfate (SO4)	ND	0.50 mg/L	05/18/09	05/19/09

ND = Not Detected

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Date Received : 05/19/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-26-2**					
Lab ID :	BMI09051940-01A	Perchlorate	ND	1.00 µg/L	05/18/09	05/21/09
Client ID :	**MW-26-1**					
Lab ID :	BMI09051940-02A	Perchlorate	1.67	1.00 µg/L	05/18/09	05/21/09
Client ID :	**EB-15-05/18/09**					
Lab ID :	BMI09051940-03A	Perchlorate	ND	1.00 µg/L	05/18/09	05/21/09

ND = Not Detected

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/19/09

Job#: G005862/JPL Groundwater Monitoring

Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-26-2**					
Lab ID :	BMI09051940-01A	Alkalinity, Bicarbonate (As CaCO3)	210	10 mg/L	05/18/09	05/27/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/18/09	05/27/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	210	10 mg/L	05/18/09	05/27/09
Client ID :	**MW-26-1**					
Lab ID :	BMI09051940-02A	Alkalinity, Bicarbonate (As CaCO3)	260	10 mg/L	05/18/09	05/27/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/18/09	05/27/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	260	10 mg/L	05/18/09	05/27/09
Client ID :	**EB-15-05/18/09**					
Lab ID :	BMI09051940-03A	Alkalinity, Bicarbonate (As CaCO3)	ND	10 mg/L	05/18/09	05/27/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/18/09	05/27/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	ND	10 mg/L	05/18/09	05/27/09

ND = Not Detected

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3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/19/09

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-26-2**					
Lab ID :	BMI09051940-01A	Sodium (Na)	38	0.50 mg/L	05/18/09	06/02/09
		Magnesium (Mg)	13	0.50 mg/L	05/18/09	06/02/09
		Potassium (K)	2.0	0.50 mg/L	05/18/09	06/02/09
		Calcium (Ca)	42	0.50 mg/L	05/18/09	06/02/09
		Chromium (Cr)	ND	0.0050 mg/L	05/18/09	06/02/09
		Iron (Fe)	4.6	0.10 mg/L	05/18/09	06/02/09
		Arsenic (As)	0.0030	0.0020 mg/L	05/18/09	06/02/09
		Lead (Pb)	ND	0.0050 mg/L	05/18/09	06/02/09
Client ID :	**MW-26-1**					
Lab ID :	BMI09051940-02A	Sodium (Na)	27	0.50 mg/L	05/18/09	05/19/09
		Magnesium (Mg)	35	0.50 mg/L	05/18/09	05/19/09
		Potassium (K)	2.6	0.50 mg/L	05/18/09	05/19/09
		Calcium (Ca)	110	0.50 mg/L	05/18/09	05/19/09
		Chromium (Cr)	ND	0.0050 mg/L	05/18/09	05/19/09
		Iron (Fe)	1.3	0.10 mg/L	05/18/09	05/19/09
		Arsenic (As)	ND	0.0020 mg/L	05/18/09	05/19/09
		Lead (Pb)	ND	0.0050 mg/L	05/18/09	05/19/09
Client ID :	**EB-15-05/18/09**					
Lab ID :	BMI09051940-03A	Sodium (Na)	ND	0.50 mg/L	05/18/09	06/01/09
		Magnesium (Mg)	ND	0.50 mg/L	05/18/09	06/01/09
		Potassium (K)	ND	0.50 mg/L	05/18/09	06/01/09
		Calcium (Ca)	ND	0.50 mg/L	05/18/09	06/01/09
		Chromium (Cr)	ND	0.0050 mg/L	05/18/09	06/01/09
		Iron (Fe)	ND	0.10 mg/L	05/18/09	06/01/09
		Arsenic (As)	ND	0.0020 mg/L	05/18/09	06/01/09
		Lead (Pb)	ND	0.0050 mg/L	05/18/09	06/01/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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6/3/09
Report Date

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

ANALYTICAL REPORT

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3990 Old Town Ave
San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/19/09

Job#: G005862/JPL Groundwater Monitoring

pH (Range 1.7 to 12.4)
EPA Method 150.2 / SM4500HB / SW9040C

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-26-2**	pH	8.0	1.7 pH Units	05/18/09 08:55	05/19/09 16:07
Lab ID : BMI09051940-01A	pH - Temperature	22	1.0 °C	05/18/09 08:55	05/19/09 16:07
Client ID : **MW-26-1**	pH	7.3	1.7 pH Units	05/18/09 09:30	05/19/09 16:22
Lab ID : BMI09051940-02A	pH - Temperature	21	1.0 °C	05/18/09 09:30	05/19/09 16:22
Client ID : **EB-15-05/18/09**	pH	6.2	1.7 pH Units	05/18/09 09:18	05/19/09 16:30
Lab ID : BMI09051940-03A	pH - Temperature	21	1.0 °C	05/18/09 09:18	05/19/09 16:30

The EPA has established an analytical holding time of 15 minutes for this method as documented in the Methods Update Rule, Federal Register, Vol 72, No 47, March 2007. This holding time will always be exceeded, unless samples are analyzed in the field.

The laboratory performed this analysis in the shortest practical holding time after sample receipt.

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/19/09

Job#: G005862/JPL Groundwater Monitoring

Total Dissolved Solids (TDS)
SM2540C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-26-2**					
Lab ID :	BMI09051940-01A	Solids, Total Dissolved (TDS)	260	10 mg/L	05/18/09	05/21/09
Client ID :	**MW-26-1**					
Lab ID :	BMI09051940-02A	Solids, Total Dissolved (TDS)	570	10 mg/L	05/18/09	05/26/09
Client ID :	**EB-15-05/18/09**					
Lab ID :	BMI09051940-03A	Solids, Total Dissolved (TDS)	ND	10 mg/L	05/18/09	05/21/09

ND = Not Detected

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ANALYTICAL REPORT

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San Diego, CA 92110
Job#: G005862/JPL Groundwater Monitoring

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-26-2**						
Lab ID :	BMI09051940-01A	* * * None Found * * *	ND	2.0 µg/L	05/19/09	05/18/09	05/21/09
Client ID :	**MW-26-1**						
Lab ID :	BMI09051940-02A	* * * None Found * * *	ND	2.0 µg/L	05/19/09	05/18/09	05/21/09
Client ID :	**EB-15-05/18/09**						
Lab ID :	BMI09051940-03A	Tertiary Butyl Alcohol (TBA)	18	10 µg/L	05/19/09	05/18/09	05/21/09
Client ID :	**TB-15-05/18/09**						
Lab ID :	BMI09051940-04A	* * * None Found * * *	ND	2.0 µg/L	05/19/09	05/18/09	05/21/09

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

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051940-01A
Client I.D. Number: MW-26-2

Sampled: 05/18/09
Received: 05/19/09
Analyzed: 05/21/09

Volatile Organics by GC/MS

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

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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6/2/09
Report Date

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

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051940-02A
Client I.D. Number: MW-26-1

Sampled: 05/18/09
Received: 05/19/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

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

6/2/09

Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051940-03A
Client I.D. Number: EB-15-05/18/09

Sampled: 05/18/09
Received: 05/19/09
Analyzed: 05/21/09

Volatile Organics by GC/MS

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

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

6/2/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051940-04A
Client I.D. Number: TB-15-05/18/09

Sampled: 05/18/09
Received: 05/19/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	93	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	102	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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.

6/2/09
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI09051940 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09051940-01A	MW-26-2	Aqueous	2
09051940-02A	MW-26-1	Aqueous	2
09051940-03A	EB-15-05/18/09	Aqueous	2
09051940-04A	TB-15-05/18/09	Aqueous	2

6/2/09

Report Date

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA AMENDED

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

WorkOrder : BMIS09051940

Report Due By : 5:00 PM On : 03-Jun-09

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

PO : 218013

Client's COC # : 25539 Job : G005862/JPL Groundwater Monitoring

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

EDD Required : **No**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	19-May-09	**29-May-09**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09051940-01A	MW-26-2	AQ	05/18/09 08:55	5	0	10	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051940-02A	MW-26-1	AQ	05/18/09 09:30	5	0	10	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051940-03A	EB-15-05/18/09	AQ	05/18/09 09:18	5	0	10	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051940-04A	TB-15-05/18/09	AQ	05/18/09 00:00	1	0	10									Reno Trip Blank 03/16/09

Comments: No security seals. Frozen ice. Temp Blank #7745 received @ 4 ° Celcius. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Amended 5/29/09 to change QC Level to DS4- due to login error. : LE

	Signature	Print Name	Company	Date/Time
Logged in by:	Patricia Edrosa	Patricia Edrosa	**Alpha Analytical, Inc.**	5/29/09 8:46

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

AMENDED

CA

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

WorkOrder : BMIS09051940

Report Due By : 5:00 PM On : 03-Jun-09

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

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

EDD Required : **No**

Sampled by : Client

PO : 218013

Client's COC # : 25539 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	19-May-09	29-May-09

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W							Sample Remarks
BMI09051940-01A	MW-26-2	AQ	05/18/09 08:55	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria							
BMI09051940-02A	MW-26-1	AQ	05/18/09 09:30	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria							
BMI09051940-03A	EB-15-05/18/09	AQ	05/18/09 09:18	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria							
BMI09051940-04A	TB-15-05/18/09	AQ	05/18/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria							Reno Trip Blank 03/16/09

Comments: No security seals. Frozen ice. Temp Blank #7745 received @ 4 ° Celcius. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Amended 5/29/09 to change QC Level to DS4- due to login error. : LE

	Signature	Print Name	Company	Date/Time
Logged in by:	Latricia Edrosa	Latricia Edrosa	Alpha Analytical, Inc.	5/29/09 8:46

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051940

Report Due By : 5:00 PM On : 03-Jun-09

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

PO : 218013

Client's COC # : 25539 Job : G005862/JPL Groundwater Monitoring

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

EDD Required : **Yes**

Sampled by : Client

Cooler Temp	Samples Received	Date Printed
4 °C	19-May-09	19-May-09

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09051940-01A	MW-26-2	AQ	05/18/09 08:55	5	0	10	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051940-02A	MW-26-1	AQ	05/18/09 09:30	5	0	10	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051940-03A	EB-15-05/18/09	AQ	05/18/09 09:18	5	0	10	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	NO2, NO3, SO4, CL	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051940-04A	TB-15-05/18/09	AQ	05/18/09 00:00	1	0	10									Reno Trip Blank 03/16/09

Comments: No security seals. Frozen ice. Temp Blank #7745 received @ 4 ° Celcius. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD).

	Signature	Print Name	Company	Date/Time
Logged in by:	Patricia Ednasa	Patricia Ednasa	Alpha Analytical, Inc.	5/19/09 10:05

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051940

Report Due By : 5:00 PM On : 03-Jun-09

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25539 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	19-May-09	**19-May-09**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W						Sample Remarks
BMI09051940-01A	MW-26-2	AQ	05/18/09 08:55	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051940-02A	MW-26-1	AQ	05/18/09 09:30	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051940-03A	EB-15-05/18/09	AQ	05/18/09 09:18	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051940-04A	TB-15-05/18/09	AQ	05/18/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Reno Trip Blank 03/16/09

Comments: No security seals. Frozen ice. Temp Blank #7745 received @ 4 ° Celcius. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD).

	Signature	Print Name	Company	Date/Time
Logged in by:	Latricia Edrosa	Latricia Edrosa	Alpha Analytical, Inc.	5/19/09 10:05

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

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

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

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

25539

Page # 1 of 1

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

Analyses Required: VOC's (524.2) Total & Diss. Lead; Gen Chem. (200.8 Ca, Mg, Fe); Gen Chem. (Na, K) (200.7); VOA (314.0); Gen Chem. (300.0 310.1, 160.1, 150.1); O-Phosphate (300.0)

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	REMARKS
~~0855~~	5/16/09	AQ	BM1090519 40-01	MW-26-2			~~5~~	
0930			-02	MW-26-1			~~5~~ 6	~~MS/MSD~~ (ea)
0940			-03	EB-15-05/16/09			5	EQUIPMENT BLANK
—			-04	TB-15-05/16/09			1	TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		Casey Bragdon	INSIGHT	5/18/09	1700
Received by	Patricia Edosa	Patricia Edosa	Alpha	5/19/09	10:05
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *27-May-09*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI09051505 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
09051505-01A	MW-4-5	Aqueous
09051505-02A	MW-4-4	Aqueous
09051505-03A	MW-4-3	Aqueous
09051505-04A	MW-4-2	Aqueous
09051505-05A	MW-4-1	Aqueous
09051505-06A	EB-14-05/14/09	Aqueous
09051505-07A	TB-14-05/14/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
09051505-04A	EPA Method 314.0	Perchlorate

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

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

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

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/15/09

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-4-5**	Nitrite (NO2) - N	ND	0.25 mg/L	05/14/09 08:34	05/15/09 13:32
Lab ID : BMI09051505-01A	Nitrate (NO3) - N	ND	0.25 mg/L	05/14/09 08:34	05/15/09 13:32
Client ID : **MW-4-4**	Nitrite (NO2) - N	ND	0.25 mg/L	05/14/09 09:04	05/15/09 13:50
Lab ID : BMI09051505-02A	Nitrate (NO3) - N	2.4	0.25 mg/L	05/14/09 09:04	05/15/09 13:50
Client ID : **MW-4-3**	Nitrite (NO2) - N	ND	0.25 mg/L	05/14/09 09:34	05/15/09 14:09
Lab ID : BMI09051505-03A	Nitrate (NO3) - N	ND	0.25 mg/L	05/14/09 09:34	05/15/09 14:09
Client ID : **MW-4-2**	Nitrite (NO2) - N	ND	0.25 mg/L	05/14/09 10:06	05/15/09 14:27
Lab ID : BMI09051505-04A	Nitrate (NO3) - N	10	0.25 mg/L	05/14/09 10:06	05/15/09 14:27
Client ID : **MW-4-1**	Nitrite (NO2) - N	ND	0.25 mg/L	05/14/09 10:43	05/15/09 14:46
Lab ID : BMI09051505-05A	Nitrate (NO3) - N	1.2	0.25 mg/L	05/14/09 10:43	05/15/09 14:46
Client ID : **EB-14-05/14/09**	Nitrite (NO2) - N	ND	0.25 mg/L	05/14/09 10:28	05/15/09 15:04
Lab ID : BMI09051505-06A	Nitrate (NO3) - N	ND	0.25 mg/L	05/14/09 10:28	05/15/09 15:04

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

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

5/29/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/15/09

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-4-5**					
Lab ID :	BMI09051505-01A	Chloride	29	0.50 mg/L	05/14/09	05/15/09
		Sulfate (SO4)	ND	0.50 mg/L	05/14/09	05/15/09
Client ID :	**MW-4-4**					
Lab ID :	BMI09051505-02A	Chloride	27	0.50 mg/L	05/14/09	05/15/09
		Sulfate (SO4)	14	0.50 mg/L	05/14/09	05/15/09
Client ID :	**MW-4-3**					
Lab ID :	BMI09051505-03A	Chloride	13	0.50 mg/L	05/14/09	05/15/09
		Sulfate (SO4)	ND	0.50 mg/L	05/14/09	05/15/09
Client ID :	**MW-4-2**					
Lab ID :	BMI09051505-04A	Chloride	99	2.5 mg/L	05/14/09	05/15/09
		Sulfate (SO4)	130	2.5 mg/L	05/14/09	05/15/09
Client ID :	**MW-4-1**					
Lab ID :	BMI09051505-05A	Chloride	20	0.50 mg/L	05/14/09	05/15/09
		Sulfate (SO4)	43	0.50 mg/L	05/14/09	05/15/09
Client ID :	**EB-14-05/14/09**					
Lab ID :	BMI09051505-06A	Chloride	ND	0.50 mg/L	05/14/09	05/15/09
		Sulfate (SO4)	ND	0.50 mg/L	05/14/09	05/15/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/15/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-4-5**					
Lab ID :	BMI09051505-01A	Perchlorate	ND	1.00 µg/L	05/14/09	05/15/09
Client ID :	**MW-4-4**					
Lab ID :	BMI09051505-02A	Perchlorate	ND	1.00 µg/L	05/14/09	05/15/09
Client ID :	**MW-4-3**					
Lab ID :	BMI09051505-03A	Perchlorate	ND	1.00 µg/L	05/14/09	05/15/09
Client ID :	**MW-4-2**					
Lab ID :	BMI09051505-04A	Perchlorate	2.01	1.00 µg/L	05/14/09	05/15/09
Client ID :	**MW-4-1**					
Lab ID :	BMI09051505-05A	Perchlorate	ND	1.00 µg/L	05/14/09	05/15/09
Client ID :	**EB-14-05/14/09**					
Lab ID :	BMI09051505-06A	Perchlorate	ND	1.00 µg/L	05/14/09	05/15/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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San Diego, CA 92110

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/15/09

Job#: G005862/JPL Groundwater Monitoring

Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-4-5**					
Lab ID :	BMI09051505-01A	Alkalinity, Bicarbonate (As CaCO3)	150	10 mg/L	05/14/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/14/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	150	10 mg/L	05/14/09	05/18/09
Client ID :	**MW-4-4**					
Lab ID :	BMI09051505-02A	Alkalinity, Bicarbonate (As CaCO3)	160	10 mg/L	05/14/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/14/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	160	10 mg/L	05/14/09	05/18/09
Client ID :	**MW-4-3**					
Lab ID :	BMI09051505-03A	Alkalinity, Bicarbonate (As CaCO3)	230	10 mg/L	05/14/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/14/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	230	10 mg/L	05/14/09	05/18/09
Client ID :	**MW-4-2**					
Lab ID :	BMI09051505-04A	Alkalinity, Bicarbonate (As CaCO3)	240	10 mg/L	05/14/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/14/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	240	10 mg/L	05/14/09	05/18/09
Client ID :	**MW-4-1**					
Lab ID :	BMI09051505-05A	Alkalinity, Bicarbonate (As CaCO3)	160	10 mg/L	05/14/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/14/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	160	10 mg/L	05/14/09	05/18/09
Client ID :	**EB-14-05/14/09**					
Lab ID :	BMI09051505-06A	Alkalinity, Bicarbonate (As CaCO3)	ND	10 mg/L	05/14/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/14/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	ND	10 mg/L	05/14/09	05/18/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/29/09
Report Date

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/15/09

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-4-5**					
Lab ID :	BMI09051505-01A	Sodium (Na)	42	0.50 mg/L	05/14/09	05/18/09
		Magnesium (Mg)	13	0.50 mg/L	05/14/09	05/18/09
		Potassium (K)	2.1	0.50 mg/L	05/14/09	05/18/09
		Calcium (Ca)	20	0.50 mg/L	05/14/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/14/09	05/18/09
		Iron (Fe)	3.7	0.10 mg/L	05/14/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/14/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/14/09	05/18/09
Client ID :	**MW-4-4**					
Lab ID :	BMI09051505-02A	Sodium (Na)	41	0.50 mg/L	05/14/09	05/18/09
		Magnesium (Mg)	13	0.50 mg/L	05/14/09	05/18/09
		Potassium (K)	2.0	0.50 mg/L	05/14/09	05/18/09
		Calcium (Ca)	36	0.50 mg/L	05/14/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/14/09	05/18/09
		Iron (Fe)	0.62	0.10 mg/L	05/14/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/14/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/14/09	05/18/09
Client ID :	**MW-4-3**					
Lab ID :	BMI09051505-03A	Sodium (Na)	43	0.50 mg/L	05/14/09	05/18/09
		Magnesium (Mg)	19	0.50 mg/L	05/14/09	05/18/09
		Potassium (K)	2.8	0.50 mg/L	05/14/09	05/18/09
		Calcium (Ca)	40	0.50 mg/L	05/14/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/14/09	05/18/09
		Iron (Fe)	3.9	0.10 mg/L	05/14/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/14/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/14/09	05/18/09
Client ID :	**MW-4-2**					
Lab ID :	BMI09051505-04A	Sodium (Na)	35	0.50 mg/L	05/14/09	05/18/09
		Magnesium (Mg)	42	0.50 mg/L	05/14/09	05/18/09
		Potassium (K)	3.1	0.50 mg/L	05/14/09	05/18/09
		Calcium (Ca)	130	0.50 mg/L	05/14/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/14/09	05/18/09
		Iron (Fe)	1.3	0.10 mg/L	05/14/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/14/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/14/09	05/18/09

Alpha Analytical, Inc.

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Client ID :	**MW-4-1**					
Lab ID :	BMI09051505-05A	Sodium (Na)	19	0.50 mg/L	05/14/09	05/18/09
		Magnesium (Mg)	16	0.50 mg/L	05/14/09	05/18/09
		Potassium (K)	2.7	0.50 mg/L	05/14/09	05/18/09
		Calcium (Ca)	55	0.50 mg/L	05/14/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/14/09	05/18/09
		Iron (Fe)	0.77	0.10 mg/L	05/14/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/14/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/14/09	05/18/09
Client ID :	**EB-14-05/14/09**					
Lab ID :	BMI09051505-06A	Sodium (Na)	ND	0.50 mg/L	05/14/09	05/18/09
		Magnesium (Mg)	ND	0.50 mg/L	05/14/09	05/18/09
		Potassium (K)	ND	0.50 mg/L	05/14/09	05/18/09
		Calcium (Ca)	ND	0.50 mg/L	05/14/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/14/09	05/18/09
		Iron (Fe)	ND	0.10 mg/L	05/14/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/14/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/14/09	05/18/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/29/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/15/09

Job#: G005862/JPL Groundwater Monitoring

pH (Range 1.7 to 12.4)
EPA Method 150.2 / SM4500HB / SW9040C

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-4-5**	pH	8.1	1.7 pH Units	05/14/09 08:34	05/15/09 14:34
Lab ID : BMI09051505-01A	pH - Temperature	18	1.0 °C	05/14/09 08:34	05/15/09 14:34
Client ID : **MW-4-4**	pH	8.0	1.7 pH Units	05/14/09 09:04	05/15/09 14:37
Lab ID : BMI09051505-02A	pH - Temperature	20	1.0 °C	05/14/09 09:04	05/15/09 14:37
Client ID : **MW-4-3**	pH	7.7	1.7 pH Units	05/14/09 09:34	05/15/09 14:40
Lab ID : BMI09051505-03A	pH - Temperature	20	1.0 °C	05/14/09 09:34	05/15/09 14:40
Client ID : **MW-4-2**	pH	7.4	1.7 pH Units	05/14/09 10:06	05/15/09 14:44
Lab ID : BMI09051505-04A	pH - Temperature	20	1.0 °C	05/14/09 10:06	05/15/09 14:44
Client ID : **MW-4-1**	pH	7.1	1.7 pH Units	05/14/09 10:43	05/15/09 14:46
Lab ID : BMI09051505-05A	pH - Temperature	20	1.0 °C	05/14/09 10:43	05/15/09 14:46
Client ID : **EB-14-05/14/09**	pH	6.2	1.7 pH Units	05/14/09 10:28	05/15/09 14:50
Lab ID : BMI09051505-06A	pH - Temperature	20	1.0 °C	05/14/09 10:28	05/15/09 14:50

The EPA has established an analytical holding time of 15 minutes for this method as documented in the Methods Update Rule, Federal Register, Vol 72, No 47, March 2007. This holding time will always be exceeded, unless samples are analyzed in the field.

The laboratory performed this analysis in the shortest practical holding time after sample receipt.

Roger Scholl Randy Gardner Walter Hinchman

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

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5/29/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/15/09

Job#: G005862/JPL Groundwater Monitoring

Total Dissolved Solids (TDS)
SM2540C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-4-5**					
Lab ID :	BMI09051505-01A	Solids, Total Dissolved (TDS)	190	10 mg/L	05/14/09	05/19/09
Client ID :	**MW-4-4**					
Lab ID :	BMI09051505-02A	Solids, Total Dissolved (TDS)	240	10 mg/L	05/14/09	05/19/09
Client ID :	**MW-4-3**					
Lab ID :	BMI09051505-03A	Solids, Total Dissolved (TDS)	260	10 mg/L	05/14/09	05/19/09
Client ID :	**MW-4-2**					
Lab ID :	BMI09051505-04A	Solids, Total Dissolved (TDS)	660	10 mg/L	05/14/09	05/19/09
Client ID :	**MW-4-1**					
Lab ID :	BMI09051505-05A	Solids, Total Dissolved (TDS)	260	10 mg/L	05/14/09	05/19/09
Client ID :	**EB-14-05/14/09**					
Lab ID :	BMI09051505-06A	Solids, Total Dissolved (TDS)	ND	10 mg/L	05/14/09	05/19/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-4-5**						
Lab ID :	BMI09051505-01A	Sulfur dioxide	15	2.0 µg/L	05/15/09	05/14/09	05/21/09
Client ID :	**MW-4-4**						
Lab ID :	BMI09051505-02A	Sulfur dioxide	4.1	2.0 µg/L	05/15/09	05/14/09	05/21/09
Client ID :	**MW-4-3**						
Lab ID :	BMI09051505-03A	* * * None Found * * *	ND	2.0 µg/L	05/15/09	05/14/09	05/21/09
Client ID :	**MW-4-2**						
Lab ID :	BMI09051505-04A	* * * None Found * * *	ND	2.0 µg/L	05/15/09	05/14/09	05/21/09
Client ID :	**MW-4-1**						
Lab ID :	BMI09051505-05A	* * * None Found * * *	ND	2.0 µg/L	05/15/09	05/14/09	05/21/09
Client ID :	**EB-14-05/14/09**						
Lab ID :	BMI09051505-06A	* * * None Found * * *	ND	2.0 µg/L	05/15/09	05/14/09	05/21/09
Client ID :	**TB-14-05/14/09**						
Lab ID :	BMI09051505-07A	* * * None Found * * *	ND	2.0 µg/L	05/15/09	05/14/09	05/21/09

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

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Page 1 of 1

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051505-01A
Client I.D. Number: MW-4-5

Sampled: 05/14/09
Received: 05/15/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/29/09
Report Date

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051505-02A
Client I.D. Number: MW-4-4

Sampled: 05/14/09
Received: 05/15/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	104	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/29/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051505-03A
Client I.D. Number: MW-4-3

Sampled: 05/14/09
Received: 05/15/09
Analyzed: 05/21/09

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	1.4	0.50	µg/L
4	Chloroethane	ND	0.50	µg/L	39	m,p-Xylene	ND	0.50	µg/L
5	Bromomethane	ND	1.0	µg/L	40	Bromoform	ND	0.50	µg/L
6	Trichlorofluoromethane	ND	0.50	µg/L	41	Styrene	ND	0.50	µg/L
7	1,1-Dichloroethene	ND	0.50	µg/L	42	o-Xylene	ND	0.50	µg/L
8	Dichloromethane	ND	1.0	µg/L	43	1,1,2,2-Tetrachloroethane	ND	0.50	µg/L
9	Freon-113	ND	0.50	µg/L	44	1,2,3-Trichloropropane	ND	1.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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Report Date

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051505-04A
Client I.D. Number: MW-4-2

Sampled: 05/14/09
Received: 05/15/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.69	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	106	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	101	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

5/29/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051505-05A
Client I.D. Number: MW-4-1

Sampled: 05/14/09
Received: 05/15/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	102	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

5/29/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051505-06A
Client I.D. Number: EB-14-05/14/09

Sampled: 05/14/09
Received: 05/15/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	89	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	102	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

5/29/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051505-07A
Client I.D. Number: TB-14-05/14/09

Sampled: 05/14/09
Received: 05/15/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	89	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	103	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/29/09
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI09051505 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09051505-01A	MW-4-5	Aqueous	2
09051505-02A	MW-4-4	Aqueous	2
09051505-03A	MW-4-3	Aqueous	2
09051505-04A	MW-4-2	Aqueous	2
09051505-05A	MW-4-1	Aqueous	2
09051505-06A	EB-14-05/14/09	Aqueous	2
09051505-07A	TB-14-05/14/09	Aqueous	2

5/29/09

Report Date

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051505

Report Due By : 5:00 PM On : 01-Jun-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25551 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	15-May-2009	**15-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09051505-01A	MW-4-5	AQ	05/14/09 08:34	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051505-02A	MW-4-4	AQ	05/14/09 09:04	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051505-03A	MW-4-3	AQ	05/14/09 09:34	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051505-04A	MW-4-2	AQ	05/14/09 10:06	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	Level IV QC
BMI09051505-05A	MW-4-1	AQ	05/14/09 10:43	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051505-06A	EB-14-05/14/09	AQ	05/14/09 10:28	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051505-07A	TB-14-05/14/09	AQ	05/14/09 00:00	1	0	10									Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #7708 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5.15.09 11:15

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

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051505

Report Due By : 5:00 PM On : 01-Jun-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25551 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	15-May-2009	**15-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W						Sample Remarks
BMI09051505-01A	MW-4-5	AQ	05/14/09 08:34	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051505-02A	MW-4-4	AQ	05/14/09 09:04	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051505-03A	MW-4-3	AQ	05/14/09 09:34	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051505-04A	MW-4-2	AQ	05/14/09 10:06	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Level IV QC
BMI09051505-05A	MW-4-1	AQ	05/14/09 10:43	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051505-06A	EB-14-05/14/09	AQ	05/14/09 10:28	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051505-07A	TB-14-05/14/09	AQ	05/14/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #7708 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5-15-09 11:15

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

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

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

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

25551

Page # 1 of 1

Client Name	P.O. #	Job #
DAVID CONNER	218013	600 5862
Address: 3990 OLD TOWN AVE, C-205	EMail Address	
City, State, Zip: SAN DIEGO, CA 92110	Phone # 619-726-7311	Fax #

Analyses Required

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC's (524.2) TOTAL Cr, LEAD	ARSENIC (200.8) DEW CHEM. (Na, K, Ca, Mg, Fe) (200.7)	Clay - (314.0)	DEW CHEM. (300.0 310.1, 160.1 150.1)	O-PHOSPHATE (300.0)		REMARKS
0834	5/14/09	AQ	BMI0905150 5-01	MW-4-5			5	X	X	X	X	X		
0904			-02	MW-4-4				X	X	X	X	X		
0934			-03	MW-4-3				X	X	X	X	X		
1006			-04	MW-4-2				X	X	X	X	X		QC LEVEL IV
1043			-05	MW-4-1				X	X	X	X	X		
1028			-06	EB-14-05/14/09			5	X	X	X	X	X		EQUIPMENT BLANK
—			-07	TB-14-05/14/09			1	X						TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BRADDON	~~INSIGHT~~ EECI	5/14/09	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	5-15-09	1104
Relinquished by					
~~Received by~~					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *27-May-09*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI09051406 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
09051406-01A	MW-23-5	Aqueous
09051406-02A	MW-23-4	Aqueous
09051406-03A	MW-23-3	Aqueous
09051406-04A	MW-23-2	Aqueous
09051406-05A	MW-23-1	Aqueous
09051406-06A	EB-13-05/13/09	Aqueous
09051406-07A	TB-13-05/13/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
09051406-04A	EPA Method 314.0	Perchlorate
09051406-05A	EPA Method 314.0	Perchlorate

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/14/09

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-23-5**	Nitrite (NO2) - N	ND	0.25 mg/L	05/13/09 08:15	05/14/09 13:36
Lab ID : BMI09051406-01A	Nitrate (NO3) - N	ND	0.25 mg/L	05/13/09 08:15	05/14/09 13:36
Client ID : **MW-23-4**	Nitrite (NO2) - N	ND	0.25 mg/L	05/13/09 08:47	05/14/09 13:54
Lab ID : BMI09051406-02A	Nitrate (NO3) - N	5.6	0.25 mg/L	05/13/09 08:47	05/14/09 13:54
Client ID : **MW-23-3**	Nitrite (NO2) - N	ND	0.25 mg/L	05/13/09 09:37	05/14/09 14:13
Lab ID : BMI09051406-03A	Nitrate (NO3) - N	4.6	0.25 mg/L	05/13/09 09:37	05/14/09 14:13
Client ID : **MW-23-2**	Nitrite (NO2) - N	ND	0.25 mg/L	05/13/09 10:04	05/14/09 14:31
Lab ID : BMI09051406-04A	Nitrate (NO3) - N	14	0.25 mg/L	05/13/09 10:04	05/14/09 14:31
Client ID : **MW-23-1**	Nitrite (NO2) - N	ND	0.25 mg/L	05/13/09 10:41	05/14/09 15:27
Lab ID : BMI09051406-05A	Nitrate (NO3) - N	14	0.25 mg/L	05/13/09 10:41	05/14/09 15:27
Client ID : **EB-13-05/13/09**	Nitrite (NO2) - N	ND	0.25 mg/L	05/13/09 10:23	05/14/09 15:45
Lab ID : BMI09051406-06A	Nitrate (NO3) - N	ND	0.25 mg/L	05/13/09 10:23	05/14/09 15:45

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/28/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/14/09

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-23-5**					
Lab ID :	BMI09051406-01A	Chloride	12	0.50 mg/L	05/13/09	05/14/09
		Sulfate (SO4)	ND	0.50 mg/L	05/13/09	05/14/09
Client ID :	**MW-23-4**					
Lab ID :	BMI09051406-02A	Chloride	14	0.50 mg/L	05/13/09	05/14/09
		Sulfate (SO4)	8.3	0.50 mg/L	05/13/09	05/14/09
Client ID :	**MW-23-3**					
Lab ID :	BMI09051406-03A	Chloride	13	0.50 mg/L	05/13/09	05/14/09
		Sulfate (SO4)	11	0.50 mg/L	05/13/09	05/14/09
Client ID :	**MW-23-2**					
Lab ID :	BMI09051406-04A	Chloride	82	5.0 mg/L	05/13/09	05/14/09
		Sulfate (SO4)	110	5.0 mg/L	05/13/09	05/14/09
Client ID :	**MW-23-1**					
Lab ID :	BMI09051406-05A	Chloride	120	5.0 mg/L	05/13/09	05/14/09
		Sulfate (SO4)	190	5.0 mg/L	05/13/09	05/14/09
Client ID :	**EB-13-05/13/09**					
Lab ID :	BMI09051406-06A	Chloride	ND	0.50 mg/L	05/13/09	05/14/09
		Sulfate (SO4)	ND	0.50 mg/L	05/13/09	05/14/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/14/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-23-5**					
Lab ID :	BMI09051406-01A	Perchlorate	ND	1.00 µg/L	05/13/09	05/21/09
Client ID :	**MW-23-4**					
Lab ID :	BMI09051406-02A	Perchlorate	ND	1.00 µg/L	05/13/09	05/15/09
Client ID :	**MW-23-3**					
Lab ID :	BMI09051406-03A	Perchlorate	ND	1.00 µg/L	05/13/09	05/15/09
Client ID :	**MW-23-2**					
Lab ID :	BMI09051406-04A	Perchlorate	4.06	1.00 µg/L	05/13/09	05/15/09
Client ID :	**MW-23-1**					
Lab ID :	BMI09051406-05A	Perchlorate	2.55	1.00 µg/L	05/13/09	05/15/09
Client ID :	**EB-13-05/13/09**					
Lab ID :	BMI09051406-06A	Perchlorate	ND	1.00 µg/L	05/13/09	05/15/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/14/09

Job#: G005862/JPL Groundwater Monitoring

Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-23-5**					
Lab ID :	BMI09051406-01A	Alkalinity, Bicarbonate (As CaCO3)	63	10 mg/L	05/13/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	120	10 mg/L	05/13/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	190	10 mg/L	05/13/09	05/18/09
Client ID :	**MW-23-4**					
Lab ID :	BMI09051406-02A	Alkalinity, Bicarbonate (As CaCO3)	130	10 mg/L	05/13/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/13/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	130	10 mg/L	05/13/09	05/18/09
Client ID :	**MW-23-3**					
Lab ID :	BMI09051406-03A	Alkalinity, Bicarbonate (As CaCO3)	150	10 mg/L	05/13/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/13/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	150	10 mg/L	05/13/09	05/18/09
Client ID :	**MW-23-2**					
Lab ID :	BMI09051406-04A	Alkalinity, Bicarbonate (As CaCO3)	200	10 mg/L	05/13/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/13/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	200	10 mg/L	05/13/09	05/18/09
Client ID :	**MW-23-1**					
Lab ID :	BMI09051406-05A	Alkalinity, Bicarbonate (As CaCO3)	270	10 mg/L	05/13/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/13/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	270	10 mg/L	05/13/09	05/18/09
Client ID :	**EB-13-05/13/09**					
Lab ID :	BMI09051406-06A	Alkalinity, Bicarbonate (As CaCO3)	ND	10 mg/L	05/13/09	05/18/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/13/09	05/18/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	ND	10 mg/L	05/13/09	05/18/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/28/09
Report Date

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/14/09

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-23-5**					
Lab ID :	BMI09051406-01A	Sodium (Na)	93	0.50 mg/L	05/13/09	05/18/09
		Magnesium (Mg)	ND	0.50 mg/L	05/13/09	05/18/09
		Potassium (K)	1.7	0.50 mg/L	05/13/09	05/18/09
		Calcium (Ca)	4.9	0.50 mg/L	05/13/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/13/09	05/18/09
		Iron (Fe)	ND	0.10 mg/L	05/13/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/13/09	05/19/09
		Lead (Pb)	ND	0.0050 mg/L	05/13/09	05/18/09
Client ID :	**MW-23-4**					
Lab ID :	BMI09051406-02A	Sodium (Na)	30	0.50 mg/L	05/13/09	05/18/09
		Magnesium (Mg)	12	0.50 mg/L	05/13/09	05/18/09
		Potassium (K)	2.0	0.50 mg/L	05/13/09	05/18/09
		Calcium (Ca)	30	0.50 mg/L	05/13/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/13/09	05/18/09
		Iron (Fe)	0.18	0.10 mg/L	05/13/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/13/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/13/09	05/18/09
Client ID :	**MW-23-3**					
Lab ID :	BMI09051406-03A	Sodium (Na)	29	0.50 mg/L	05/13/09	05/18/09
		Magnesium (Mg)	13	0.50 mg/L	05/13/09	05/18/09
		Potassium (K)	1.9	0.50 mg/L	05/13/09	05/18/09
		Calcium (Ca)	36	0.50 mg/L	05/13/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/13/09	05/18/09
		Iron (Fe)	0.24	0.10 mg/L	05/13/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/13/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/13/09	05/18/09
Client ID :	**MW-23-2**					
Lab ID :	BMI09051406-04A	Sodium (Na)	39	0.50 mg/L	05/13/09	05/18/09
		Magnesium (Mg)	41	0.50 mg/L	05/13/09	05/18/09
		Potassium (K)	3.0	0.50 mg/L	05/13/09	05/18/09
		Calcium (Ca)	100	0.50 mg/L	05/13/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/13/09	05/18/09
		Iron (Fe)	0.75	0.10 mg/L	05/13/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/13/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/13/09	05/18/09

Alpha Analytical, Inc.

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Client ID :	**MW-23-1**					
Lab ID :	BMI09051406-05A	Sodium (Na)	43	0.50 mg/L	05/13/09	05/18/09
		Magnesium (Mg)	61	0.50 mg/L	05/13/09	05/18/09
		Potassium (K)	3.7	0.50 mg/L	05/13/09	05/18/09
		Calcium (Ca)	150	0.50 mg/L	05/13/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/13/09	05/18/09
		Iron (Fe)	1.2	0.10 mg/L	05/13/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/13/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/13/09	05/18/09
Client ID :	**EB-13-05/13/09**					
Lab ID :	BMI09051406-06A	Sodium (Na)	0.58	0.50 mg/L	05/13/09	05/18/09
		Magnesium (Mg)	ND	0.50 mg/L	05/13/09	05/18/09
		Potassium (K)	ND	0.50 mg/L	05/13/09	05/18/09
		Calcium (Ca)	ND	0.50 mg/L	05/13/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/13/09	05/18/09
		Iron (Fe)	ND	0.10 mg/L	05/13/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/13/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/13/09	05/18/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/28/09

Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/14/09

Job#: G005862/JPL Groundwater Monitoring

pH (Range 1.7 to 12.4)
EPA Method 150.2 / SM4500HB / SW9040C

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-23-5**	pH	9.7	1.7 pH Units	05/13/09 08:15	05/14/09 16:09
Lab ID : BMI09051406-01A	pH - Temperature	18	1.0 °C	05/13/09 08:15	05/14/09 16:09
Client ID : **MW-23-4**	pH	8.2	1.7 pH Units	05/13/09 08:47	05/14/09 16:10
Lab ID : BMI09051406-02A	pH - Temperature	17	1.0 °C	05/13/09 08:47	05/14/09 16:10
Client ID : **MW-23-3**	pH	7.7	1.7 pH Units	05/13/09 09:37	05/14/09 16:13
Lab ID : BMI09051406-03A	pH - Temperature	17	1.0 °C	05/13/09 09:37	05/14/09 16:13
Client ID : **MW-23-2**	pH	7.6	1.7 pH Units	05/13/09 10:04	05/14/09 16:15
Lab ID : BMI09051406-04A	pH - Temperature	17	1.0 °C	05/13/09 10:04	05/14/09 16:15
Client ID : **MW-23-1**	pH	7.1	1.7 pH Units	05/13/09 10:41	05/14/09 16:17
Lab ID : BMI09051406-05A	pH - Temperature	18	1.0 °C	05/13/09 10:41	05/14/09 16:17
Client ID : **EB-13-05/13/09**	pH	6.1	1.7 pH Units	05/13/09 10:23	05/14/09 16:19
Lab ID : BMI09051406-06A	pH - Temperature	18	1.0 °C	05/13/09 10:23	05/14/09 16:19

The EPA has established an analytical holding time of 15 minutes for this method as documented in the Methods Update Rule, Federal Register, Vol 72, No 47, March 2007. This holding time will always be exceeded, unless samples are analyzed in the field.

The laboratory performed this analysis in the shortest practical holding time after sample receipt.

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/28/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/14/09

Job#: G005862/JPL Groundwater Monitoring

Total Dissolved Solids (TDS)
SM2540C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-23-5**					
Lab ID :	BMI09051406-01A	Solids, Total Dissolved (TDS)	240	10 mg/L	05/13/09	05/19/09
Client ID :	**MW-23-4**					
Lab ID :	BMI09051406-02A	Solids, Total Dissolved (TDS)	220	10 mg/L	05/13/09	05/19/09
Client ID :	**MW-23-3**					
Lab ID :	BMI09051406-03A	Solids, Total Dissolved (TDS)	230	10 mg/L	05/13/09	05/19/09
Client ID :	**MW-23-2**					
Lab ID :	BMI09051406-04A	Solids, Total Dissolved (TDS)	600	10 mg/L	05/13/09	05/19/09
Client ID :	**MW-23-1**					
Lab ID :	BMI09051406-05A	Solids, Total Dissolved (TDS)	820	10 mg/L	05/13/09	05/20/09
Client ID :	**EB-13-05/13/09**					
Lab ID :	BMI09051406-06A	Solids, Total Dissolved (TDS)	ND	10 mg/L	05/13/09	05/19/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-23-5**						
Lab ID :	BMI09051406-01A	Sulfur dioxide	22	2.0 µg/L	05/14/09	05/13/09	05/21/09
Client ID :	**MW-23-4**						
Lab ID :	BMI09051406-02A	Sulfur dioxide	11	2.0 µg/L	05/14/09	05/13/09	05/21/09
Client ID :	**MW-23-3**						
Lab ID :	BMI09051406-03A	Sulfur dioxide	6.9	2.0 µg/L	05/14/09	05/13/09	05/21/09
Client ID :	**MW-23-2**						
Lab ID :	BMI09051406-04A	Sulfur dioxide	2.1	2.0 µg/L	05/14/09	05/13/09	05/21/09
Client ID :	**MW-23-1**						
Lab ID :	BMI09051406-05A	* * * None Found * * *	ND	2.0 µg/L	05/14/09	05/13/09	05/21/09
Client ID :	**EB-13-05/13/09**						
Lab ID :	BMI09051406-06A	* * * None Found * * *	ND	2.0 µg/L	05/14/09	05/13/09	05/20/09
Client ID :	**TB-13-05/13/09**						
Lab ID :	BMI09051406-07A	* * * None Found * * *	ND	2.0 µg/L	05/14/09	05/13/09	05/20/09

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

Roger Scholl Randy Gardner Walter Hinchman

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5/28/09
Report Date

Page 1 of 1

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051406-01A
Client I.D. Number: MW-23-5

Sampled: 05/13/09
Received: 05/14/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/28/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051406-02A
Client I.D. Number: MW-23-4

Sampled: 05/13/09
Received: 05/14/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

5/28/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051406-03A
Client I.D. Number: MW-23-3

Sampled: 05/13/09
Received: 05/14/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	100	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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Report Date

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051406-04A
Client I.D. Number: MW-23-2

Sampled: 05/13/09
Received: 05/14/09
Analyzed: 05/21/09

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	0.50	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.78	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	101	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	100	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	98	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/28/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051406-05A
Client I.D. Number: MW-23-1

Sampled: 05/13/09
Received: 05/14/09
Analyzed: 05/21/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	1.0	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	100	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

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

5/28/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051406-06A
Client I.D. Number: EB-13-05/13/09

Sampled: 05/13/09
Received: 05/14/09
Analyzed: 05/20/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	109	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	97	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

5/28/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051406-07A
Client I.D. Number: TB-13-05/13/09

Sampled: 05/13/09
Received: 05/14/09
Analyzed: 05/20/09

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
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	111	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	98	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	99	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/28/09
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI09051406 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09051406-01A	MW-23-5	Aqueous	2
09051406-02A	MW-23-4	Aqueous	2
09051406-03A	MW-23-3	Aqueous	2
09051406-04A	MW-23-2	Aqueous	2
09051406-05A	MW-23-1	Aqueous	2
09051406-06A	EB-13-05/13/09	Aqueous	2
09051406-07A	TB-13-05/13/09	Aqueous	2

5/28/09

Report Date

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051406

Report Due By : 5:00 PM On : 29-May-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25541 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	14-May-2009	**14-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09051406-01A	MW-23-5	AQ	05/13/09 08:15	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051406-02A	MW-23-4	AQ	05/13/09 08:47	10	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	MS/MSD
BMI09051406-03A	MW-23-3	AQ	05/13/09 09:37	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051406-04A	MW-23-2	AQ	05/13/09 10:04	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051406-05A	MW-23-1	AQ	05/13/09 10:41	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	Level IV QC
BMI09051406-06A	EB-13-05/13/09	AQ	05/13/09 10:23	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051406-07A	TB-13-05/13/09	AQ	05/13/09 00:00	1	0	10									Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #7634 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5.14.09 1106

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051406

Report Due By : 5:00 PM On : 29-May-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25541 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	14-May-2009	**14-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W						Sample Remarks
BMI09051406-01A	MW-23-5	AQ	05/13/09 08:15	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051406-02A	MW-23-4	AQ	05/13/09 08:47	10	0	10	VOC by 524 Criteria	VOC by 524 Criteria						MS/MSD
BMI09051406-03A	MW-23-3	AQ	05/13/09 09:37	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051406-04A	MW-23-2	AQ	05/13/09 10:04	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051406-05A	MW-23-1	AQ	05/13/09 10:41	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Level IV QC
BMI09051406-06A	EB-13-05/13/09	AQ	05/13/09 10:23	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051406-07A	TB-13-05/13/09	AQ	05/13/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #7634 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5-14-09 1106

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

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

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

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

25541

Page # 1 of 1

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

Analyses Required

Required QC Level? I II III IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC's (524.2)	Total Cr, Lead (200.8)	Gen Chem. (Na, K, Ca, Mg, Fe) (200.7)	Clay (314.0)	Gen Chem. (310.1, 150.1, 300.0)	0-PHOSPHATE (300.0)		REMARKS
0815	5/13/09	AQ	BMI0905/406-01	MW-23-5			5	X	X	X	X	X			
0847			-02	MW-23-4			10	|	|	|	|	|			MS/MSD
0937			-03	MW-23-3			5	|	|	|	|	|			
1004			-04	MW-23-2			|	|	|	|	|	|			
1041			-05	MW-23-1			|	|	|	|	|	|			QC LEVEL III
1023			-06	EB-13-05/13/09			5	X	X	X	X	X			EQUIPMENT BLANK
—			-07	TB-13-05/13/09			1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROGDON	INSIGHT	5/13/09	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	5-14-09	1106
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *26-May-09*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI09051301 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
09051301-01A	MW-11-5	Aqueous
09051301-02A	MW-11-4	Aqueous
09051301-03A	MW-11-3	Aqueous
09051301-04A	MW-11-2	Aqueous
09051301-05A	MW-11-1	Aqueous
09051301-06A	EB-12-05/12/09	Aqueous
09051301-07A	TB-12-05/12/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
NONE		

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/13/09

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-11-5**	Nitrite (NO2) - N	ND	0.25 mg/L	05/12/09 08:37	05/13/09 13:14
Lab ID : BMI09051301-01A	Nitrate (NO3) - N	ND	0.25 mg/L	05/12/09 08:37	05/13/09 13:14
Client ID : **MW-11-4**	Nitrite (NO2) - N	ND	0.25 mg/L	05/12/09 09:29	05/13/09 13:33
Lab ID : BMI09051301-02A	Nitrate (NO3) - N	ND	0.25 mg/L	05/12/09 09:29	05/13/09 13:33
Client ID : **MW-11-3**	Nitrite (NO2) - N	ND	0.25 mg/L	05/12/09 10:26	05/13/09 13:51
Lab ID : BMI09051301-03A	Nitrate (NO3) - N	ND	0.25 mg/L	05/12/09 10:26	05/13/09 13:51
Client ID : **MW-11-2**	Nitrite (NO2) - N	ND	0.25 mg/L	05/12/09 10:54	05/13/09 14:10
Lab ID : BMI09051301-04A	Nitrate (NO3) - N	ND	0.25 mg/L	05/12/09 10:54	05/13/09 14:10
Client ID : **MW-11-1**	Nitrite (NO2) - N	ND	0.25 mg/L	05/12/09 11:32	05/13/09 14:28
Lab ID : BMI09051301-05A	Nitrate (NO3) - N	1.1	0.25 mg/L	05/12/09 11:32	05/13/09 14:28
	Phosphate, ortho - P	ND	0.25 mg/L	05/12/09 11:32	05/13/09 14:28
Client ID : **EB-12-05/12/09**	Nitrite (NO2) - N	ND	0.25 mg/L	05/12/09 11:17	05/13/09 14:47
Lab ID : BMI09051301-06A	Nitrate (NO3) - N	ND	0.25 mg/L	05/12/09 11:17	05/13/09 14:47

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/27/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/13/09

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-11-5**					
Lab ID :	BMI09051301-01A	Chloride	12	0.50 mg/L	05/12/09	05/13/09
		Sulfate (SO4)	18	0.50 mg/L	05/12/09	05/13/09
Client ID :	**MW-11-4**					
Lab ID :	BMI09051301-02A	Chloride	11	0.50 mg/L	05/12/09	05/13/09
		Sulfate (SO4)	0.59	0.50 mg/L	05/12/09	05/13/09
Client ID :	**MW-11-3**					
Lab ID :	BMI09051301-03A	Chloride	12	0.50 mg/L	05/12/09	05/13/09
		Sulfate (SO4)	26	0.50 mg/L	05/12/09	05/13/09
Client ID :	**MW-11-2**					
Lab ID :	BMI09051301-04A	Chloride	17	0.50 mg/L	05/12/09	05/13/09
		Sulfate (SO4)	33	0.50 mg/L	05/12/09	05/13/09
Client ID :	**MW-11-1**					
Lab ID :	BMI09051301-05A	Chloride	25	0.50 mg/L	05/12/09	05/13/09
		Sulfate (SO4)	55	0.50 mg/L	05/12/09	05/13/09
Client ID :	**EB-12-05/12/09**					
Lab ID :	BMI09051301-06A	Chloride	ND	0.50 mg/L	05/12/09	05/13/09
		Sulfate (SO4)	ND	0.50 mg/L	05/12/09	05/13/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/27/09
Report Date

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/13/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

	Parameter		Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-11-5**					
Lab ID :	BMI09051301-01A	Perchlorate	ND	1.00 µg/L	05/12/09	05/13/09
Client ID :	**MW-11-4**					
Lab ID :	BMI09051301-02A	Perchlorate	ND	1.00 µg/L	05/12/09	05/13/09
Client ID :	**MW-11-3**					
Lab ID :	BMI09051301-03A	Perchlorate	ND	1.00 µg/L	05/12/09	05/13/09
Client ID :	**MW-11-2**					
Lab ID :	BMI09051301-04A	Perchlorate	ND	1.00 µg/L	05/12/09	05/13/09
Client ID :	**MW-11-1**					
Lab ID :	BMI09051301-05A	Perchlorate	ND	1.00 µg/L	05/12/09	05/13/09
Client ID :	**EB-12-05/12/09**					
Lab ID :	BMI09051301-06A	Perchlorate	ND	1.00 µg/L	05/12/09	05/13/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/13/09

Job#: G005862/JPL Groundwater Monitoring

Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-11-5**					
Lab ID :	BMI09051301-01A	Alkalinity, Bicarbonate (As CaCO3)	130	10 mg/L	05/12/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/12/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	130	10 mg/L	05/12/09	05/13/09
Client ID :	**MW-11-4**					
Lab ID :	BMI09051301-02A	Alkalinity, Bicarbonate (As CaCO3)	47	10 mg/L	05/12/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	55	10 mg/L	05/12/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	100	10 mg/L	05/12/09	05/13/09
Client ID :	**MW-11-3**					
Lab ID :	BMI09051301-03A	Alkalinity, Bicarbonate (As CaCO3)	170	10 mg/L	05/12/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/12/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	170	10 mg/L	05/12/09	05/13/09
Client ID :	**MW-11-2**					
Lab ID :	BMI09051301-04A	Alkalinity, Bicarbonate (As CaCO3)	180	10 mg/L	05/12/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/12/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	180	10 mg/L	05/12/09	05/13/09
Client ID :	**MW-11-1**					
Lab ID :	BMI09051301-05A	Alkalinity, Bicarbonate (As CaCO3)	210	10 mg/L	05/12/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/12/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	210	10 mg/L	05/12/09	05/13/09
Client ID :	**EB-12-05/12/09**					
Lab ID :	BMI09051301-06A	Alkalinity, Bicarbonate (As CaCO3)	ND	10 mg/L	05/12/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/12/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	ND	10 mg/L	05/12/09	05/13/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

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5/27/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/13/09

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-11-5**					
Lab ID :	BMI09051301-01A	Sodium (Na)	48	0.50 mg/L	05/12/09	05/18/09
		Magnesium (Mg)	2.1	0.50 mg/L	05/12/09	05/18/09
		Potassium (K)	1.1	0.50 mg/L	05/12/09	05/18/09
		Calcium (Ca)	21	0.50 mg/L	05/12/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/12/09	05/18/09
		Iron (Fe)	0.39	0.10 mg/L	05/12/09	05/18/09
		Arsenic (As)	0.0051	0.0020 mg/L	05/12/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/12/09	05/18/09
Client ID :	**MW-11-4**					
Lab ID :	BMI09051301-02A	Sodium (Na)	26	0.50 mg/L	05/12/09	05/18/09
		Magnesium (Mg)	7.8	0.50 mg/L	05/12/09	05/18/09
		Potassium (K)	1.8	0.50 mg/L	05/12/09	05/18/09
		Calcium (Ca)	9.0	0.50 mg/L	05/12/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/12/09	05/18/09
		Iron (Fe)	ND	0.10 mg/L	05/12/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/12/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/12/09	05/18/09
Client ID :	**MW-11-3**					
Lab ID :	BMI09051301-03A	Sodium (Na)	27	0.50 mg/L	05/12/09	05/18/09
		Magnesium (Mg)	14	0.50 mg/L	05/12/09	05/18/09
		Potassium (K)	2.1	0.50 mg/L	05/12/09	05/18/09
		Calcium (Ca)	45	0.50 mg/L	05/12/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/12/09	05/18/09
		Iron (Fe)	0.46	0.10 mg/L	05/12/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/12/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/12/09	05/18/09
Client ID :	**MW-11-2**					
Lab ID :	BMI09051301-04A	Sodium (Na)	24	0.50 mg/L	05/12/09	05/18/09
		Magnesium (Mg)	18	0.50 mg/L	05/12/09	05/18/09
		Potassium (K)	3.2	0.50 mg/L	05/12/09	05/18/09
		Calcium (Ca)	46	0.50 mg/L	05/12/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/12/09	05/18/09
		Iron (Fe)	0.60	0.10 mg/L	05/12/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/12/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/12/09	05/18/09

Alpha Analytical, Inc.

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Client ID :	**MW-11-1**					
Lab ID :	BMI09051301-05A	Sodium (Na)	29	0.50 mg/L	05/12/09	05/18/09
		Magnesium (Mg)	22	0.50 mg/L	05/12/09	05/18/09
		Potassium (K)	3.5	0.50 mg/L	05/12/09	05/18/09
		Calcium (Ca)	62	0.50 mg/L	05/12/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/12/09	05/18/09
		Iron (Fe)	0.52	0.10 mg/L	05/12/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/12/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/12/09	05/18/09
Client ID :	**EB-12-05/12/09**					
Lab ID :	BMI09051301-06A	Sodium (Na)	ND	0.50 mg/L	05/12/09	05/18/09
		Magnesium (Mg)	ND	0.50 mg/L	05/12/09	05/18/09
		Potassium (K)	ND	0.50 mg/L	05/12/09	05/18/09
		Calcium (Ca)	ND	0.50 mg/L	05/12/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/12/09	05/18/09
		Iron (Fe)	ND	0.10 mg/L	05/12/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/12/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/12/09	05/18/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

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Q

5/27/09

Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/13/09

Job#: G005862/JPL Groundwater Monitoring

pH (Range 1.7 to 12.4)
EPA Method 150.2 / SM4500HB / SW9040C

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-11-5**	pH	8.0	1.7 pH Units	05/12/09 08:37	05/13/09 14:26
Lab ID : BMI09051301-01A	pH - Temperature	20	1.0 °C	05/12/09 08:37	05/13/09 14:26
Client ID : **MW-11-4**	pH	9.1	1.7 pH Units	05/12/09 09:29	05/13/09 14:28
Lab ID : BMI09051301-02A	pH - Temperature	21	1.0 °C	05/12/09 09:29	05/13/09 14:28
Client ID : **MW-11-3**	pH	8.0	1.7 pH Units	05/12/09 10:26	05/13/09 14:32
Lab ID : BMI09051301-03A	pH - Temperature	20	1.0 °C	05/12/09 10:26	05/13/09 14:32
Client ID : **MW-11-2**	pH	8.2	1.7 pH Units	05/12/09 10:54	05/13/09 14:35
Lab ID : BMI09051301-04A	pH - Temperature	20	1.0 °C	05/12/09 10:54	05/13/09 14:35
Client ID : **MW-11-1**	pH	7.7	1.7 pH Units	05/12/09 11:32	05/13/09 14:37
Lab ID : BMI09051301-05A	pH - Temperature	20	1.0 °C	05/12/09 11:32	05/13/09 14:37
Client ID : **EB-12-05/12/09**	pH	6.2	1.7 pH Units	05/12/09 11:17	05/13/09 14:40
Lab ID : BMI09051301-06A	pH - Temperature	20	1.0 °C	05/12/09 11:17	05/13/09 14:40

The EPA has established an analytical holding time of 15 minutes for this method as documented in the Methods Update Rule, Federal Register, Vol 72, No 47, March 2007. This holding time will always be exceeded, unless samples are analyzed in the field.

The laboratory performed this analysis in the shortest practical holding time after sample receipt.

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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5/27/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/13/09

Job#: G005862/JPL Groundwater Monitoring

Total Dissolved Solids (TDS)
SM2540C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-11-5**					
Lab ID :	BMI09051301-01A	Solids, Total Dissolved (TDS)	190	10 mg/L	05/12/09	05/19/09
Client ID :	**MW-11-4**					
Lab ID :	BMI09051301-02A	Solids, Total Dissolved (TDS)	130	10 mg/L	05/12/09	05/19/09
Client ID :	**MW-11-3**					
Lab ID :	BMI09051301-03A	Solids, Total Dissolved (TDS)	240	10 mg/L	05/12/09	05/19/09
Client ID :	**MW-11-2**					
Lab ID :	BMI09051301-04A	Solids, Total Dissolved (TDS)	260	10 mg/L	05/12/09	05/19/09
Client ID :	**MW-11-1**					
Lab ID :	BMI09051301-05A	Solids, Total Dissolved (TDS)	340	10 mg/L	05/12/09	05/19/09
Client ID :	**EB-12-05/12/09**					
Lab ID :	BMI09051301-06A	Solids, Total Dissolved (TDS)	ND	10 mg/L	05/12/09	05/19/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/27/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-11-5**						
Lab ID :	BMI09051301-01A	Sulfur dioxide	18	2.0 µg/L	05/13/09	05/12/09	05/18/09
Client ID :	**MW-11-4**						
Lab ID :	BMI09051301-02A	Sulfur dioxide	20	2.0 µg/L	05/13/09	05/12/09	05/18/09
Client ID :	**MW-11-3**						
Lab ID :	BMI09051301-03A	Sulfur dioxide	21	2.0 µg/L	05/13/09	05/12/09	05/18/09
Client ID :	**MW-11-2**						
Lab ID :	BMI09051301-04A	Sulfur dioxide	20	2.0 µg/L	05/13/09	05/12/09	05/18/09
Client ID :	**MW-11-1**						
Lab ID :	BMI09051301-05A	Sulfur dioxide	14	2.0 µg/L	05/13/09	05/12/09	05/18/09
Client ID :	**EB-12-05/12/09**						
Lab ID :	BMI09051301-06A	* * * None Found * * *	ND	2.0 µg/L	05/13/09	05/12/09	05/18/09
Client ID :	**TB-12-05/12/09**						
Lab ID :	BMI09051301-07A	* * * None Found * * *	ND	2.0 µg/L	05/13/09	05/12/09	05/18/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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5/27/09
Report Date

Page 1 of 1

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051301-01A
Client I.D. Number: MW-11-5

Sampled: 05/12/09
Received: 05/13/09
Analyzed: 05/18/09

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	2.0	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	2.0	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	2.0	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	2.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	3.0	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	2.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	2.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	2.0	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	98	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	2.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/27/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051301-02A
Client I.D. Number: MW-11-4

Sampled: 05/12/09
Received: 05/13/09
Analyzed: 05/18/09

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	2.0	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	2.0	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	2.0	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	2.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	3.0	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	2.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	2.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	2.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	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	2.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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5/27/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051301-03A
Client I.D. Number: MW-11-3

Sampled: 05/12/09
Received: 05/13/09
Analyzed: 05/18/09

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	2.0	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	2.0	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	2.0	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	2.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	3.0	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	2.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	2.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	2.0	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	100	(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	2.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/27/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051301-04A
Client I.D. Number: MW-11-2

Sampled: 05/12/09
Received: 05/13/09
Analyzed: 05/18/09

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	2.0	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	2.0	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	2.0	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	2.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	3.0	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	2.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	2.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	2.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	112	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	97	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	2.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

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5/27/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051301-05A
Client I.D. Number: MW-11-1

Sampled: 05/12/09
Received: 05/13/09
Analyzed: 05/18/09

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	2.0	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	2.0	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	2.0	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	2.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	3.0	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	2.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	2.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	2.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	115	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	91	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	2.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/27/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051301-06A
Client I.D. Number: EB-12-05/12/09

Sampled: 05/12/09
Received: 05/13/09
Analyzed: 05/18/09

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	2.0	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	2.0	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	2.0	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	2.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	3.0	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	2.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	2.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	2.0	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	99	(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	2.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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5/27/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051301-07A
Client I.D. Number: TB-12-05/12/09

Sampled: 05/12/09
Received: 05/13/09
Analyzed: 05/18/09

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	2.0	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	2.0	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	2.0	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	2.0	µg/L
10	trans-1,2-Dichloroethene	ND	0.50	µg/L	45	Isopropylbenzene	ND	0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND	0.50	µg/L	46	Bromobenzene	ND	0.50	µg/L
12	1,1-Dichloroethane	ND	0.50	µg/L	47	n-Propylbenzene	ND	0.50	µg/L
13	2-Butanone (MEK)	ND	10	µg/L	48	4-Chlorotoluene	ND	0.50	µg/L
14	cis-1,2-Dichloroethene	ND	0.50	µg/L	49	2-Chlorotoluene	ND	0.50	µg/L
15	Bromochloromethane	ND	0.50	µg/L	50	1,3,5-Trimethylbenzene	ND	0.50	µg/L
16	Chloroform	ND	0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND	0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	3.0	µg/L
25	Trichloroethene	ND	0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	2.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61	Naphthalene	ND	2.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62	Hexachlorobutadiene	ND	2.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	2.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(70-130)	%REC
30	1,1,2-Trichloroethane	ND	0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND	0.50	µg/L	66	Surr: 4-Bromofluorobenzene	96	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L					
33	Dibromochloromethane	ND	0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND	2.0	µg/L					
35	Tetrachloroethene	ND	0.50	µg/L					

ND = Not Detected

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5/27/09
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI09051301 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09051301-01A	MW-11-5	Aqueous	2
09051301-02A	MW-11-4	Aqueous	2
09051301-03A	MW-11-3	Aqueous	2
09051301-04A	MW-11-2	Aqueous	2
09051301-05A	MW-11-1	Aqueous	2
09051301-06A	EB-12-05/12/09	Aqueous	2
09051301-07A	TB-12-05/12/09	Aqueous	2

5/27/09

Report Date

Alpha Analytical, Inc.

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

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

Date: *22-May-09*

QC Summary Report

Work Order: 09051301

Method Blank

Type **MBLK** Test Code: **SM2540C**

File ID: Batch ID: **W0517DS** Analysis Date: **05/19/2009 00:00**

Sample ID: **MBLK-W0517DS** Units : **mg/L** Run ID: **WETLAB_090517E** Prep Date: **05/19/2009**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Solids, Total Dissolved (TDS)	ND	10								

Laboratory Control Spike

Type **LCS** Test Code: **SM2540C**

File ID: Batch ID: **W0517DS** Analysis Date: **05/19/2009 00:00**

Sample ID: **LCS-W0517DS** Units : **mg/L** Run ID: **WETLAB_090517E** Prep Date: **05/19/2009**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Solids, Total Dissolved (TDS)	193	10	200		97	80	120			

Comments:

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

Alpha Analytical, Inc.

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

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

Date: 26-May-09

QC Summary Report

Work Order: 09051301

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

File ID: **09051807.D** Batch ID: **MS15W0518M** Analysis Date: **05/18/2009 10:33**

Sample ID: **MBLK MS15W0518M** Units : **µg/L** Run ID: **MSD_15_090518B** Prep Date: **05/18/2009**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	ND	0.5								
Chloromethane	ND	1								
Vinyl chloride	ND	0.5								
Chloroethane	ND	0.5								
Bromomethane	ND	1								
Trichlorofluoromethane	ND	0.5								
1,1-Dichloroethene	ND	0.5								
Dichloromethane	ND	1								
Freon-113	ND	0.5								
trans-1,2-Dichloroethene	ND	0.5								
Methyl tert-butyl ether (MTBE)	ND	0.5								
1,1-Dichloroethane	ND	0.5								
2-Butanone (MEK)	ND	10								
cis-1,2-Dichloroethene	ND	0.5								
Bromochloromethane	ND	0.5								
Chloroform	ND	0.5								
2,2-Dichloropropane	ND	0.5								
1,2-Dichloroethane	ND	0.5								
1,1,1-Trichloroethane	ND	0.5								
1,1-Dichloropropene	ND	0.5								
Carbon tetrachloride	ND	0.5								
Benzene	ND	0.5								
Dibromomethane	ND	0.5								
1,2-Dichloropropane	ND	0.5								
Trichloroethene	ND	0.5								
Bromodichloromethane	ND	0.5								
4-Methyl-2-pentanone (MIBK)	ND	2.5								
cis-1,3-Dichloropropene	ND	0.5								
trans-1,3-Dichloropropene	ND	0.5								
1,1,2-Trichloroethane	ND	0.5								
Toluene	ND	0.5								
1,3-Dichloropropane	ND	0.5								
Dibromochloromethane	ND	0.5								
1,2-Dibromoethane (EDB)	ND	1								
Tetrachloroethene	ND	0.5								
1,1,1,2-Tetrachloroethane	ND	0.5								
Chlorobenzene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
Bromoform	ND	0.5								
Styrene	ND	0.5								
o-Xylene	ND	0.5								
1,1,2,2-Tetrachloroethane	ND	0.5								
1,2,3-Trichloropropane	ND	1								
Isopropylbenzene	ND	0.5								
Bromobenzene	ND	0.5								
n-Propylbenzene	ND	0.5								
4-Chlorotoluene	ND	0.5								
2-Chlorotoluene	ND	0.5								
1,3,5-Trimethylbenzene	ND	0.5								
tert-Butylbenzene	ND	0.5								
1,2,4-Trimethylbenzene	ND	0.5								
sec-Butylbenzene	ND	0.5								
1,3-Dichlorobenzene	ND	0.5								
1,4-Dichlorobenzene	ND	0.5								
4-Isopropyltoluene	ND	0.5								
1,2-Dichlorobenzene	ND	0.5								
n-Butylbenzene	ND	0.5								
1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5								
1,2,4-Trichlorobenzene	ND	1								
Naphthalene	ND	1								
Hexachlorobutadiene	ND	1								
1,2,3-Trichlorobenzene	ND	1								
Surr: 1,2-Dichloroethane-d4	9.16		10		92	70	130			
Surr: Toluene-d8	10.3		10		103	70	130			

Alpha Analytical, Inc.

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

Date: 26-May-09

QC Summary Report

Work Order: 09051301

Surr: 4-Bromofluorobenzene	9.42		10	94	70	130			

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

File ID: **09051804.D** Batch ID: **MS15W0518M** Analysis Date: **05/18/2009 09:17**

Sample ID: **LCS MS15W0518M** Units : **µg/L** Run ID: **MSD_15_090518B** Prep Date: **05/18/2009**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	12.7	1	10		127	70	130			
Chloromethane	9.84	2	10		98	70	130			
Vinyl chloride	10.9	1	10		109	70	130			
Chloroethane	13.8	1	10		117	70	130			
Bromomethane	8.74	2	10		87	70	130			
Trichlorofluoromethane	12.9	1	10		129	70	130			
1,1-Dichloroethene	11.3	1	10		113	70	130			
Dichloromethane	11.7	2	10		117	70	130			
trans-1,2-Dichloroethene	10.6	1	10		106	70	130			
Methyl tert-butyl ether (MTBE)	10.3	0.5	10		103	70	130			
1,1-Dichloroethane	10.7	1	10		107	70	130			
cis-1,2-Dichloroethene	10.6	1	10		106	70	130			
Bromochloromethane	11.3	1	10		113	70	130			
Chloroform	10.6	1	10		106	70	130			
2,2-Dichloropropane	10.1	1	10		101	70	130			
1,2-Dichloroethane	11.7	1	10		117	70	130			
1,1,1-Trichloroethane	11.4	1	10		114	70	130			
1,1-Dichloropropene	11	1	10		110	70	130			
Carbon tetrachloride	10.2	1	10		102	70	130			
Benzene	9.67	0.5	10		97	70	130			
Dibromomethane	11.8	1	10		118	70	130			
1,2-Dichloropropane	9.96	1	10		99.6	70	130			
Trichloroethene	10.6	1	10		106	70	130			
Bromodichloromethane	10.7	1	10		107	70	130			
cis-1,3-Dichloropropene	9.56	1	10		96	70	130			
trans-1,3-Dichloropropene	9.49	1	10		95	70	130			
1,1,2-Trichloroethane	10.1	1	10		101	70	130			
Toluene	9.18	0.5	10		92	70	130			
1,3-Dichloropropane	9.84	1	10		98	70	130			
Dibromochloromethane	10.2	1	10		102	70	130			
1,2-Dibromoethane (EDB)	19.2	2	20		96	70	130			
Tetrachloroethene	10.2	1	10		102	70	130			
1,1,1,2-Tetrachloroethane	9.13	1	10		91	70	130			
Chlorobenzene	8.78	1	10		88	70	130			
Ethylbenzene	8.39	0.5	10		84	70	130			
m,p-Xylene	8.88	0.5	10		89	70	130			
Bromoform	9.84	1	10		98	70	130			
Styrene	8.42	1	10		84	70	130			
o-Xylene	9.36	0.5	10		94	70	130			
1,1,2,2-Tetrachloroethane	9.42	1	10		94	70	130			
1,2,3-Trichloropropane	20.2	2	20		101	70	130			
Isopropylbenzene	7.8	1	10		78	70	130			
Bromobenzene	8.73	1	10		87	70	130			
n-Propylbenzene	8.41	1	10		84	70	130			
4-Chlorotoluene	8.86	1	10		89	70	130			
2-Chlorotoluene	8.76	1	10		88	70	130			
1,3,5-Trimethylbenzene	9.31	1	10		93	70	130			
tert-Butylbenzene	8.61	1	10		86	70	130			
1,2,4-Trimethylbenzene	9.54	1	10		95	70	130			
sec-Butylbenzene	8.65	1	10		87	70	130			
1,3-Dichlorobenzene	9.08	1	10		91	70	130			
1,4-Dichlorobenzene	9.16	1	10		92	70	130			
4-Isopropyltoluene	9.05	1	10		91	70	130			
1,2-Dichlorobenzene	9.54	1	10		95	70	130			
n-Butylbenzene	9.02	1	10		90	70	130			
1,2-Dibromo-3-chloropropane (DBCP)	46.5	3	50		93	70	130			
1,2,4-Trichlorobenzene	11.9	2	10		119	70	130			
Naphthalene	11.4	2	10		114	70	130			
Hexachlorobutadiene	20.9	2	20		104	70	130			
1,2,3-Trichlorobenzene	12.3	2	10		123	70	130			
Surr: 1,2-Dichloroethane-d4	8.91		10		89	70	130			
Surr: Toluene-d8	9.75		10		98	70	130			
Surr: 4-Bromofluorobenzene	9.12		10		91	70	130			

Alpha Analytical, Inc.

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

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

Date: 26-May-09

QC Summary Report

Work Order: 09051301

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

File ID: **09051808.D** Batch ID: **MS15W0518M** Analysis Date: **05/18/2009 10:55**

Sample ID: **09051301-02AMS** Units : **µg/L** Run ID: **MSD_15_090518B** Prep Date: **05/18/2009**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	54.1	2.5	50	0	108	13	167			
Chloromethane	40.8	10	50	0	82	28	145			
Vinyl chloride	47.4	2.5	50	0	95	43	134			
Chloroethane	57.5	2.5	50	0	115	39	154			
Bromomethane	33.6	10	50	0	67	19	176			
Trichlorofluoromethane	59.3	2.5	50	0	119	34	160			
1,1-Dichloroethene	49.1	2.5	50	0	98	60	130			
Dichloromethane	52.6	10	50	0	105	68	130			
trans-1,2-Dichloroethene	47	2.5	50	0	94	63	130			
Methyl tert-butyl ether (MTBE)	48.7	1.3	50	0	97	56	141			
1,1-Dichloroethane	48	2.5	50	0	96	61	130			
cis-1,2-Dichloroethene	48.3	2.5	50	0	97	70	130			
Bromochloromethane	52.5	2.5	50	0	105	70	130			
Chloroform	47.8	2.5	50	0	96	67	130			
2,2-Dichloropropane	44.5	2.5	50	0	89	30	152			
1,2-Dichloroethane	55.6	2.5	50	0	111	60	135			
1,1,1-Trichloroethane	50.8	2.5	50	0	102	59	137			
1,1-Dichloropropene	48.9	2.5	50	0	98	63	130			
Carbon tetrachloride	47.7	2.5	50	0	95	50	147			
Benzene	43.3	1.3	50	0	87	67	130			
Dibromomethane	53.3	2.5	50	0	107	69	133			
1,2-Dichloropropane	45.5	2.5	50	0	91	69	130			
Trichloroethene	46.9	2.5	50	0	94	69	130			
Bromodichloromethane	49.3	2.5	50	0	99	66	134			
cis-1,3-Dichloropropene	40.2	2.5	50	0	80	63	130			
trans-1,3-Dichloropropene	41.8	2.5	50	0	84	66	131			
1,1,2-Trichloroethane	44.8	2.5	50	0	90	68	130			
Toluene	40	1.3	50	0	80	66	130			
1,3-Dichloropropane	45.7	2.5	50	0	91	70	130			
Dibromochloromethane	48.3	2.5	50	0	97	70	130			
1,2-Dibromoethane (EDB)	87.5	10	100	0	88	70	130			
Tetrachloroethene	44.4	2.5	50	0	89	61	134			
1,1,1,2-Tetrachloroethane	42.6	2.5	50	0	85	70	130			
Chlorobenzene	39.7	2.5	50	0	79	70	130			
Ethylbenzene	36.9	1.3	50	0	74	68	130			
m,p-Xylene	37.7	1.3	50	0	75	64	130			
Bromoform	46.8	2.5	50	0	94	64	138			
Styrene	38.9	2.5	50	0	78	69	130			
o-Xylene	41.4	1.3	50	0	83	70	130			
1,1,2,2-Tetrachloroethane	46.1	2.5	50	0	92	65	131			
1,2,3-Trichloropropane	98.3	10	100	0	98	70	130			
Isopropylbenzene	34.6	2.5	50	0	69	64	138			
Bromobenzene	39.5	2.5	50	0	79	70	130			
n-Propylbenzene	36.6	2.5	50	0	73	66	132			
4-Chlorotoluene	39.7	2.5	50	0	79	70	130			
2-Chlorotoluene	39.2	2.5	50	0	78	70	130			
1,3,5-Trimethylbenzene	41.2	2.5	50	0	82	66	136			
tert-Butylbenzene	38.7	2.5	50	0	77	65	137			
1,2,4-Trimethylbenzene	41.5	2.5	50	0	83	65	137			
sec-Butylbenzene	38.4	2.5	50	0	77	66	134			
1,3-Dichlorobenzene	41.7	2.5	50	0	83	70	130			
1,4-Dichlorobenzene	41.8	2.5	50	0	84	70	130			
4-Isopropyltoluene	40.7	2.5	50	0	81	66	137			
1,2-Dichlorobenzene	44.5	2.5	50	0	89	70	130			
n-Butylbenzene	40.3	2.5	50	0	81	60	142			
1,2-Dibromo-3-chloropropane (DBCP)	218	15	250	0	87	67	130			
1,2,4-Trichlorobenzene	54	10	50	0	108	61	137			
Naphthalene	51.7	10	50	0	103	40	167			
Hexachlorobutadiene	96.5	10	100	0	96	61	130			
1,2,3-Trichlorobenzene	56.4	10	50	0	113	51	144			
Surr: 1,2-Dichloroethane-d4	44.7		50		89	70	130			
Surr: Toluene-d8	48.8		50		98	70	130			
Surr: 4-Bromofluorobenzene	45.2		50		90	70	130			

Alpha Analytical, Inc.

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

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

Date: 26-May-09

QC Summary Report

Work Order: 09051301

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

File ID: **09051809.D** Batch ID: **MS15W0518M** Analysis Date: **05/18/2009 11:17**

Sample ID: **09051301-02AMSD** Units : **µg/L** Run ID: **MSD_15_090518B** Prep Date: **05/18/2009**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Dichlorodifluoromethane	56.6	2.5	50	0	113	13	167	54.12	4.4(20)	
Chloromethane	45.9	10	50	0	92	28	145	40.76	11.9(20)	
Vinyl chloride	51.7	2.5	50	0	103	43	134	47.38	8.7(20)	
Chloroethane	55.6	2.5	50	0	111	39	154	57.5	3.4(20)	
Bromomethane	39.7	10	50	0	79	19	176	33.59	16.6(20)	
Trichlorofluoromethane	61.2	2.5	50	0	122	34	160	59.27	3.2(20)	
1,1-Dichloroethene	53.6	2.5	50	0	107	60	130	49.11	8.8(20)	
Dichloromethane	56.9	10	50	0	114	68	130	52.59	7.9(20)	
trans-1,2-Dichloroethene	50.5	2.5	50	0	101	63	130	46.99	7.1(20)	
Methyl tert-butyl ether (MTBE)	51.8	1.3	50	0	104	56	141	48.65	6.2(20)	
1,1-Dichloroethane	51.5	2.5	50	0	103	61	130	48.02	6.9(20)	
cis-1,2-Dichloroethene	52.8	2.5	50	0	106	70	130	48.3	9.0(20)	
Bromochloromethane	56.6	2.5	50	0	113	70	130	52.46	7.5(20)	
Chloroform	51.1	2.5	50	0	102	67	130	47.84	6.7(20)	
2,2-Dichloropropane	47.4	2.5	50	0	95	30	152	44.52	6.4(20)	
1,2-Dichloroethane	57.8	2.5	50	0	116	60	135	55.57	3.9(20)	
1,1,1-Trichloroethane	54.4	2.5	50	0	109	59	137	50.78	6.9(20)	
1,1-Dichloropropene	52	2.5	50	0	104	63	130	48.93	6.0(20)	
Carbon tetrachloride	51	2.5	50	0	102	50	147	47.65	6.8(20)	
Benzene	46.7	1.3	50	0	93	67	130	43.27	7.7(20)	
Dibromomethane	56.2	2.5	50	0	112	69	133	53.28	5.4(20)	
1,2-Dichloropropane	49.1	2.5	50	0	98	69	130	45.51	7.6(20)	
Trichloroethene	50.6	2.5	50	0	101	69	130	46.85	7.7(20)	
Bromodichloromethane	52.7	2.5	50	0	105	66	134	49.26	6.8(20)	
cis-1,3-Dichloropropene	43.5	2.5	50	0	87	63	130	40.24	7.9(20)	
trans-1,3-Dichloropropene	43.8	2.5	50	0	88	66	131	41.81	4.7(20)	
1,1,2-Trichloroethane	48	2.5	50	0	96	68	130	44.82	6.9(20)	
Toluene	42.5	1.3	50	0	85	66	130	39.97	6.1(20)	
1,3-Dichloropropane	47.1	2.5	50	0	94	70	130	45.69	3.0(20)	
Dibromochloromethane	50.2	2.5	50	0	100	70	130	48.3	3.9(20)	
1,2-Dibromoethane (EDB)	91.1	10	100	0	91	70	130	87.5	4.1(20)	
Tetrachloroethene	47.6	2.5	50	0	95	61	134	44.44	6.8(20)	
1,1,1,2-Tetrachloroethane	44.9	2.5	50	0	90	70	130	42.6	5.2(20)	
Chlorobenzene	42.2	2.5	50	0	84	70	130	39.74	6.1(20)	
Ethylbenzene	39.9	1.3	50	0	80	68	130	36.93	7.6(20)	
m,p-Xylene	40.3	1.3	50	0	81	64	130	37.66	6.8(20)	
Bromoform	49.9	2.5	50	0	99.9	64	138	46.78	6.5(20)	
Styrene	41.9	2.5	50	0	84	69	130	38.91	7.3(20)	
o-Xylene	45	1.3	50	0	90	70	130	41.35	8.5(20)	
1,1,2,2-Tetrachloroethane	49	2.5	50	0	98	65	131	46.06	6.2(20)	
1,2,3-Trichloropropane	101	10	100	0	101	70	130	98.29	2.6(20)	
Isopropylbenzene	38.4	2.5	50	0	77	64	138	34.64	10.2(20)	
Bromobenzene	42.1	2.5	50	0	84	70	130	39.49	6.4(20)	
n-Propylbenzene	40	2.5	50	0	80	66	132	36.6	8.9(20)	
4-Chlorotoluene	43.2	2.5	50	0	86	70	130	39.66	8.5(20)	
2-Chlorotoluene	42.8	2.5	50	0	86	70	130	39.17	9.0(20)	
1,3,5-Trimethylbenzene	43.9	2.5	50	0	88	66	136	41.22	6.3(20)	
tert-Butylbenzene	42	2.5	50	0	84	65	137	38.74	8.2(20)	
1,2,4-Trimethylbenzene	44.8	2.5	50	0	90	65	137	41.54	7.5(20)	
sec-Butylbenzene	42.3	2.5	50	0	85	66	134	38.35	9.8(20)	
1,3-Dichlorobenzene	45.8	2.5	50	0	92	70	130	41.72	9.2(20)	
1,4-Dichlorobenzene	45.5	2.5	50	0	91	70	130	41.79	8.4(20)	
4-Isopropyltoluene	44.4	2.5	50	0	89	66	137	40.71	8.6(20)	
1,2-Dichlorobenzene	47.1	2.5	50	0	94	70	130	44.46	5.8(20)	
n-Butylbenzene	44	2.5	50	0	88	60	142	40.33	8.6(20)	
1,2-Dibromo-3-chloropropane (DBCP)	233	15	250	0	93	67	130	217.6	7.0(20)	
1,2,4-Trichlorobenzene	60.7	10	50	0	121	61	137	54	11.7(20)	
Naphthalene	57.5	10	50	0	115	40	167	51.69	10.6(20)	
Hexachlorobutadiene	106	10	100	0	106	61	130	96.47	9.8(20)	
1,2,3-Trichlorobenzene	64.6	10	50	0	129	51	144	56.43	13.4(20)	
Surr: 1,2-Dichloroethane-d4	44.7		50		89	70	130			
Surr: Toluene-d8	49.2		50		98	70	130			
Surr: 4-Bromofluorobenzene	46.1		50		92	70	130			

Alpha Analytical, Inc.

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

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

Date: *26-May-09*

QC Summary Report

Work Order: 09051301

Comments:

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

AMENDED

CA

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

WorkOrder : BMIS09051301

Report Due By : 5:00 PM On : 28-May-2009

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

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

EDD Required : **No**

Sampled by : Client

PO : 218013

Client's COC # : 25550 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	13-May-2009	**14-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09051301-01A	MW-11-5	AQ	05/12/09 08:37	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051301-02A	MW-11-4	AQ	05/12/09 09:29	10	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	MS/MSD
BMI09051301-03A	MW-11-3	AQ	05/12/09 10:26	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051301-04A	MW-11-2	AQ	05/12/09 10:54	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051301-05A	MW-11-1	AQ	05/12/09 11:32	5	0	10	NO2, NO3, SO4, Cl, Ortho - P	NO2, NO3, SO4, Cl, Ortho - P	NO2, NO3, SO4, Cl, Ortho - P	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	Level IV QC
BMI09051301-06A	EB-12-05/12/09	AQ	05/12/09 11:17	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051301-07A	TB-12-05/12/09	AQ	05/12/09 00:00	1	0	10									Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #2587 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Added ortho - P to sample -05A due to login error. EA :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5.14.09 1419

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA AMENDED

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

WorkOrder : BMIS09051301

Report Due By : 5:00 PM On : 28-May-2009

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

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

EDD Required : **No**

Sampled by : Client

PO : 218013

Client's COC # : 25550 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	13-May-2009	14-May-2009

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W						Sample Remarks
BMI09051301-01A	MW-11-5	AQ	05/12/09 08:37	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051301-02A	MW-11-4	AQ	05/12/09 09:29	10	0	10	VOC by 524 Criteria	VOC by 524 Criteria						MS/MSD
BMI09051301-03A	MW-11-3	AQ	05/12/09 10:26	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051301-04A	MW-11-2	AQ	05/12/09 10:54	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051301-05A	MW-11-1	AQ	05/12/09 11:32	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Level IV QC
BMI09051301-06A	EB-12-05/12/09	AQ	05/12/09 11:17	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051301-07A	TB-12-05/12/09	AQ	05/12/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #2587 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Added ortho - P to sample -05A due to login error. EA :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	5.14.09 1419

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051301

Report Due By : 5:00 PM On : 28-May-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25550 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	13-May-2009	**13-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09051301-01A	MW-11-5	AQ	05/12/09 08:37	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051301-02A	MW-11-4	AQ	05/12/09 09:29	10	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	MS/MSD
BMI09051301-03A	MW-11-3	AQ	05/12/09 10:26	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051301-04A	MW-11-2	AQ	05/12/09 10:54	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051301-05A	MW-11-1	AQ	05/12/09 11:32	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	Level IV QC
BMI09051301-06A	EB-12-05/12/09	AQ	05/12/09 11:17	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051301-07A	TB-12-05/12/09	AQ	05/12/09 00:00	1	0	10									Reno Trip Blank 3/16/09

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

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5-13-09 9:47

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051301

Report Due By : 5:00 PM On : 28-May-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25550 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	13-May-2009	**13-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W						Sample Remarks
BMI09051301-01A	MW-11-5	AQ	05/12/09 08:37	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051301-02A	MW-11-4	AQ	05/12/09 09:29	10	0	10	VOC by 524 Criteria	VOC by 524 Criteria						MS/MSD
BMI09051301-03A	MW-11-3	AQ	05/12/09 10:26	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051301-04A	MW-11-2	AQ	05/12/09 10:54	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051301-05A	MW-11-1	AQ	05/12/09 11:32	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Level IV QC
BMI09051301-06A	EB-12-05/12/09	AQ	05/12/09 11:17	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051301-07A	TB-12-05/12/09	AQ	05/12/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Reno Trip Blank 3/16/09

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

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5-13-09 9:47

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

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

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

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

25550

Page # 1 of 1

Client Name: DAVID CONNER
Address: 3490 OLD TOWN AVE, C-205
City, State, Zip: SAN DIEGO, CA 92110
P.O. # 218013
Job # 6005862
EMail Address
Phone # 619-726-7311
Fax #

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Report Attention / Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC's (524.2)	TOTAL CA. (200.8)	GEN CHEM. (Na, K, Ca, Mg, Fe) (200.7)	Cl04 - (314.0)	GEN CHEM (300.0, 310.1, 160.1, 150.1)	O-PHOSPHATE (300.0)		REMARKS
0837	5/12/09	AQ	BMI0905130 1-01	MW-11-5			5	X	X	X	X	X			
0929			-02	MW-11-4			10	X	X	X	X	X			MS/MSD
1026			-03	MW-11-3			5	X	X	X	X	X			
1054			-04	MW-11-2			|	X	X	X	X	X			
1132			-05	MW-11-1			|	X	X	X	X	X	X		QC LEVEL IV
1117			-06	EB-12-05/12/09			5	X	X	X	X	X			EQUIPMENT BLANK
—			-07	TB-12-05/12/09			1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BRADDON	WSI/GAT	5/12/09	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	5.13.09	9:47
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *21-May-09*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI09051205 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
09051205-01A	MW-19-5	Aqueous
09051205-02A	MW-19-4	Aqueous
09051205-03A	MW-19-3	Aqueous
09051205-04A	MW-19-2	Aqueous
09051205-05A	MW-19-1	Aqueous
09051205-06A	DUPE-08-2Q09	Aqueous
09051205-07A	EB-11-05/11/09	Aqueous
09051205-08A	TB-11-05/11/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
09051205-01A	EPA Method 314.0	Perchlorate
09051205-02A	EPA Method 314.0	Perchlorate
09051205-03A	EPA Method 314.0	Perchlorate
09051205-04A	EPA Method 314.0	Perchlorate
09051205-05A	EPA Method 314.0	Perchlorate
09051205-06A	EPA Method 314.0	Perchlorate

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/12/09

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-19-5**	Nitrite (NO2) - N	ND	0.25 mg/L	05/11/09 08:42	05/12/09 13:24
Lab ID : BMI09051205-01A	Nitrate (NO3) - N	8.1	0.25 mg/L	05/11/09 08:42	05/12/09 13:24
Client ID : **MW-19-4**	Nitrite (NO2) - N	ND	0.25 mg/L	05/11/09 00:00	05/12/09 13:42
Lab ID : BMI09051205-02A	Nitrate (NO3) - N	9.1	0.25 mg/L	05/11/09 00:00	05/12/09 13:42
Client ID : **MW-19-3**	Nitrite (NO2) - N	ND	0.25 mg/L	05/11/09 00:00	05/12/09 14:00
Lab ID : BMI09051205-03A	Nitrate (NO3) - N	11	0.25 mg/L	05/11/09 00:00	05/12/09 14:00
Client ID : **MW-19-2**	Nitrite (NO2) - N	ND	0.25 mg/L	05/11/09 00:00	05/12/09 14:19
Lab ID : BMI09051205-04A	Nitrate (NO3) - N	16	1.3 mg/L	05/11/09 00:00	05/12/09 16:10
Client ID : **MW-19-1**	Nitrite (NO2) - N	ND	0.25 mg/L	05/11/09 00:00	05/12/09 14:38
Lab ID : BMI09051205-05A	Nitrate (NO3) - N	8.3	0.25 mg/L	05/11/09 00:00	05/12/09 14:38
Client ID : **DUPE-08-2Q09**	Nitrite (NO2) - N	ND	0.25 mg/L	05/11/09 00:00	05/12/09 14:56
Lab ID : BMI09051205-06A	Nitrate (NO3) - N	9.1	0.25 mg/L	05/11/09 00:00	05/12/09 14:56
Client ID : **EB-11-05/11/09**	Nitrite (NO2) - N	ND	0.25 mg/L	05/11/09 11:07	05/12/09 15:15
Lab ID : BMI09051205-07A	Nitrate (NO3) - N	ND	0.25 mg/L	05/11/09 11:07	05/12/09 15:15

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/26/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/12/09

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**					
Lab ID :	BMI09051205-01A	Chloride	64	2.5 mg/L	05/11/09	05/12/09
		Sulfate (SO4)	78	0.50 mg/L	05/11/09	05/12/09
Client ID :	**MW-19-4**					
Lab ID :	BMI09051205-02A	Chloride	47	2.5 mg/L	05/11/09	05/12/09
		Sulfate (SO4)	62	0.50 mg/L	05/11/09	05/12/09
Client ID :	**MW-19-3**					
Lab ID :	BMI09051205-03A	Chloride	47	0.50 mg/L	05/11/09	05/12/09
		Sulfate (SO4)	44	0.50 mg/L	05/11/09	05/12/09
Client ID :	**MW-19-2**					
Lab ID :	BMI09051205-04A	Chloride	95	2.5 mg/L	05/11/09	05/12/09
		Sulfate (SO4)	140	2.5 mg/L	05/11/09	05/12/09
Client ID :	**MW-19-1**					
Lab ID :	BMI09051205-05A	Chloride	51	2.5 mg/L	05/11/09	05/12/09
		Sulfate (SO4)	59	0.50 mg/L	05/11/09	05/12/09
Client ID :	**DUPE-08-2Q09**					
Lab ID :	BMI09051205-06A	Chloride	47	2.5 mg/L	05/11/09	05/12/09
		Sulfate (SO4)	62	0.50 mg/L	05/11/09	05/12/09
Client ID :	**EB-11-05/11/09**					
Lab ID :	BMI09051205-07A	Chloride	ND	0.50 mg/L	05/11/09	05/12/09
		Sulfate (SO4)	ND	0.50 mg/L	05/11/09	05/12/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

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5/26/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/12/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**					
Lab ID :	BMI09051205-01A	Perchlorate	2.81	1.00 µg/L	05/11/09	05/13/09
Client ID :	**MW-19-4**					
Lab ID :	BMI09051205-02A	Perchlorate	3.08	1.00 µg/L	05/11/09	05/13/09
Client ID :	**MW-19-3**					
Lab ID :	BMI09051205-03A	Perchlorate	2.89	1.00 µg/L	05/11/09	05/13/09
Client ID :	**MW-19-2**					
Lab ID :	BMI09051205-04A	Perchlorate	5.05	1.00 µg/L	05/11/09	05/13/09
Client ID :	**MW-19-1**					
Lab ID :	BMI09051205-05A	Perchlorate	7.07	1.00 µg/L	05/11/09	05/13/09
Client ID :	**DUPE-08-2Q09**					
Lab ID :	BMI09051205-06A	Perchlorate	2.85	1.00 µg/L	05/11/09	05/13/09
Client ID :	**EB-11-05/11/09**					
Lab ID :	BMI09051205-07A	Perchlorate	ND	1.00 µg/L	05/11/09	05/13/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/26/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/12/09

Job#: G005862/JPL Groundwater Monitoring

Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**					
Lab ID :	BMI09051205-01A	Alkalinity, Bicarbonate (As CaCO3)	200	10 mg/L	05/11/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/11/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	200	10 mg/L	05/11/09	05/13/09
Client ID :	**MW-19-4**					
Lab ID :	BMI09051205-02A	Alkalinity, Bicarbonate (As CaCO3)	160	10 mg/L	05/11/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/11/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	160	10 mg/L	05/11/09	05/13/09
Client ID :	**MW-19-3**					
Lab ID :	BMI09051205-03A	Alkalinity, Bicarbonate (As CaCO3)	170	10 mg/L	05/11/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/11/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	170	10 mg/L	05/11/09	05/13/09
Client ID :	**MW-19-2**					
Lab ID :	BMI09051205-04A	Alkalinity, Bicarbonate (As CaCO3)	210	10 mg/L	05/11/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/11/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	210	10 mg/L	05/11/09	05/13/09
Client ID :	**MW-19-1**					
Lab ID :	BMI09051205-05A	Alkalinity, Bicarbonate (As CaCO3)	170	10 mg/L	05/11/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/11/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	170	10 mg/L	05/11/09	05/13/09
Client ID :	**DUPE-08-2Q09**					
Lab ID :	BMI09051205-06A	Alkalinity, Bicarbonate (As CaCO3)	160	10 mg/L	05/11/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/11/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	160	10 mg/L	05/11/09	05/13/09
Client ID :	**EB-11-05/11/09**					
Lab ID :	BMI09051205-07A	Alkalinity, Bicarbonate (As CaCO3)	ND	10 mg/L	05/11/09	05/13/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/11/09	05/13/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	ND	10 mg/L	05/11/09	05/13/09

Alpha Analytical, Inc.

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

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

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/26/09

Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/12/09

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**					
Lab ID :	BMI09051205-01A	Sodium (Na)	34	0.50 mg/L	05/11/09	05/18/09
		Magnesium (Mg)	33	0.50 mg/L	05/11/09	05/18/09
		Potassium (K)	3.0	0.50 mg/L	05/11/09	05/18/09
		Calcium (Ca)	72	0.50 mg/L	05/11/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/11/09	05/18/09
		Iron (Fe)	0.70	0.10 mg/L	05/11/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/11/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/11/09	05/18/09
Client ID :	**MW-19-4**					
Lab ID :	BMI09051205-02A	Sodium (Na)	35	0.50 mg/L	05/11/09	05/18/09
		Magnesium (Mg)	28	0.50 mg/L	05/11/09	05/18/09
		Potassium (K)	3.0	0.50 mg/L	05/11/09	05/18/09
		Calcium (Ca)	55	0.50 mg/L	05/11/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/11/09	05/18/09
		Iron (Fe)	0.50	0.10 mg/L	05/11/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/11/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/11/09	05/18/09
Client ID :	**MW-19-3**					
Lab ID :	BMI09051205-03A	Sodium (Na)	28	0.50 mg/L	05/11/09	05/18/09
		Magnesium (Mg)	24	0.50 mg/L	05/11/09	05/18/09
		Potassium (K)	2.6	0.50 mg/L	05/11/09	05/18/09
		Calcium (Ca)	63	0.50 mg/L	05/11/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/11/09	05/18/09
		Iron (Fe)	0.58	0.10 mg/L	05/11/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/11/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/11/09	05/18/09
Client ID :	**MW-19-2**					
Lab ID :	BMI09051205-04A	Sodium (Na)	35	0.50 mg/L	05/11/09	05/18/09
		Magnesium (Mg)	42	0.50 mg/L	05/11/09	05/18/09
		Potassium (K)	3.0	0.50 mg/L	05/11/09	05/18/09
		Calcium (Ca)	130	0.50 mg/L	05/11/09	05/18/09
		Chromium (Cr)	0.0053	0.0050 mg/L	05/11/09	05/18/09
		Iron (Fe)	4.6	0.10 mg/L	05/11/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/11/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/11/09	05/18/09

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

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Client ID :	**MW-19-1**					
Lab ID :	BMI09051205-05A	Sodium (Na)	19	0.50 mg/L	05/11/09	05/18/09
		Magnesium (Mg)	26	0.50 mg/L	05/11/09	05/18/09
		Potassium (K)	3.6	0.50 mg/L	05/11/09	05/18/09
		Calcium (Ca)	72	0.50 mg/L	05/11/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/11/09	05/18/09
		Iron (Fe)	1.1	0.10 mg/L	05/11/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/11/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/11/09	05/18/09
Client ID :	**DUPE-08-2Q09**					
Lab ID :	BMI09051205-06A	Sodium (Na)	33	0.50 mg/L	05/11/09	05/18/09
		Magnesium (Mg)	26	0.50 mg/L	05/11/09	05/18/09
		Potassium (K)	2.7	0.50 mg/L	05/11/09	05/18/09
		Calcium (Ca)	58	0.50 mg/L	05/11/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/11/09	05/18/09
		Iron (Fe)	0.59	0.10 mg/L	05/11/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/11/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/11/09	05/18/09
Client ID :	**EB-11-05/11/09**					
Lab ID :	BMI09051205-07A	Sodium (Na)	ND	0.50 mg/L	05/11/09	05/18/09
		Magnesium (Mg)	ND	0.50 mg/L	05/11/09	05/18/09
		Potassium (K)	ND	0.50 mg/L	05/11/09	05/18/09
		Calcium (Ca)	ND	0.50 mg/L	05/11/09	05/18/09
		Chromium (Cr)	ND	0.0050 mg/L	05/11/09	05/18/09
		Iron (Fe)	ND	0.10 mg/L	05/11/09	05/18/09
		Arsenic (As)	ND	0.0020 mg/L	05/11/09	05/18/09
		Lead (Pb)	ND	0.0050 mg/L	05/11/09	05/18/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

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5/26/09

Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/12/09

Job#: G005862/JPL Groundwater Monitoring

pH (Range 1.7 to 12.4)
EPA Method 150.2 / SM4500HB / SW9040C

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-19-5**	pH	7.8	1.7 pH Units	05/11/09 08:42	05/12/09 14:34
Lab ID : BMI09051205-01A	pH - Temperature	19	1.0 °C	05/11/09 08:42	05/12/09 14:34
Client ID : **MW-19-4**	pH	8.0	1.7 pH Units	05/11/09 00:00	05/12/09 14:37
Lab ID : BMI09051205-02A	pH - Temperature	19	1.0 °C	05/11/09 00:00	05/12/09 14:37
Client ID : **MW-19-3**	pH	7.4	1.7 pH Units	05/11/09 00:00	05/12/09 14:40
Lab ID : BMI09051205-03A	pH - Temperature	19	1.0 °C	05/11/09 00:00	05/12/09 14:40
Client ID : **MW-19-2**	pH	7.1	1.7 pH Units	05/11/09 00:00	05/12/09 14:47
Lab ID : BMI09051205-04A	pH - Temperature	19	1.0 °C	05/11/09 00:00	05/12/09 14:47
Client ID : **MW-19-1**	pH	7.6	1.7 pH Units	05/11/09 00:00	05/12/09 14:50
Lab ID : BMI09051205-05A	pH - Temperature	19	1.0 °C	05/11/09 00:00	05/12/09 14:50
Client ID : **DUPE-08-2Q09**	pH	7.9	1.7 pH Units	05/11/09 00:00	05/12/09 14:53
Lab ID : BMI09051205-06A	pH - Temperature	19	1.0 °C	05/11/09 00:00	05/12/09 14:53
Client ID : **EB-11-05/11/09**	pH	6.3	1.7 pH Units	05/11/09 11:07	05/12/09 14:56
Lab ID : BMI09051205-07A	pH - Temperature	20	1.0 °C	05/11/09 11:07	05/12/09 14:56

The EPA has established an analytical holding time of 15 minutes for this method as documented in the Methods Update Rule, Federal Register, Vol 72, No 47, March 2007. This holding time will always be exceeded, unless samples are analyzed in the field.

The laboratory performed this analysis in the shortest practical holding time after sample receipt.

Roger Scholl Randy Gardner Walter Hinchman

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5/26/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/12/09

Job#: G005862/JPL Groundwater Monitoring

Total Dissolved Solids (TDS)
SM2540C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**					
Lab ID :	BMI09051205-01A	Solids, Total Dissolved (TDS)	460	10 mg/L	05/11/09	05/19/09
Client ID :	**MW-19-4**					
Lab ID :	BMI09051205-02A	Solids, Total Dissolved (TDS)	360	10 mg/L	05/11/09	05/19/09
Client ID :	**MW-19-3**					
Lab ID :	BMI09051205-03A	Solids, Total Dissolved (TDS)	370	10 mg/L	05/11/09	05/19/09
Client ID :	**MW-19-2**					
Lab ID :	BMI09051205-04A	Solids, Total Dissolved (TDS)	660	10 mg/L	05/11/09	05/19/09
Client ID :	**MW-19-1**					
Lab ID :	BMI09051205-05A	Solids, Total Dissolved (TDS)	380	10 mg/L	05/11/09	05/19/09
Client ID :	**DUPE-08-2Q09**					
Lab ID :	BMI09051205-06A	Solids, Total Dissolved (TDS)	370	10 mg/L	05/11/09	05/19/09
Client ID :	**EB-11-05/11/09**					
Lab ID :	BMI09051205-07A	Solids, Total Dissolved (TDS)	ND	10 mg/L	05/11/09	05/19/09

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ANALYTICAL REPORT

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-19-5**						
Lab ID :	BMI09051205-01A	* * * None Found * * *	ND	2.0 µg/L	05/12/09	05/11/09	05/14/09
Client ID :	**MW-19-4**						
Lab ID :	BMI09051205-02A	* * * None Found * * *	ND	2.0 µg/L	05/12/09	05/11/09	05/14/09
Client ID :	**MW-19-3**						
Lab ID :	BMI09051205-03A	* * * None Found * * *	ND	2.0 µg/L	05/12/09	05/11/09	05/14/09
Client ID :	**MW-19-2**						
Lab ID :	BMI09051205-04A	* * * None Found * * *	ND	2.0 µg/L	05/12/09	05/11/09	05/14/09
Client ID :	**MW-19-1**						
Lab ID :	BMI09051205-05A	* * * None Found * * *	ND	2.0 µg/L	05/12/09	05/11/09	05/14/09
Client ID :	**DUPE-08-2Q09**						
Lab ID :	BMI09051205-06A	* * * None Found * * *	ND	2.0 µg/L	05/12/09	05/11/09	05/14/09
Client ID :	**EB-11-05/11/09**						
Lab ID :	BMI09051205-07A	2-Methyl-1-propene	2.8	2.0 µg/L	05/12/09	05/11/09	05/14/09
		Tertiary Butyl Alcohol (TBA)	16	10 µg/L	05/12/09	05/11/09	05/14/09
Client ID :	**TB-11-05/11/09**						
Lab ID :	BMI09051205-08A	* * * None Found * * *	ND	2.0 µg/L	05/12/09	05/11/09	05/14/09

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

Roger Scholl Randy Gardner Walter Hinchman

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5/26/09
Report Date

Page 1 of 1

Alpha Analytical, Inc.

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

Date: *19-May-09*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI09051205 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
09051205-01A	MW-19-5	Aqueous
09051205-02A	MW-19-4	Aqueous
09051205-03A	MW-19-3	Aqueous
09051205-04A	MW-19-2	Aqueous
09051205-05A	MW-19-1	Aqueous
09051205-06A	DUPE-08-2Q09	Aqueous
09051205-07A	EB-11-05/11/09	Aqueous
09051205-08A	TB-11-05/11/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
NONE		

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

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

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

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051205-01A
Client I.D. Number: MW-19-5

Sampled: 05/11/09
Received: 05/12/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	97	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	105	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	91	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	1.7		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5% recovery.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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5/26/09
Report Date

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051205-02A
Client I.D. Number: MW-19-4

Sampled: 05/11/09
Received: 05/12/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	96	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	105	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5% recovery.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/26/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051205-03A
Client I.D. Number: MW-19-3

Sampled: 05/11/09
Received: 05/12/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5% recovery.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/26/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051205-04A
Client I.D. Number: MW-19-2

Sampled: 05/11/09
Received: 05/12/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.75		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	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					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5% recovery.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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5/26/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051205-05A
Client I.D. Number: MW-19-1

Sampled: 05/11/09
Received: 05/12/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	0.52		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	95	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5% recovery.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/26/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051205-06A
Client I.D. Number: DUPE-08-2Q09

Sampled: 05/11/09
Received: 05/12/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	105	(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	92	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5% recovery.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/26/09
Report Date

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051205-07A
Client I.D. Number: EB-11-05/11/09

Sampled: 05/11/09
Received: 05/12/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	89	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	103	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5% recovery.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

5/26/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09051205-08A
Client I.D. Number: TB-11-05/11/09

Sampled: 05/11/09
Received: 05/12/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	89	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	108	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	94	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

*Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5% recovery.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/26/09
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI09051205 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09051205-01A	MW-19-5	Aqueous	2
09051205-02A	MW-19-4	Aqueous	2
09051205-03A	MW-19-3	Aqueous	2
09051205-04A	MW-19-2	Aqueous	2
09051205-05A	MW-19-1	Aqueous	2
09051205-06A	DUPE-08-2Q09	Aqueous	2
09051205-07A	EB-11-05/11/09	Aqueous	2
09051205-08A	TB-11-05/11/09	Aqueous	2

5/26/09

Report Date

Billing Information :

CHAIN-OF-CUSTODY RECORD

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

CA

WorkOrder : BMIS09051205

Report Due By : 5:00 PM On : 27-May-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25545 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	12-May-2009	**12-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09051205-01A	MW-19-5	AQ	05/11/09 08:42	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051205-02A	MW-19-4	AQ	05/11/09 00:00	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051205-03A	MW-19-3	AQ	05/11/09 00:00	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051205-04A	MW-19-2	AQ	05/11/09 00:00	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	Level IV QC
BMI09051205-05A	MW-19-1	AQ	05/11/09 00:00	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051205-06A	DUPE-08-2Q09	AQ	05/11/09 00:00	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051205-07A	EB-11-05/11/09	AQ	05/11/09 11:07	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09051205-08A	TB-11-05/11/09	AQ	05/11/09 00:00	1	0	10									Reno Trip Blank 3/16/09

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

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5-12-09 1058

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

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09051205

Report Due By : 5:00 PM On : 27-May-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25545 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	12-May-2009	**12-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W						Sample Remarks
BMI09051205-01A	MW-19-5	AQ	05/11/09 08:42	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051205-02A	MW-19-4	AQ	05/11/09 00:00	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051205-03A	MW-19-3	AQ	05/11/09 00:00	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051205-04A	MW-19-2	AQ	05/11/09 00:00	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Level IV QC
BMI09051205-05A	MW-19-1	AQ	05/11/09 00:00	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051205-06A	DUPE-08-2Q09	AQ	05/11/09 00:00	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051205-07A	EB-11-05/11/09	AQ	05/11/09 11:07	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria						
BMI09051205-08A	TB-11-05/11/09	AQ	05/11/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria						Reno Trip Blank 3/16/09

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

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	Alpha Analytical, Inc.	5-12-09 1058

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

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

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

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

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

25545

Page # 1 of 1

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

Analyses Required: VOCs (524.2), TOTAL Pb, TOTAL As (200.8), GEN CHEM (Na, K, Ca, Mg, Fe) (200.7), Cl, NO_3 (314.0), GEN CHEM (300.0, 310.1, 160.1, 150.1), O-PHOSPHATE (300.0)

Required QC Level? I II (III) IV

EDD / EDF? YES ___ NO ___

Global ID # _____

Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by / Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOCs (524.2)	TOTAL Pb	TOTAL As (200.8)	GEN CHEM (Na, K, Ca, Mg, Fe) (200.7)	Cl, NO_3 (314.0)	GEN CHEM (300.0, 310.1, 160.1, 150.1)	O-PHOSPHATE (300.0)	REMARKS
0842	5/11/09	AQ	BMI0905205-01	MW-19-5			5	X	X	X	X	X			
0913			-02	MW-19-4				X	X	X	X	X			
1015			-03	MW-19-3				X	X	X	X	X			
1045			-04	MW-19-2				X	X	X	X	X			QC LEVEL IV
1122			-05	MW-19-1				X	X	X	X	X			
—			-06	DUPE-08-2009				X	X	X	X	X			DUPLICATE
1107			-07	EB-11-05/11/09			5	X	X	X	X	X			EQUIPMENT BLANK
—			-08	TB-11-05/11/09			1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by		CHASE BROGDON	NVS/EHS	5/11/09	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	5-12-09	1058
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *19-May-09*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI09050802 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
09050802-01A	MW-12-5	Aqueous
09050802-02A	MW-12-4	Aqueous
09050802-03A	MW-12-3	Aqueous
09050802-04A	MW-12-2	Aqueous
09050802-05A	MW-12-1	Aqueous
09050802-06A	DUPE-07-2Q09	Aqueous
09050802-07A	EB-10-5/07/09	Aqueous
09050802-08A	TB-10-5/07/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
09050802-01A	EPA Method 314.0	Perchlorate
09050802-02A	EPA Method 314.0	Perchlorate
09050802-04A	EPA Method 314.0	Perchlorate
09050802-05A	EPA Method 314.0	Perchlorate

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/08/09

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-12-5**	Nitrite (NO2) - N	ND	0.25 mg/L	05/07/09 08:35	05/08/09 14:41
Lab ID : BMI09050802-01A	Nitrate (NO3) - N	1.6	0.25 mg/L	05/07/09 08:35	05/08/09 14:41
Client ID : **MW-12-4**	Nitrite (NO2) - N	ND	0.25 mg/L	05/07/09 09:07	05/08/09 15:00
Lab ID : BMI09050802-02A	Nitrate (NO3) - N	1.3	0.25 mg/L	05/07/09 09:07	05/08/09 15:00
Client ID : **MW-12-3**	Nitrite (NO2) - N	ND	0.25 mg/L	05/07/09 09:50	05/08/09 15:59
Lab ID : BMI09050802-03A	Nitrate (NO3) - N	ND	0.25 mg/L	05/07/09 09:50	05/08/09 15:59
Client ID : **MW-12-2**	Nitrite (NO2) - N	ND	0.25 mg/L	05/07/09 10:35	05/08/09 16:18
Lab ID : BMI09050802-04A	Nitrate (NO3) - N	1.6	0.25 mg/L	05/07/09 10:35	05/08/09 16:18
Client ID : **MW-12-1**	Nitrite (NO2) - N	ND	0.25 mg/L	05/07/09 11:07	05/08/09 16:36
Lab ID : BMI09050802-05A	Nitrate (NO3) - N	1.3	0.25 mg/L	05/07/09 11:07	05/08/09 16:36
Client ID : **DUPE-07-2Q09**	Nitrite (NO2) - N	ND	0.25 mg/L	05/07/09 00:00	05/08/09 16:55
Lab ID : BMI09050802-06A	Nitrate (NO3) - N	ND	0.25 mg/L	05/07/09 00:00	05/08/09 16:55
Client ID : **EB-10-5/07/09**	Nitrite (NO2) - N	ND	0.25 mg/L	05/07/09 10:51	05/08/09 17:13
Lab ID : BMI09050802-07A	Nitrate (NO3) - N	ND	0.25 mg/L	05/07/09 10:51	05/08/09 17:13

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/21/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/08/09

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-12-5**					
Lab ID :	BMI09050802-01A	Chloride	17	0.50 mg/L	05/07/09	05/08/09
		Sulfate (SO4)	22	0.50 mg/L	05/07/09	05/08/09
Client ID :	**MW-12-4**					
Lab ID :	BMI09050802-02A	Chloride	16	0.50 mg/L	05/07/09	05/08/09
		Sulfate (SO4)	34	0.50 mg/L	05/07/09	05/08/09
Client ID :	**MW-12-3**					
Lab ID :	BMI09050802-03A	Chloride	16	0.50 mg/L	05/07/09	05/08/09
		Sulfate (SO4)	29	0.50 mg/L	05/07/09	05/08/09
Client ID :	**MW-12-2**					
Lab ID :	BMI09050802-04A	Chloride	21	0.50 mg/L	05/07/09	05/08/09
		Sulfate (SO4)	45	0.50 mg/L	05/07/09	05/08/09
Client ID :	**MW-12-1**					
Lab ID :	BMI09050802-05A	Chloride	29	0.50 mg/L	05/07/09	05/08/09
		Sulfate (SO4)	59	0.50 mg/L	05/07/09	05/08/09
Client ID :	**DUPE-07-2Q09**					
Lab ID :	BMI09050802-06A	Chloride	16	0.50 mg/L	05/07/09	05/08/09
		Sulfate (SO4)	29	0.50 mg/L	05/07/09	05/08/09
Client ID :	**EB-10-5/07/09**					
Lab ID :	BMI09050802-07A	Chloride	ND	0.50 mg/L	05/07/09	05/08/09
		Sulfate (SO4)	ND	0.50 mg/L	05/07/09	05/08/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/08/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-12-5**					
Lab ID :	BMI09050802-01A	Perchlorate	1.95	1.00 µg/L	05/07/09	05/08/09
Client ID :	**MW-12-4**					
Lab ID :	BMI09050802-02A	Perchlorate	2.99	1.00 µg/L	05/07/09	05/08/09
Client ID :	**MW-12-3**					
Lab ID :	BMI09050802-03A	Perchlorate	ND	1.00 µg/L	05/07/09	05/08/09
Client ID :	**MW-12-2**					
Lab ID :	BMI09050802-04A	Perchlorate	2.12	1.00 µg/L	05/07/09	05/08/09
Client ID :	**MW-12-1**					
Lab ID :	BMI09050802-05A	Perchlorate	1.01	1.00 µg/L	05/07/09	05/08/09
Client ID :	**DUPE-07-2Q09**					
Lab ID :	BMI09050802-06A	Perchlorate	ND	1.00 µg/L	05/07/09	05/08/09
Client ID :	**EB-10-5/07/09**					
Lab ID :	BMI09050802-07A	Perchlorate	ND	1.00 µg/L	05/07/09	05/08/09

ND = Not Detected

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/08/09

Job#: G005862/JPL Groundwater Monitoring

Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-12-5**					
Lab ID :	BMI09050802-01A	Alkalinity, Bicarbonate (As CaCO3)	180	10 mg/L	05/07/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/07/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	180	10 mg/L	05/07/09	05/11/09
Client ID :	**MW-12-4**					
Lab ID :	BMI09050802-02A	Alkalinity, Bicarbonate (As CaCO3)	200	10 mg/L	05/07/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/07/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	200	10 mg/L	05/07/09	05/11/09
Client ID :	**MW-12-3**					
Lab ID :	BMI09050802-03A	Alkalinity, Bicarbonate (As CaCO3)	160	10 mg/L	05/07/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/07/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	160	10 mg/L	05/07/09	05/11/09
Client ID :	**MW-12-2**					
Lab ID :	BMI09050802-04A	Alkalinity, Bicarbonate (As CaCO3)	210	10 mg/L	05/07/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/07/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	210	10 mg/L	05/07/09	05/11/09
Client ID :	**MW-12-1**					
Lab ID :	BMI09050802-05A	Alkalinity, Bicarbonate (As CaCO3)	190	10 mg/L	05/07/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/07/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	190	10 mg/L	05/07/09	05/11/09
Client ID :	**DUPE-07-2Q09**					
Lab ID :	BMI09050802-06A	Alkalinity, Bicarbonate (As CaCO3)	150	10 mg/L	05/07/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/07/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	150	10 mg/L	05/07/09	05/11/09
Client ID :	**EB-10-5/07/09**					
Lab ID :	BMI09050802-07A	Alkalinity, Bicarbonate (As CaCO3)	ND	10 mg/L	05/07/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/07/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	ND	10 mg/L	05/07/09	05/11/09

Alpha Analytical, Inc.

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ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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Report Date

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/08/09

Job#: G005862/JPL Groundwater Monitoring

Metals by ICPMS
EPA Method 200.8

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-12-5**					
Lab ID :	BMI09050802-01A	Sodium (Na)	36	0.50 mg/L	05/07/09	05/08/09
		Magnesium (Mg)	12	0.50 mg/L	05/07/09	05/08/09
		Potassium (K)	2.1	0.50 mg/L	05/07/09	05/08/09
		Calcium (Ca)	42	0.50 mg/L	05/07/09	05/08/09
		Chromium (Cr)	ND	0.0050 mg/L	05/07/09	05/08/09
		Iron (Fe)	1.1	0.10 mg/L	05/07/09	05/08/09
		Arsenic (As)	ND	0.0020 mg/L	05/07/09	05/08/09
		Lead (Pb)	ND	0.0050 mg/L	05/07/09	05/08/09
Client ID :	**MW-12-4**					
Lab ID :	BMI09050802-02A	Sodium (Na)	24	0.50 mg/L	05/07/09	05/08/09
		Magnesium (Mg)	15	0.50 mg/L	05/07/09	05/08/09
		Potassium (K)	2.3	0.50 mg/L	05/07/09	05/08/09
		Calcium (Ca)	61	0.50 mg/L	05/07/09	05/08/09
		Chromium (Cr)	ND	0.0050 mg/L	05/07/09	05/08/09
		Iron (Fe)	0.60	0.10 mg/L	05/07/09	05/08/09
		Arsenic (As)	ND	0.0020 mg/L	05/07/09	05/08/09
		Lead (Pb)	ND	0.0050 mg/L	05/07/09	05/08/09
Client ID :	**MW-12-3**					
Lab ID :	BMI09050802-03A	Sodium (Na)	26	0.50 mg/L	05/07/09	05/08/09
		Magnesium (Mg)	16	0.50 mg/L	05/07/09	05/08/09
		Potassium (K)	3.1	0.50 mg/L	05/07/09	05/08/09
		Calcium (Ca)	37	0.50 mg/L	05/07/09	05/08/09
		Chromium (Cr)	ND	0.0050 mg/L	05/07/09	05/08/09
		Iron (Fe)	0.60	0.10 mg/L	05/07/09	05/08/09
		Arsenic (As)	ND	0.0020 mg/L	05/07/09	05/08/09
		Lead (Pb)	ND	0.0050 mg/L	05/07/09	05/08/09
Client ID :	**MW-12-2**					
Lab ID :	BMI09050802-04A	Sodium (Na)	25	0.50 mg/L	05/07/09	05/08/09
		Magnesium (Mg)	20	0.50 mg/L	05/07/09	05/08/09
		Potassium (K)	3.4	0.50 mg/L	05/07/09	05/08/09
		Calcium (Ca)	62	0.50 mg/L	05/07/09	05/08/09
		Chromium (Cr)	ND	0.0050 mg/L	05/07/09	05/08/09
		Iron (Fe)	0.69	0.10 mg/L	05/07/09	05/08/09
		Arsenic (As)	ND	0.0020 mg/L	05/07/09	05/08/09
		Lead (Pb)	ND	0.0050 mg/L	05/07/09	05/08/09

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Client ID :	**MW-12-1**					
Lab ID :	BMI09050802-05A	Sodium (Na)	24	0.50 mg/L	05/07/09	05/08/09
		Magnesium (Mg)	19	0.50 mg/L	05/07/09	05/08/09
		Potassium (K)	3.2	0.50 mg/L	05/07/09	05/08/09
		Calcium (Ca)	59	0.50 mg/L	05/07/09	05/08/09
		Chromium (Cr)	ND	0.0050 mg/L	05/07/09	05/08/09
		Iron (Fe)	0.87	0.10 mg/L	05/07/09	05/08/09
		Arsenic (As)	ND	0.0020 mg/L	05/07/09	05/08/09
		Lead (Pb)	ND	0.0050 mg/L	05/07/09	05/08/09
Client ID :	**DUPE-07-2Q09**					
Lab ID :	BMI09050802-06A	Sodium (Na)	25	0.50 mg/L	05/07/09	05/08/09
		Magnesium (Mg)	15	0.50 mg/L	05/07/09	05/08/09
		Potassium (K)	3.0	0.50 mg/L	05/07/09	05/08/09
		Calcium (Ca)	38	0.50 mg/L	05/07/09	05/08/09
		Chromium (Cr)	ND	0.0050 mg/L	05/07/09	05/08/09
		Iron (Fe)	0.56	0.10 mg/L	05/07/09	05/08/09
		Arsenic (As)	ND	0.0020 mg/L	05/07/09	05/08/09
		Lead (Pb)	ND	0.0050 mg/L	05/07/09	05/08/09
Client ID :	**EB-10-5/07/09**					
Lab ID :	BMI09050802-07A	Sodium (Na)	ND	0.50 mg/L	05/07/09	05/08/09
		Magnesium (Mg)	ND	0.50 mg/L	05/07/09	05/08/09
		Potassium (K)	ND	0.50 mg/L	05/07/09	05/08/09
		Calcium (Ca)	ND	0.50 mg/L	05/07/09	05/08/09
		Chromium (Cr)	ND	0.0050 mg/L	05/07/09	05/08/09
		Iron (Fe)	ND	0.10 mg/L	05/07/09	05/08/09
		Arsenic (As)	ND	0.0020 mg/L	05/07/09	05/08/09
		Lead (Pb)	ND	0.0050 mg/L	05/07/09	05/08/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/08/09

Job#: G005862/JPL Groundwater Monitoring

pH (Range 1.7 to 12.4)
EPA Method 150.2 / SM4500HB / SW9040C

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : **MW-12-5**	pH	8.0	1.7 pH Units	05/07/09 08:35	05/08/09 12:08
Lab ID : BMI09050802-01A	pH - Temperature	16	1.0 °C	05/07/09 08:35	05/08/09 12:08
Client ID : **MW-12-4**	pH	7.8	1.7 pH Units	05/07/09 09:07	05/08/09 12:11
Lab ID : BMI09050802-02A	pH - Temperature	16	1.0 °C	05/07/09 09:07	05/08/09 12:11
Client ID : **MW-12-3**	pH	8.1	1.7 pH Units	05/07/09 09:50	05/08/09 12:13
Lab ID : BMI09050802-03A	pH - Temperature	16	1.0 °C	05/07/09 09:50	05/08/09 12:13
Client ID : **MW-12-2**	pH	7.7	1.7 pH Units	05/07/09 10:35	05/08/09 12:15
Lab ID : BMI09050802-04A	pH - Temperature	16	1.0 °C	05/07/09 10:35	05/08/09 12:15
Client ID : **MW-12-1**	pH	7.6	1.7 pH Units	05/07/09 11:07	05/08/09 12:17
Lab ID : BMI09050802-05A	pH - Temperature	16	1.0 °C	05/07/09 11:07	05/08/09 12:17
Client ID : **DUPE-07-2Q09**	pH	8.1	1.7 pH Units	05/07/09 00:00	05/08/09 12:19
Lab ID : BMI09050802-06A	pH - Temperature	16	1.0 °C	05/07/09 00:00	05/08/09 12:19
Client ID : **EB-10-5/07/09**	pH	6.2	1.7 pH Units	05/07/09 10:51	05/08/09 12:21
Lab ID : BMI09050802-07A	pH - Temperature	16	1.0 °C	05/07/09 10:51	05/08/09 12:21

The EPA has established an analytical holding time of 15 minutes for this method as documented in the Methods Update Rule, Federal Register, Vol 72, No 47, March 2007. This holding time will always be exceeded, unless samples are analyzed in the field.

The laboratory performed this analysis in the shortest practical holding time after sample receipt.

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/08/09

Job#: G005862/JPL Groundwater Monitoring

Total Dissolved Solids (TDS)
SM2540C

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-12-5**					
Lab ID :	BMI09050802-01A	Solids, Total Dissolved (TDS)	260	10 mg/L	05/07/09	05/15/09
Client ID :	**MW-12-4**					
Lab ID :	BMI09050802-02A	Solids, Total Dissolved (TDS)	270	10 mg/L	05/07/09	05/17/09
Client ID :	**MW-12-3**					
Lab ID :	BMI09050802-03A	Solids, Total Dissolved (TDS)	230	10 mg/L	05/07/09	05/15/09
Client ID :	**MW-12-2**					
Lab ID :	BMI09050802-04A	Solids, Total Dissolved (TDS)	320	10 mg/L	05/07/09	05/15/09
Client ID :	**MW-12-1**					
Lab ID :	BMI09050802-05A	Solids, Total Dissolved (TDS)	250	10 mg/L	05/07/09	05/15/09
Client ID :	**DUPE-07-2Q09**					
Lab ID :	BMI09050802-06A	Solids, Total Dissolved (TDS)	220	10 mg/L	05/07/09	05/15/09
Client ID :	**EB-10-5/07/09**					
Lab ID :	BMI09050802-07A	Solids, Total Dissolved (TDS)	ND	10 mg/L	05/07/09	05/15/09

ND = Not Detected

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

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

Tentatively Identified Compounds - Volatile Organics by GC/MS

		Parameter	Estimated Concentration	Estimated Reporting Limit	Date Received	Date Sampled	Date Analyzed
Client ID :	**MW-12-5**						
Lab ID :	BMI09050802-01A	Sulfur dioxide	9.6	2.0 µg/L	05/08/09	05/07/09	05/14/09
Client ID :	**MW-12-4**						
Lab ID :	BMI09050802-02A	Sulfur dioxide	15	2.0 µg/L	05/08/09	05/07/09	05/14/09
Client ID :	**MW-12-3**						
Lab ID :	BMI09050802-03A	Sulfur dioxide	15	2.0 µg/L	05/08/09	05/07/09	05/14/09
Client ID :	**MW-12-2**						
Lab ID :	BMI09050802-04A	Sulfur dioxide	10	2.0 µg/L	05/08/09	05/07/09	05/14/09
Client ID :	**MW-12-1**						
Lab ID :	BMI09050802-05A	Sulfur dioxide	8.1	2.0 µg/L	05/08/09	05/07/09	05/14/09
Client ID :	**DUPE-07-2Q09**						
Lab ID :	BMI09050802-06A	Sulfur dioxide	13	2.0 µg/L	05/08/09	05/07/09	05/14/09
Client ID :	**EB-10-5/07/09**						
Lab ID :	BMI09050802-07A	* * * None Found * * *	ND	2.0 µg/L	05/08/09	05/07/09	05/14/09
Client ID :	**TB-10-5/07/09**						
Lab ID :	BMI09050802-08A	* * * None Found * * *	ND	2.0 µg/L	05/08/09	05/07/09	05/14/09

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

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/21/09
Report Date

Page 1 of 1

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09050802-01A
Client I.D. Number: MW-12-5

Sampled: 05/07/09
Received: 05/08/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	103	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	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	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

* Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/21/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09050802-02A
Client I.D. Number: MW-12-4

Sampled: 05/07/09
Received: 05/08/09
Analyzed: 05/14/09

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	0.63	0.50	µg/L	51 tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND	0.50	µg/L	52 1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND	0.50	µg/L	53 sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND	0.50	µg/L	54 1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND	0.50	µg/L	55 1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	0.75	0.50	µg/L	56 4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND	0.50	µg/L	57 1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND	0.50	µg/L	58 n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND	0.50	µg/L	59 1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND	0.50	µg/L	60 1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND	0.50	µg/L	61 Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND	2.5	µg/L	62 Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND	0.50	µg/L	63 1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND	0.50	µg/L	64 Surr: 1,2-Dichloroethane-d4	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	92	(70-130)	%REC
32	1,3-Dichloropropane	ND	0.50	µg/L				
33	Dibromochloromethane	ND	0.50	µg/L				
34	1,2-Dibromoethane (EDB)	ND	1.0	µg/L				
35	Tetrachloroethene	ND	0.50	µg/L				

Note: Analysis conducted using EPA Method 524.2 criteria.

* Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/21/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09050802-03A
Client I.D. Number: MW-12-3

Sampled: 05/07/09
Received: 05/08/09
Analyzed: 05/14/09

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	0.88		0.50	µg/L	51	tert-Butylbenzene	ND	0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L	52	1,2,4-Trimethylbenzene	ND	0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	107	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	92	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

* Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/21/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09050802-04A
Client I.D. Number: MW-12-2

Sampled: 05/07/09
Received: 05/08/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	105	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	101	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

* Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/21/09
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09050802-05A
Client I.D. Number: MW-12-1

Sampled: 05/07/09
Received: 05/08/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	107	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	99	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

* Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/21/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09050802-06A
Client I.D. Number: DUPE-07-2Q09

Sampled: 05/07/09
Received: 05/08/09
Analyzed: 05/14/09

Volatile Organics by GC/MS

	Compound	Concentration		Reporting Limit	
1	Dichlorodifluoromethane	ND	*	0.50	µg/L
2	Chloromethane	ND		1.0	µg/L
3	Vinyl chloride	ND		0.50	µg/L
4	Chloroethane	ND		0.50	µg/L
5	Bromomethane	ND		1.0	µg/L
6	Trichlorofluoromethane	ND		0.50	µg/L
7	1,1-Dichloroethene	ND		0.50	µg/L
8	Dichloromethane	ND		1.0	µg/L
9	Freon-113	ND		0.50	µg/L
10	trans-1,2-Dichloroethene	ND		0.50	µg/L
11	Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L
12	1,1-Dichloroethane	ND		0.50	µg/L
13	2-Butanone (MEK)	ND		10	µg/L
14	cis-1,2-Dichloroethene	ND		0.50	µg/L
15	Bromochloromethane	ND		0.50	µg/L
16	Chloroform	0.97		0.50	µg/L
17	2,2-Dichloropropane	ND		0.50	µg/L
18	1,2-Dichloroethane	ND		0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L
22	Benzene	ND		0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L
25	Trichloroethene	ND		0.50	µg/L
26	Bromodichloromethane	ND		0.50	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L
30	1,1,2-Trichloroethane	ND		0.50	µg/L
31	Toluene	ND		0.50	µg/L
32	1,3-Dichloropropane	ND		0.50	µg/L
33	Dibromochloromethane	ND		0.50	µg/L
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L
35	Tetrachloroethene	ND		0.50	µg/L
36	1,1,1,2-Tetrachloroethane	ND		0.50	µg/L
37	Chlorobenzene	ND		0.50	µg/L
38	Ethylbenzene	ND		0.50	µg/L
39	m,p-Xylene	ND		0.50	µg/L
40	Bromoform	ND		0.50	µg/L
41	Styrene	ND		0.50	µg/L
42	o-Xylene	ND		0.50	µg/L
43	1,1,2,2-Tetrachloroethane	ND		0.50	µg/L
44	1,2,3-Trichloropropane	ND		1.0	µg/L
45	Isopropylbenzene	ND		0.50	µg/L
46	Bromobenzene	ND		0.50	µg/L
47	n-Propylbenzene	ND		0.50	µg/L
48	4-Chlorotoluene	ND		0.50	µg/L
49	2-Chlorotoluene	ND		0.50	µg/L
50	1,3,5-Trimethylbenzene	ND		0.50	µg/L
51	tert-Butylbenzene	ND		0.50	µg/L
52	1,2,4-Trimethylbenzene	ND		0.50	µg/L
53	sec-Butylbenzene	ND		0.50	µg/L
54	1,3-Dichlorobenzene	ND		0.50	µg/L
55	1,4-Dichlorobenzene	ND		0.50	µg/L
56	4-Isopropyltoluene	ND		0.50	µg/L
57	1,2-Dichlorobenzene	ND		0.50	µg/L
58	n-Butylbenzene	ND		0.50	µg/L
59	1,2-Dibromo-3-chloropropane (DBCP)	ND		2.5	µg/L
60	1,2,4-Trichlorobenzene	ND		1.0	µg/L
61	Naphthalene	ND		1.0	µg/L
62	Hexachlorobutadiene	ND		1.0	µg/L
63	1,2,3-Trichlorobenzene	ND		1.0	µg/L
64	Surr: 1,2-Dichloroethane-d4	109		(70-130)	%REC
65	Surr: Toluene-d8	100		(70-130)	%REC
66	Surr: 4-Bromofluorobenzene	95		(70-130)	%REC

Note: Analysis conducted using EPA Method 524.2 criteria.

* Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/21/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09050802-07A
Client I.D. Number: EB-10-5/07/09

Sampled: 05/07/09
Received: 05/08/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	87	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	104	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	93	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

* Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/21/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

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

Alpha Analytical Number: BMI09050802-08A
Client I.D. Number: TB-10-5/07/09

Sampled: 05/07/09
Received: 05/08/09
Analyzed: 05/14/09

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
18	1,2-Dichloroethane	ND		0.50	µg/L	53	sec-Butylbenzene	ND	0.50	µg/L
19	1,1,1-Trichloroethane	ND		0.50	µg/L	54	1,3-Dichlorobenzene	ND	0.50	µg/L
20	1,1-Dichloropropene	ND		0.50	µg/L	55	1,4-Dichlorobenzene	ND	0.50	µg/L
21	Carbon tetrachloride	ND		0.50	µg/L	56	4-Isopropyltoluene	ND	0.50	µg/L
22	Benzene	ND		0.50	µg/L	57	1,2-Dichlorobenzene	ND	0.50	µg/L
23	Dibromomethane	ND		0.50	µg/L	58	n-Butylbenzene	ND	0.50	µg/L
24	1,2-Dichloropropane	ND		0.50	µg/L	59	1,2-Dibromo-3-chloropropane (DBCP)	ND	2.5	µg/L
25	Trichloroethene	ND		0.50	µg/L	60	1,2,4-Trichlorobenzene	ND	1.0	µg/L
26	Bromodichloromethane	ND		0.50	µg/L	61	Naphthalene	ND	1.0	µg/L
27	4-Methyl-2-pentanone (MIBK)	ND		2.5	µg/L	62	Hexachlorobutadiene	ND	1.0	µg/L
28	cis-1,3-Dichloropropene	ND		0.50	µg/L	63	1,2,3-Trichlorobenzene	ND	1.0	µg/L
29	trans-1,3-Dichloropropene	ND		0.50	µg/L	64	Surr: 1,2-Dichloroethane-d4	84	(70-130)	%REC
30	1,1,2-Trichloroethane	ND		0.50	µg/L	65	Surr: Toluene-d8	104	(70-130)	%REC
31	Toluene	ND		0.50	µg/L	66	Surr: 4-Bromofluorobenzene	95	(70-130)	%REC
32	1,3-Dichloropropane	ND		0.50	µg/L					
33	Dibromochloromethane	ND		0.50	µg/L					
34	1,2-Dibromoethane (EDB)	ND		1.0	µg/L					
35	Tetrachloroethene	ND		0.50	µg/L					

Note: Analysis conducted using EPA Method 524.2 criteria.

* Note: Dichlorodifluoromethane failed the Method CV criteria of 70-130% @ 63.5%.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/21/09
Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order: BMI09050802 **Project:** G005862/JPL Groundwater Monitoring

Alpha's Sample ID	Client's Sample ID	Matrix	pH
09050802-01A	MW-12-5	Aqueous	2
09050802-02A	MW-12-4	Aqueous	2
09050802-03A	MW-12-3	Aqueous	2
09050802-04A	MW-12-2	Aqueous	2
09050802-05A	MW-12-1	Aqueous	2
09050802-06A	DUPE-07-2Q09	Aqueous	2
09050802-07A	EB-10-5/07/09	Aqueous	2
09050802-08A	TB-10-5/07/09	Aqueous	2

5/21/09

Report Date

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : BMIS09050802

Report Due By : 5:00 PM On : 22-May-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25548 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	08-May-2009	**08-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests 300_0(A)_W	300_0(B)_W	300_0(C)_W	314_W	ALKALINITY_W	METALS_DW	PH_W	TDS	Sample Remarks
BMI09050802-01A	MW-12-5	AQ	05/07/09 08:35	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	Level IV QC
BMI09050802-02A	MW-12-4	AQ	05/07/09 09:07	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09050802-03A	MW-12-3	AQ	05/07/09 09:50	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09050802-04A	MW-12-2	AQ	05/07/09 10:35	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09050802-05A	MW-12-1	AQ	05/07/09 11:07	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09050802-06A	DUPE-07-2Q09	AQ	05/07/09 00:00	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09050802-07A	EB-10-5/07/09	AQ	05/07/09 10:51	5	0	10	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	NO2, NO3, SO4, Cl	Perchlorate	Alk (Bicarb, Carb, Total)	Cr, Pb, As, Na, K, Ca, Mg, Fe	pH	TDS	
BMI09050802-08A	TB-10-5/07/09	AQ	05/07/09 00:00	1	0	10									Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #7710 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5-8-09 9:45

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

Billing Information :

CHAIN-OF-CUSTODY RECORD

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

CA

WorkOrder : BMIS09050802

Report Due By : 5:00 PM On : 22-May-2009

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

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

EDD Required : **Yes**

Sampled by : Client

PO : 218013

Client's COC # : 25548 Job : G005862/JPL Groundwater Monitoring

Cooler Temp	Samples Received	Date Printed
4 °C	08-May-2009	**08-May-2009**

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles Alpha	Sub	TAT	Requested Tests VOC_TIC_W	VOC_W	Sample Remarks
BMI09050802-01A	MW-12-5	AQ	05/07/09 08:35	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria	Level IV QC
BMI09050802-02A	MW-12-4	AQ	05/07/09 09:07	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09050802-03A	MW-12-3	AQ	05/07/09 09:50	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09050802-04A	MW-12-2	AQ	05/07/09 10:35	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09050802-05A	MW-12-1	AQ	05/07/09 11:07	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09050802-06A	DUPE-07-2Q09	AQ	05/07/09 00:00	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09050802-07A	EB-10-5/07/09	AQ	05/07/09 10:51	5	0	10	VOC by 524 Criteria	VOC by 524 Criteria	
BMI09050802-08A	TB-10-5/07/09	AQ	05/07/09 00:00	1	0	10	VOC by 524 Criteria	VOC by 524 Criteria	Reno Trip Blank 3/16/09

Comments: No security seals. Frozen ice. Temp Blank #7710 received @ 4°C. Perchlorate RL of 1.0 ug/L. Level IV QC. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). :

	Signature	Print Name	Company	Date/Time
Logged in by:	Elizabeth Adcox	Elizabeth Adcox	**Alpha Analytical, Inc.**	5.8.09 9:45

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

Billing Information:

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

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

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

25548

Page # 1 of 1

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

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

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	VOC's (524.2)	TOTAL OF LEAD ARSENIC (200.8)	GEN CHEM. (Na, K, Ca, Mg, Fe) (200.7)	Clay - (3140)	GEN CHEM. (300.0, 310.1, 160.1, 150.1)	O-PHOSPHATE (300.0)		REMARKS
0835	5/07/09	AQ	BMI09050802-01	MW-12-5			5	X	X	X	X	X			QC LEVEL IV
0907			-02	MW-12-4				X	X	X	X	X			
0950			-03	MW-12-3				X	X	X	X	X			
1035			-04	MW-12-2				X	X	X	X	X			
1107			-05	MW-12-1				X	X	X	X	X			
—			-06	DUPE-07-2009				X	X	X	X	X			Duplicate
1051			-07	EB-10-5/07/09			5	X	X	X	X	X			EQUIPMENT BLANK
—			-08	TB-10-5/07/09			1	X							TRIP BLANK

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	CHASE BROGDON	INSIGHT	05/07/09	1300
Received by	Elizabeth Adcox	Elizabeth Adcox	Alpha	5.8.09	9:45
Relinquished by					
Received by					
Relinquished by					
Received by					

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

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

Alpha Analytical, Inc.

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

Date: *12-May-09*

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

CASE NARRATIVE

Project: G005862/JPL Groundwater Monitoring
Work Order: BMI09050740 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
09050740-01A	MW-17-5	Aqueous
09050740-02A	MW-17-4	Aqueous
09050740-03A	MW-17-3	Aqueous
09050740-04A	MW-17-2	Aqueous
09050740-05A	MW-17-1	Aqueous
09050740-06A	EB-08-5/05/09	Aqueous
09050740-07A	TB-08-5/05/09	Aqueous

Manually Integrated Analytes

Alpha's Sample ID	Test Reference	Analyte
09050740-03A	EPA Method 314.0	Perchlorate
09050740-04A	EPA Method 314.0	Perchlorate

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

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

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

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/07/09

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-17-5**	Nitrite (NO2) - N	ND	*	0.25 mg/L	05/05/09 08:40	05/07/09 12:47
Lab ID : BMI09050740-01A	Nitrate (NO3) - N	ND	*	0.25 mg/L	05/05/09 08:40	05/07/09 12:47
Client ID : **MW-17-4**	Nitrite (NO2) - N	ND	*	0.25 mg/L	05/05/09 09:18	05/07/09 13:06
Lab ID : BMI09050740-02A	Nitrate (NO3) - N	ND	*	0.25 mg/L	05/05/09 09:18	05/07/09 13:06
Client ID : **MW-17-3**	Nitrite (NO2) - N	ND		0.25 mg/L	05/05/09 11:07	05/07/09 10:38
Lab ID : BMI09050740-03A	Nitrate (NO3) - N	11		0.25 mg/L	05/05/09 11:07	05/07/09 10:38
Client ID : **MW-17-2**	Nitrite (NO2) - N	ND		0.25 mg/L	05/05/09 11:41	05/07/09 11:15
Lab ID : BMI09050740-04A	Nitrate (NO3) - N	8.5		0.25 mg/L	05/05/09 11:41	05/07/09 11:15
Client ID : **MW-17-1**	Nitrite (NO2) - N	ND		0.25 mg/L	05/05/09 12:13	05/07/09 11:33
Lab ID : BMI09050740-05A	Nitrate (NO3) - N	0.55		0.25 mg/L	05/05/09 12:13	05/07/09 11:33
Client ID : **EB-08-5/05/09**	Nitrite (NO2) - N	ND		0.25 mg/L	05/05/09 11:30	05/07/09 10:56
Lab ID : BMI09050740-06A	Nitrate (NO3) - N	ND		0.25 mg/L	05/05/09 11:30	05/07/09 10:56

*These samples were received outside the 48 hour holding time for non-preserved samples.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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

5/19/09
Report Date

Alpha Analytical, Inc.

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

ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/07/09

Job#: G005862/JPL Groundwater Monitoring

Anions by IC
EPA Method 300.0 / 9056

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-17-5**					
Lab ID :	BMI09050740-01A	Chloride	10	0.50 mg/L	05/05/09	05/07/09
		Sulfate (SO4)	21	0.50 mg/L	05/05/09	05/07/09
Client ID :	**MW-17-4**					
Lab ID :	BMI09050740-02A	Chloride	11	0.50 mg/L	05/05/09	05/07/09
		Sulfate (SO4)	21	0.50 mg/L	05/05/09	05/07/09
Client ID :	**MW-17-3**					
Lab ID :	BMI09050740-03A	Chloride	55	2.5 mg/L	05/05/09	05/09/09
		Sulfate (SO4)	71	0.50 mg/L	05/05/09	05/07/09
Client ID :	**MW-17-2**					
Lab ID :	BMI09050740-04A	Chloride	79	5.0 mg/L	05/05/09	05/07/09
		Sulfate (SO4)	120	5.0 mg/L	05/05/09	05/07/09
Client ID :	**MW-17-1**					
Lab ID :	BMI09050740-05A	Chloride	10	0.50 mg/L	05/05/09	05/07/09
		Sulfate (SO4)	36	0.50 mg/L	05/05/09	05/07/09
Client ID :	**EB-08-5/05/09**					
Lab ID :	BMI09050740-06A	Chloride	ND	0.50 mg/L	05/05/09	05/07/09
		Sulfate (SO4)	ND	0.50 mg/L	05/05/09	05/07/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/07/09

Job#: G005862/JPL Groundwater Monitoring

Perchlorate by Ion Chromatography
EPA Method 314.0

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-17-5**					
Lab ID :	BMI09050740-01A	Perchlorate	ND	1.00 µg/L	05/05/09	05/07/09
Client ID :	**MW-17-4**					
Lab ID :	BMI09050740-02A	Perchlorate	ND	1.00 µg/L	05/05/09	05/07/09
Client ID :	**MW-17-3**					
Lab ID :	BMI09050740-03A	Perchlorate	12.9	1.00 µg/L	05/05/09	05/07/09
Client ID :	**MW-17-2**					
Lab ID :	BMI09050740-04A	Perchlorate	5.32	1.00 µg/L	05/05/09	05/07/09
Client ID :	**MW-17-1**					
Lab ID :	BMI09050740-05A	Perchlorate	ND	1.00 µg/L	05/05/09	05/07/09
Client ID :	**EB-08-5/05/09**					
Lab ID :	BMI09050740-06A	Perchlorate	ND	1.00 µg/L	05/05/09	05/07/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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ANALYTICAL REPORT

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

Attn: David Conner
Phone: (818) 393-2808
Fax: (614) 458-6641
Date Received : 05/07/09

Job#: G005862/JPL Groundwater Monitoring

Alkalinity
SM2320B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-17-5**					
Lab ID :	BMI09050740-01A	Alkalinity, Bicarbonate (As CaCO3)	120	10 mg/L	05/05/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/05/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	120	10 mg/L	05/05/09	05/11/09
Client ID :	**MW-17-4**					
Lab ID :	BMI09050740-02A	Alkalinity, Bicarbonate (As CaCO3)	130	10 mg/L	05/05/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/05/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	130	10 mg/L	05/05/09	05/11/09
Client ID :	**MW-17-3**					
Lab ID :	BMI09050740-03A	Alkalinity, Bicarbonate (As CaCO3)	180	10 mg/L	05/05/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/05/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	180	10 mg/L	05/05/09	05/11/09
Client ID :	**MW-17-2**					
Lab ID :	BMI09050740-04A	Alkalinity, Bicarbonate (As CaCO3)	210	10 mg/L	05/05/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/05/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	210	10 mg/L	05/05/09	05/11/09
Client ID :	**MW-17-1**					
Lab ID :	BMI09050740-05A	Alkalinity, Bicarbonate (As CaCO3)	170	10 mg/L	05/05/09	05/11/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/05/09	05/11/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	170	10 mg/L	05/05/09	05/11/09
Client ID :	**EB-08-5/05/09**					
Lab ID :	BMI09050740-06A	Alkalinity, Bicarbonate (As CaCO3)	ND	10 mg/L	05/05/09	05/12/09
		Alkalinity, Carbonate (As CaCO3)	ND	10 mg/L	05/05/09	05/12/09
		Alkalinity, Total (As CaCO3 at pH 4.5)	ND	10 mg/L	05/05/09	05/12/09

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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

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5/19/09
Report Date