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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-21-11/30/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204015.D

Level: (LOW/MED)

Date Collected: 11/30/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 16:53

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-21-11/30/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204015.D

Level: (LOW/MED)

Date Collected: 11/30/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 16:53

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

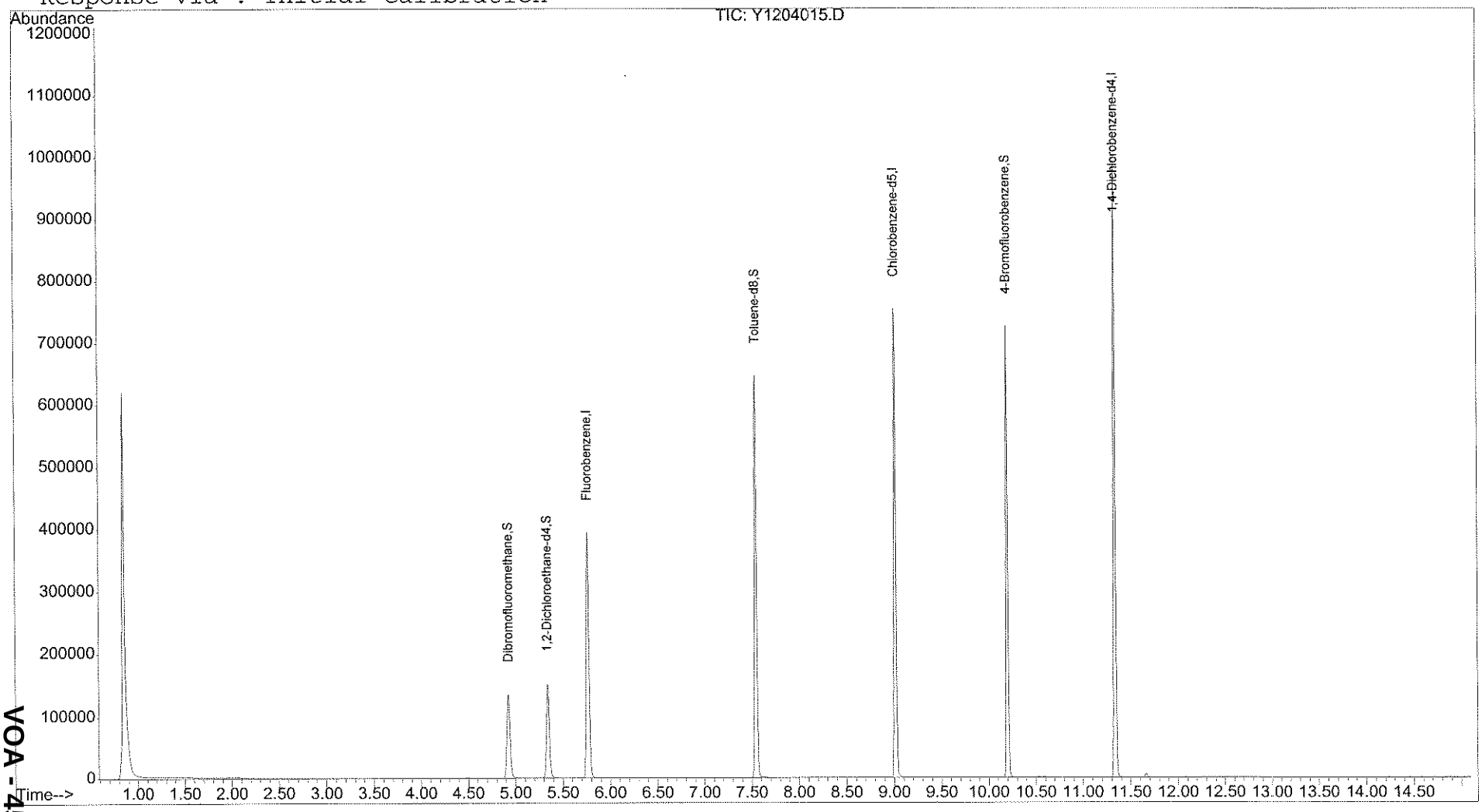
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\120406\Y1204015.D
Acq On : 4 Dec 2006 16:53
Sample : JPL26-005 TB-21-11/30/06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 5 10:28 2006

Vial: 24
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204015.D Vial: 24
Acq On : 4 Dec 2006 16:53 Operator: LH
Sample : JPL26-005 TB-21-11/30/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:28 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	5.76	96	367932	50.00 ug/l	0.00
50) Chlorobenzene-d5	9.01	82	194884	50.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	11.34	152	220583	50.00 ug/l	0.00
System Monitoring Compounds					
32) Dibromofluoromethane	4.93	111	100611	46.07 ug/l	0.00
38) 1,2-Dichloroethane-d4	5.34	65	114146	58.66 ug/l	0.00
51) Toluene-d8	7.55	98	391083	49.57 ug/l	0.00
71) 4-Bromofluorobenzene	10.20	95	190967	60.98 ug/l	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.08	50	343	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) 1,1-Dichloroethene	0.00	96	0	N.D.	
9) Acrolein	0.00	56	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.15	43	647	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Acetonitrile	0.00	40	0	N.D. d	
16) Allyl chloride	0.00	76	0	N.D.	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D. d	
19) Methyl tert-butyl ether	0.00	73	0	N.D.	
20) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
21) Acrylonitrile	0.00	53	0	N.D.	
22) Vinyl acetate	0.00	43	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	0.00	83	0	N.D.	
33) 1,1,1-Trichloroethane	0.00	97	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204015.D Vial: 24
Acq On : 4 Dec 2006 16:53 Operator: LH
Sample : JPL26-005 TB-21-11/30/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:28 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34)	Cyclohexane	0.00	56	0	N.D.	
35)	Carbon Tetrachloride	0.00	117	0	N.D.	
36)	Methyl methacrylate	0.00	41	0	N.D.	
37)	1,1-Dichloropropene	0.00	75	0	N.D.	
39)	Benzene	0.00	78	0	N.D.	
40)	1,2-Dichloroethane	0.00	62	0	N.D.	
41)	Isobutanol	0.00	43	0	N.D.	
42)	Trichloroethene	0.00	130	0	N.D.	
43)	Methylcyclohexane	0.00	83	0	N.D.	
44)	1,2-Dichloropropane	0.00	63	0	N.D.	
45)	Dibromomethane	0.00	93	0	N.D.	
46)	2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
47)	Bromodichloromethane	0.00	83	0	N.D.	
48)	cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49)	4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52)	Toluene	7.61	92	68	N.D.	
53)	Ethyl methacrylate	0.00	69	0	N.D.	
54)	trans-1,3-Dichloropropene	0.00	75	0	N.D.	
55)	1,1,2-Trichloroethane	0.00	97	0	N.D.	
56)	Tetrachloroethene	0.00	166	0	N.D.	
57)	2-Hexanone	0.00	43	0	N.D.	
58)	1,3-Dichloropropane	0.00	76	0	N.D.	
59)	Dibromochloromethane	0.00	129	0	N.D.	
60)	1,2-Dibromoethane	0.00	107	0	N.D.	
61)	Chlorobenzene	0.00	112	0	N.D.	
62)	1-Chlorohexane	9.29	91	231	N.D.	
63)	Ethylbenzene	9.29	91	231	N.D.	
64)	1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
65)	m,p-Xylene	0.00	106	0	N.D.	
66)	o-xylene	0.00	106	0	N.D.	
67)	Styrene	0.00	104	0	N.D.	
68)	Bromoform	0.00	173	0	N.D.	
69)	Isopropylbenzene	10.19	105	127	N.D.	
72)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
73)	n-Propylbenzene	0.00	120	0	N.D.	
74)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
75)	Bromobenzene	0.00	156	0	N.D.	
76)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
77)	2-Chlorotoluene	10.47	91	247	N.D.	
78)	1,3,5-Trimethylbenzene	0.00	105	0	N.D.	
79)	4-Chlorotoluene	10.47	91	247	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204015.D Vial: 24
Acq On : 4 Dec 2006 16:53 Operator: LH
Sample : JPL26-005 TB-21-11/30/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:28 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	tert-Butylbenzene	10.97	119	55	N.D.	
81)	1,2,4-Trimethylbenzene	11.01	105	122	N.D.	
82)	sec-butylbenzene	11.18	105	138	N.D.	
83)	4-Isopropyltoluene	11.34	119	320	N.D.	
84)	1,3-Dichlorobenzene	11.35	146	59	N.D.	
85)	1,4-Dichlorobenzene	11.35	146	59	N.D.	
86)	n-Butylbenzene	11.74	91	56	N.D.	
87)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.54	128	54	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204020.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 18:54

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204020.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 18:54

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204020.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 18:54

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

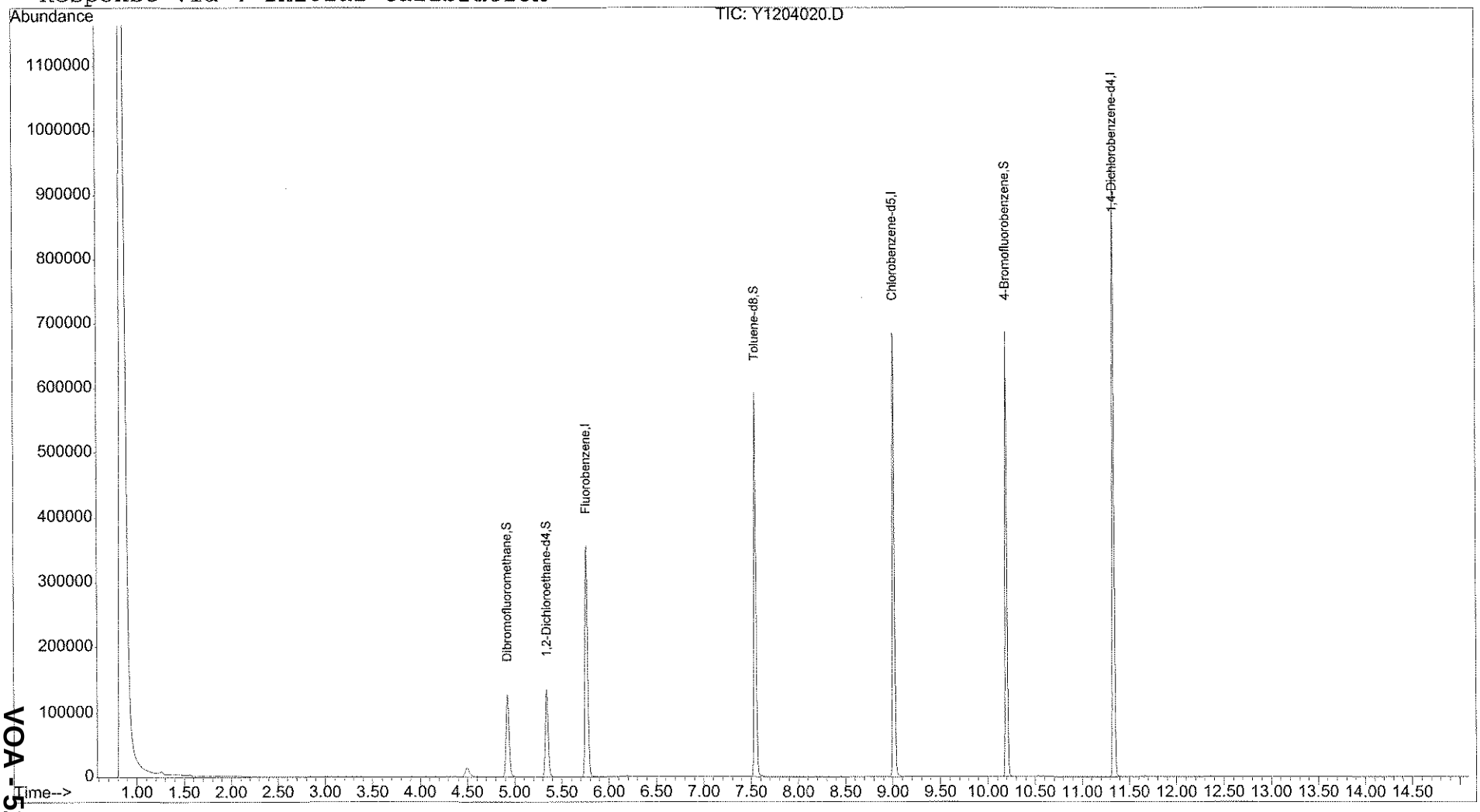
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\120406\Y1204020.D Vial: 29
Acq On : 4 Dec 2006 18:54 Operator: LH
Sample : JPL26-006 MW-5 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:37 2006 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration



VOA -52

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204020.D Vial: 29
Acq On : 4 Dec 2006 18:54 Operator: LH
Sample : JPL26-006 MW-5 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:37 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	5.77	96	331798	50.00 ug/l	0.00
50) Chlorobenzene-d5	9.01	82	182088	50.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	11.34	152	212983	50.00 ug/l	0.00
System Monitoring Compounds					
32) Dibromofluoromethane	4.93	111	91256	46.34 ug/l	0.00
38) 1,2-Dichloroethane-d4	5.34	65	103411	58.93 ug/l	0.00
51) Toluene-d8	7.55	98	348664	47.30 ug/l	0.00
71) 4-Bromofluorobenzene	10.20	95	180934	59.84 ug/l	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) 1,1-Dichloroethene	0.00	96	0	N.D.	
9) Acrolein	0.00	56	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D. d	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Acetonitrile	0.00	40	0	N.D. d	
16) Allyl chloride	0.00	76	0	N.D.	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) Methyl tert-butyl ether	0.00	73	0	N.D.	
20) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
21) Acrylonitrile	0.00	53	0	N.D.	
22) Vinyl acetate	0.00	43	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	4.71	83	54	N.D.	
33) 1,1,1-Trichloroethane	0.00	97	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204020.D
Acq On : 4 Dec 2006 18:54
Sample : JPL26-006 MW-5
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 5 10:37 2006

Vial: 29
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34)	Cyclohexane	0.00	56	0	N.D.	
35)	Carbon Tetrachloride	0.00	117	0	N.D.	
36)	Methyl methacrylate	0.00	41	0	N.D.	
37)	1,1-Dichloropropene	0.00	75	0	N.D.	
39)	Benzene	0.00	78	0	N.D.	
40)	1,2-Dichloroethane	0.00	62	0	N.D.	
41)	Isobutanol	0.00	43	0	N.D.	
42)	Trichloroethene	6.20	130	713	N.D.	
43)	Methylcyclohexane	0.00	83	0	N.D.	
44)	1,2-Dichloropropane	0.00	63	0	N.D.	
45)	Dibromomethane	0.00	93	0	N.D.	
46)	2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
47)	Bromodichloromethane	0.00	83	0	N.D.	
48)	cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49)	4-Methyl-2-pentanone	7.55	43	1625	~~Below Cal # 1~~	
52)	Toluene	7.61	92	65	N.D.	
53)	Ethyl methacrylate	0.00	69	0	N.D.	LM 12/5/06
54)	trans-1,3-Dichloropropene	0.00	75	0	N.D.	
55)	1,1,2-Trichloroethane	0.00	97	0	N.D.	
56)	Tetrachloroethene	0.00	166	0	N.D.	
57)	2-Hexanone	0.00	43	0	N.D.	
58)	1,3-Dichloropropane	0.00	76	0	N.D.	
59)	Dibromochloromethane	0.00	129	0	N.D.	
60)	1,2-Dibromoethane	0.00	107	0	N.D.	
61)	Chlorobenzene	0.00	112	0	N.D.	
62)	1-Chlorohexane	9.30	91	174	N.D.	
63)	Ethylbenzene	9.30	91	174	N.D.	
64)	1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
65)	m,p-Xylene	0.00	106	0	N.D.	
66)	o-xylene	0.00	106	0	N.D.	
67)	Styrene	0.00	104	0	N.D.	
68)	Bromoform	0.00	173	0	N.D.	
69)	Isopropylbenzene	10.21	105	245	N.D.	
72)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
73)	n-Propylbenzene	0.00	120	0	N.D.	
74)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
75)	Bromobenzene	0.00	156	0	N.D.	
76)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
77)	2-Chlorotoluene	10.47	91	53	N.D.	
78)	1,3,5-Trimethylbenzene	0.00	105	0	N.D.	
79)	4-Chlorotoluene	10.47	91	53	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204020.D Vial: 29
Acq On : 4 Dec 2006 18:54 Operator: LH
Sample : JPL26-006 MW-5 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:37 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	0.00	105	0	N.D.	
82)	sec-butylbenzene	0.00	105	0	N.D.	
83)	4-Isopropyltoluene	11.34	119	206	N.D.	
84)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	n-Butylbenzene	11.74	91	133	N.D.	
87)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	0.00	128	0	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-6

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204021.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 19:18

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.86	
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-6

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204021.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 19:18

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	1.2	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-6

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204021.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 19:18

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

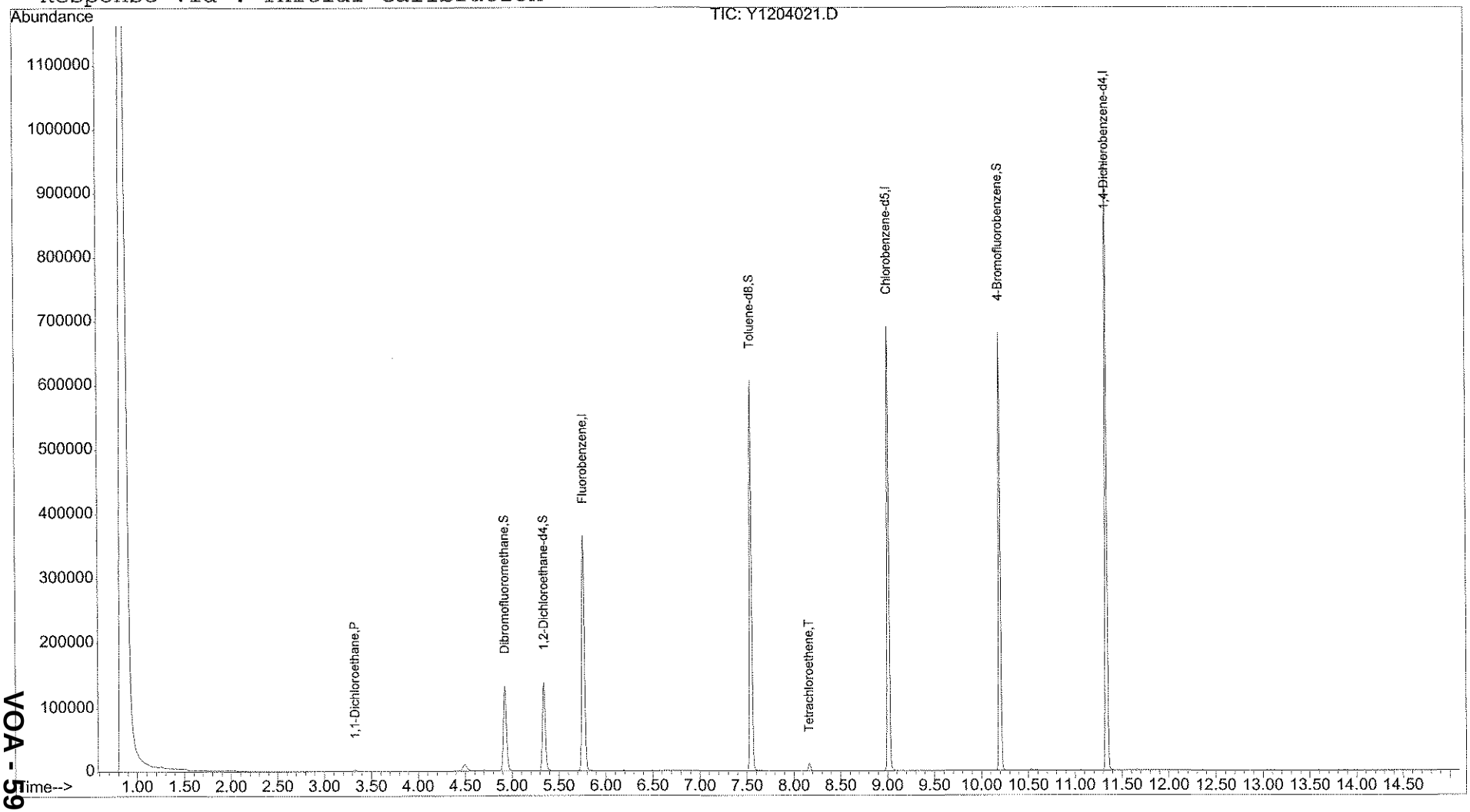
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\120406\Y1204021.D
Acq On : 4 Dec 2006 19:18
Sample : JPL26-007 MW-6
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 5 10:39 2006

Vial: 30
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration



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Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204021.D
Acq On : 4 Dec 2006 19:18
Sample : JPL26-007 MW-6
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 5 10:39 2006

Vial: 30
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	5.77	96	341271	50.00 ug/l	0.00
50) Chlorobenzene-d5	9.01	82	184559	50.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	11.34	152	214443	50.00 ug/l	0.00
System Monitoring Compounds					
32) Dibromofluoromethane	4.93	111	94934	46.86 ug/l	0.00
38) 1,2-Dichloroethane-d4	5.34	65	105687	58.55 ug/l	0.00
51) Toluene-d8	7.55	98	356147	47.67 ug/l	0.00
71) 4-Bromofluorobenzene	10.20	95	180614	59.32 ug/l	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) 1,1-Dichloroethene	0.00	96	0	N.D.	
9) Acrolein	0.00	56	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.15	43	503	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Acetonitrile	0.00	40	0	N.D. d	
16) Allyl chloride	0.00	76	0	N.D.	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) Methyl tert-butyl ether	0.00	73	0	N.D.	
20) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
21) Acrylonitrile	0.00	53	0	N.D.	
22) Vinyl acetate	0.00	43	0	N.D.	
23) 1,1-Dichloroethane	3.33	63	3605	0.86 ug/l	93
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	4.70	83	1483	N.D.	
33) 1,1,1-Trichloroethane	0.00	97	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204021.D
Acq On : 4 Dec 2006 19:18
Sample : JPL26-007 MW-6
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 5 10:39 2006

Vial: 30
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	0.00	117	0	N.D.	
36) Methyl methacrylate	0.00	41	0	N.D.	
37) 1,1-Dichloropropene	5.11	75	56	N.D.	
39) Benzene	0.00	78	0	N.D.	
40) 1,2-Dichloroethane	0.00	62	0	N.D.	
41) Isobutanol	0.00	43	0	N.D.	
42) Trichloroethene	6.20	130	429	N.D.	
43) Methylcyclohexane	0.00	83	0	N.D.	
44) 1,2-Dichloropropane	0.00	63	0	N.D.	
45) Dibromomethane	0.00	93	0	N.D.	
46) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
47) Bromodichloromethane	0.00	83	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	7.54	43	1709	~~Below Cal~~ #	1
52) Toluene	7.61	92	65	N.D.	
53) Ethyl methacrylate	0.00	69	0	N.D.	
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	8.16	166	3136	1.15 ug/l	99
57) 2-Hexanone	0.00	43	0	N.D.	
58) 1,3-Dichloropropane	0.00	76	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	0.00	112	0	N.D.	
62) 1-Chlorohexane	9.29	91	123	N.D.	
63) Ethylbenzene	9.29	91	123	N.D.	
64) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
65) m,p-Xylene	0.00	106	0	N.D.	
66) o-xylene	0.00	106	0	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	
69) Isopropylbenzene	10.20	105	124	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
73) n-Propylbenzene	0.00	120	0	N.D.	
74) trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
75) Bromobenzene	0.00	156	0	N.D.	
76) 1,2,3-Trichloropropane	0.00	110	0	N.D.	
77) 2-Chlorotoluene	0.00	91	0	N.D.	
78) 1,3,5-Trimethylbenzene	0.00	105	0	N.D.	
79) 4-Chlorotoluene	0.00	91	0	N.D.	

LW 12/15/06

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

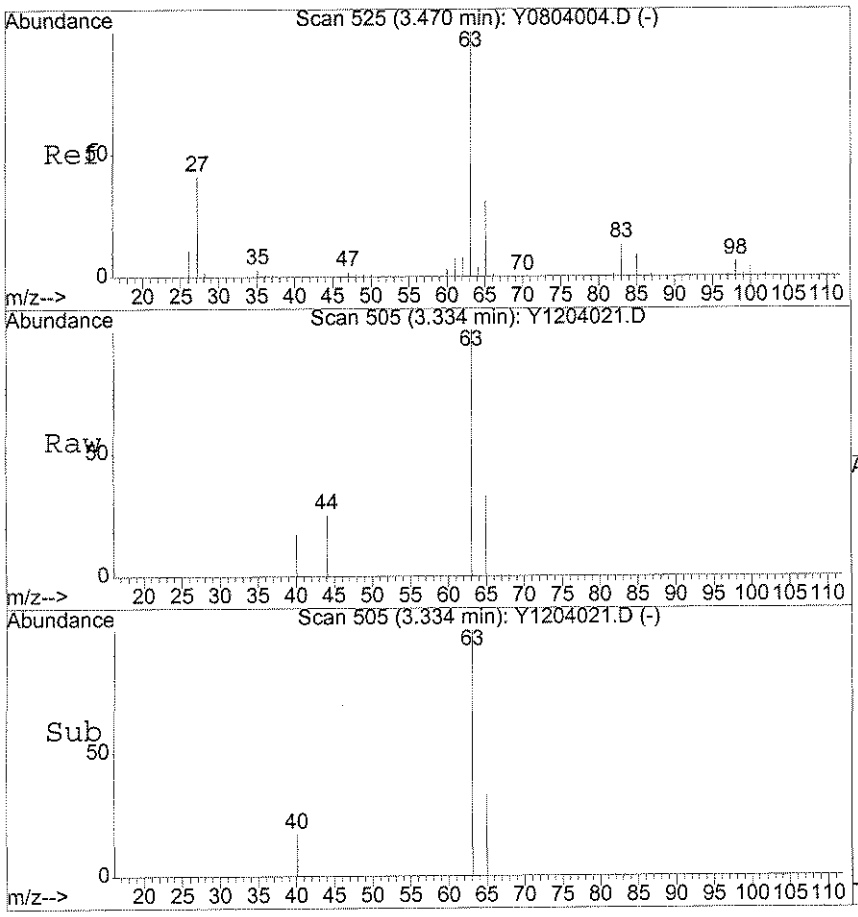
Data File : X:\MSVOA\YODA\120406\Y1204021.D
Acq On : 4 Dec 2006 19:18
Sample : JPL26-007 MW-6
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 5 10:39 2006

Vial: 30
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	0.00	105	0	N.D.	
82)	sec-butylbenzene	0.00	105	0	N.D.	
83)	4-Isopropyltoluene	11.34	119	156	N.D.	
84)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	n-Butylbenzene	11.74	91	55	N.D.	
87)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	0.00	128	0	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

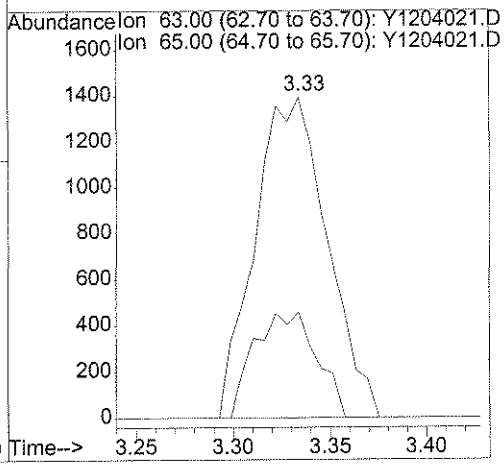
(#) = qualifier out of range (m) = manual integration

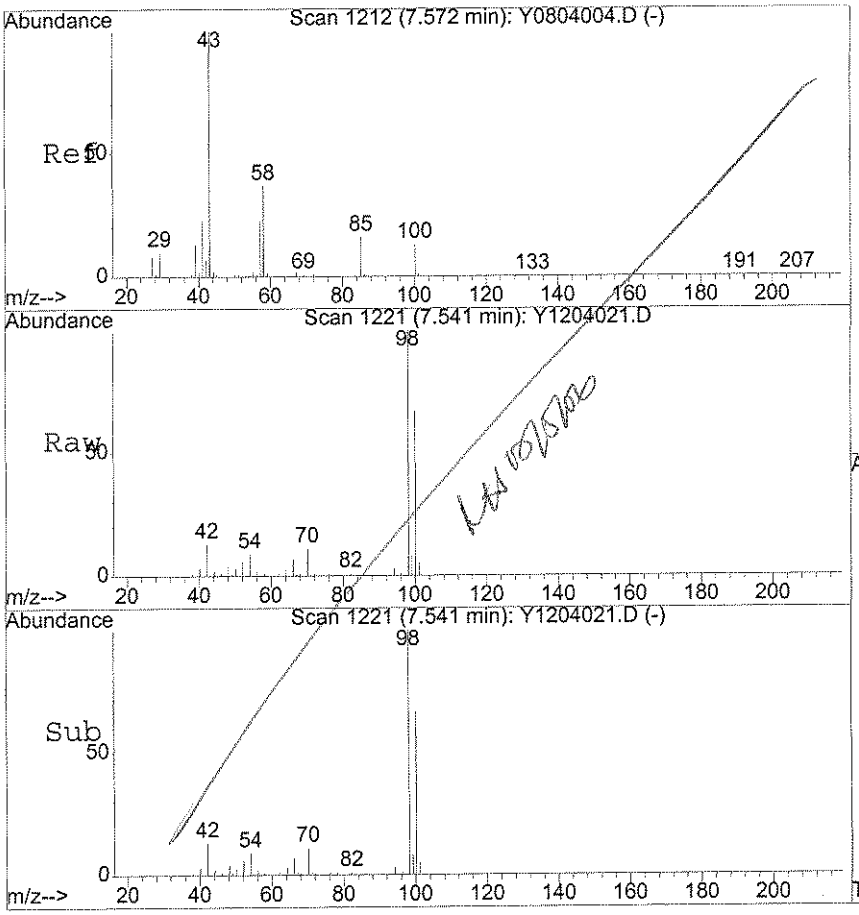


#23
1,1-Dichloroethane
Concen: 0.86 ug/l
RT: 3.33 min Scan# 505
Delta R.T. 0.01 min
Lab File: Y1204021.D
Acq: 4 Dec 2006 19:18

Tgt Ion: 63 Resp: 3605

Ion	Ratio	Lower	Upper
63	100		
65	28.3	12.3	52.3

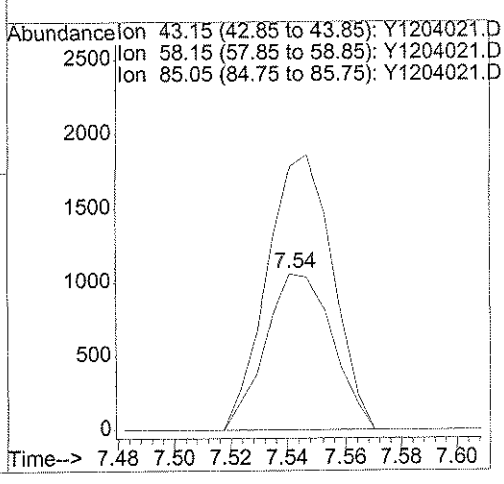


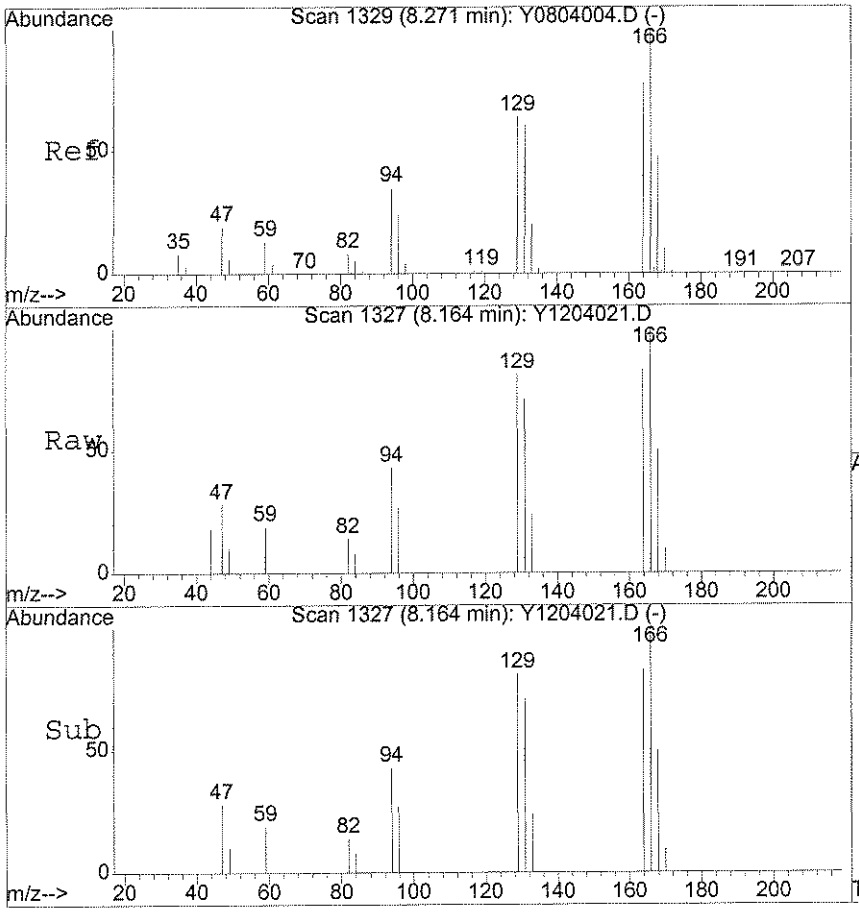


#49
4-Methyl-2-pentanone
Concen: Below Cal
RT: 7.54 min Scan# 1221
Delta R.T. 0.02 min
Lab File: Y1204021.D
Acq: 4 Dec 2006 19:18

Tgt Ion: 43 Resp: 1709

Ion	Ratio	Lower	Upper
43	100		
58	172.1	34.3	51.5#
85	0.0	14.3	21.5#

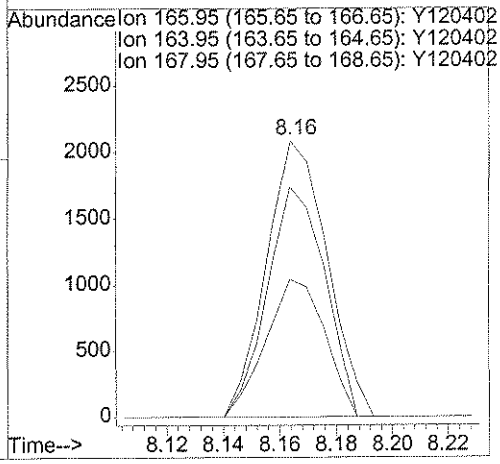




#56
Tetrachloroethene
Concen: 1.15 ug/l
RT: 8.16 min Scan# 1327
Delta R.T. -0.00 min
Lab File: Y1204021.D
Acq: 4 Dec 2006 19:18

Tgt Ion:166 Resp: 3136

Ion	Ratio	Lower	Upper
166	100		
164	78.9	63.3	94.9
168	48.4	39.6	59.4



1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-22-12/1/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204016.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 17:17

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-22-12/1/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204016.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 17:17

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-22-12/1/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-008

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204016.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: not dec.

Date/Time Analyzed: 12/04/2006 17:17

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

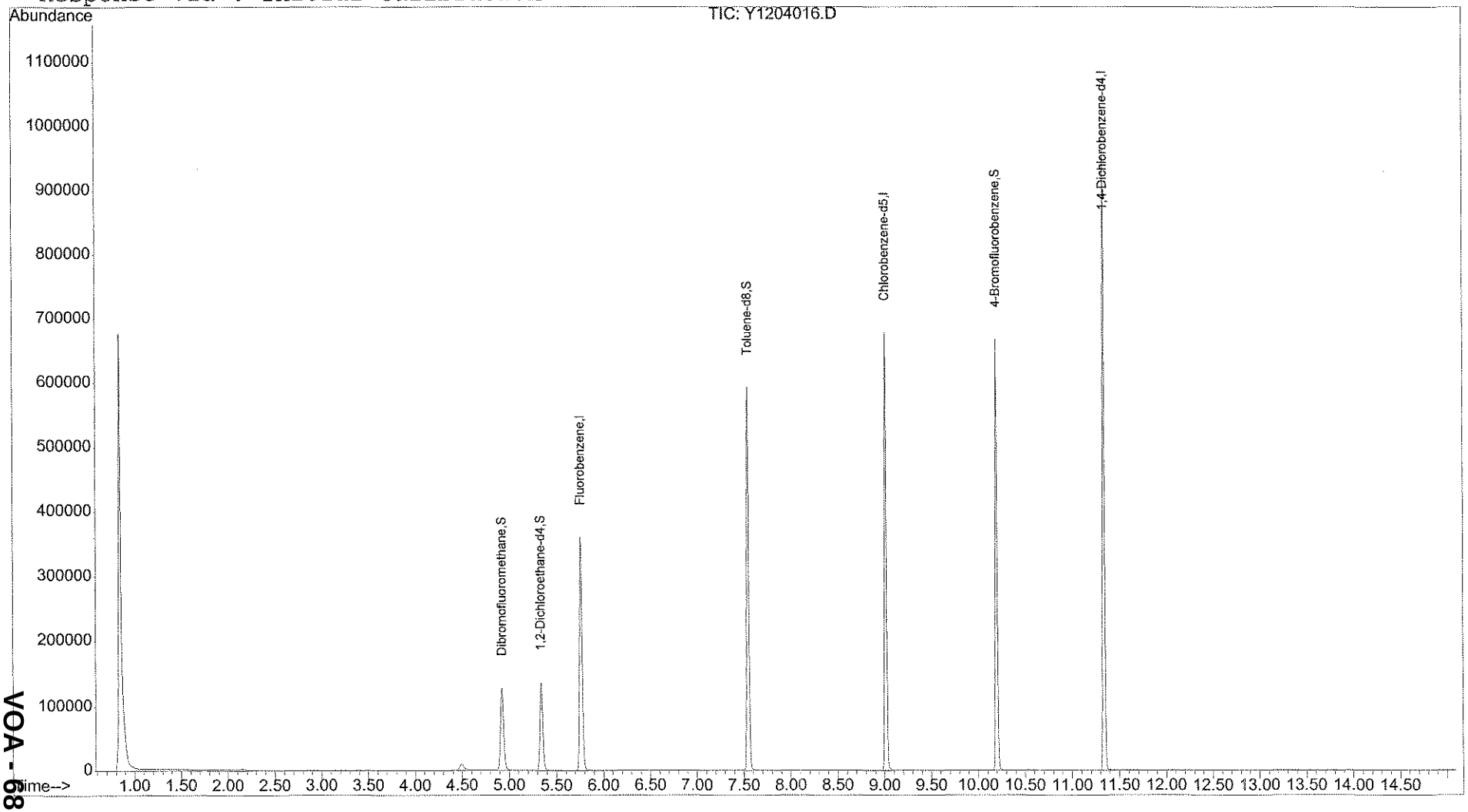
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\120406\Y1204016.D Vial: 25
Acq On : 4 Dec 2006 17:17 Operator: LH
Sample : JPL26-008 TB-22-12/01/06 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:30 2006 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration



VOA - 68

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204016.D Vial: 25
Acq On : 4 Dec 2006 17:17 Operator: LH
Sample : JPL26-008 TB-22-12/01/06 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:30 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	5.76	96	330134	50.00 ug/l	0.00
50) Chlorobenzene-d5	9.01	82	178459	50.00 ug/l	0.00
70) 1,4-Dichlorobenzene-d4	11.34	152	215652	50.00 ug/l	0.00
System Monitoring Compounds					
32) Dibromofluoromethane	4.92	111	94507	48.23 ug/l	0.00
38) 1,2-Dichloroethane-d4	5.34	65	103347	59.19 ug/l	0.00
51) Toluene-d8	7.55	98	350473	48.51 ug/l	0.00
71) 4-Bromofluorobenzene	10.20	95	176257	57.57 ug/l	0.00
Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) 1,1-Dichloroethene	0.00	96	0	N.D.	
9) Acrolein	0.00	56	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D. d	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Acetonitrile	0.00	40	0	N.D. d	
16) Allyl chloride	0.00	76	0	N.D.	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) Methyl tert-butyl ether	0.00	73	0	N.D.	
20) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
21) Acrylonitrile	0.00	53	0	N.D.	
22) Vinyl acetate	0.00	43	0	N.D.	
23) 1,1-Dichloroethane	0.00	63	0	N.D.	
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	4.36	43	1051	~~Below Cal #~~	57
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	4.73	41	120	N.D.	
31) Chloroform	0.00	83	0	N.D.	
33) 1,1,1-Trichloroethane	0.00	97	0	N.D.	

LH 12/8/06

(#) = qualifier out of range (m) = manual integration
Y1204016.D 8260B.M Tue Dec 05 10:30:57 2006

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204016.D Vial: 25
Acq On : 4 Dec 2006 17:17 Operator: LH
Sample : JPL26-008 TB-22-12/01/06 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 5 10:30 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	0.00	117	0	N.D.	
36) Methyl methacrylate	0.00	41	0	N.D.	
37) 1,1-Dichloropropene	0.00	75	0	N.D.	
39) Benzene	0.00	78	0	N.D.	
40) 1,2-Dichloroethane	0.00	62	0	N.D.	
41) Isobutanol	0.00	43	0	N.D.	
42) Trichloroethene	0.00	130	0	N.D.	
43) Methylcyclohexane	0.00	83	0	N.D.	
44) 1,2-Dichloropropane	0.00	63	0	N.D.	
45) Dibromomethane	0.00	93	0	N.D.	
46) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
47) Bromodichloromethane	0.00	83	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	7.54	43	1549	~~Below Cal #~~	1
52) Toluene	7.61	92	61	N.D.	
53) Ethyl methacrylate	0.00	69	0	N.D.	
54) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	0.00	166	0	N.D.	
57) 2-Hexanone	0.00	43	0	N.D.	
58) 1,3-Dichloropropane	0.00	76	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	0.00	112	0	N.D.	
62) 1-Chlorohexane	9.29	91	219	N.D.	
63) Ethylbenzene	9.29	91	219	N.D.	
64) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
65) m,p-Xylene	0.00	106	0	N.D.	
66) o-xylene	0.00	106	0	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	
69) Isopropylbenzene	10.19	105	67	N.D.	
72) 1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
73) n-Propylbenzene	0.00	120	0	N.D.	
74) trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
75) Bromobenzene	0.00	156	0	N.D.	
76) 1,2,3-Trichloropropane	0.00	110	0	N.D.	
77) 2-Chlorotoluene	10.47	91	193	N.D.	
78) 1,3,5-Trimethylbenzene	0.00	105	0	N.D.	
79) 4-Chlorotoluene	10.47	91	193	N.D.	

HW 12/5/06

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : X:\MSVOA\YODA\120406\Y1204016.D
Acq On : 4 Dec 2006 17:17
Sample : JPL26-008 TB-22-12/01/06
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 5 10:30 2006

Vial: 25
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 8 point calibration 8260- 5ML
Last Update : Wed Nov 22 10:01:26 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.01	105	135	N.D.	
82)	sec-butylbenzene	11.01	105	135	N.D.	
83)	4-Isopropyltoluene	11.34	119	168	N.D.	
84)	1,3-Dichlorobenzene	11.36	146	62	N.D.	
85)	1,4-Dichlorobenzene	11.36	146	62	N.D.	
86)	n-Butylbenzene	11.74	91	145	N.D.	
87)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	0.00	128	0	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-009

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212019.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 17:19

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-009

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212019.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 17:19

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-1

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-009

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212019.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 17:19

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

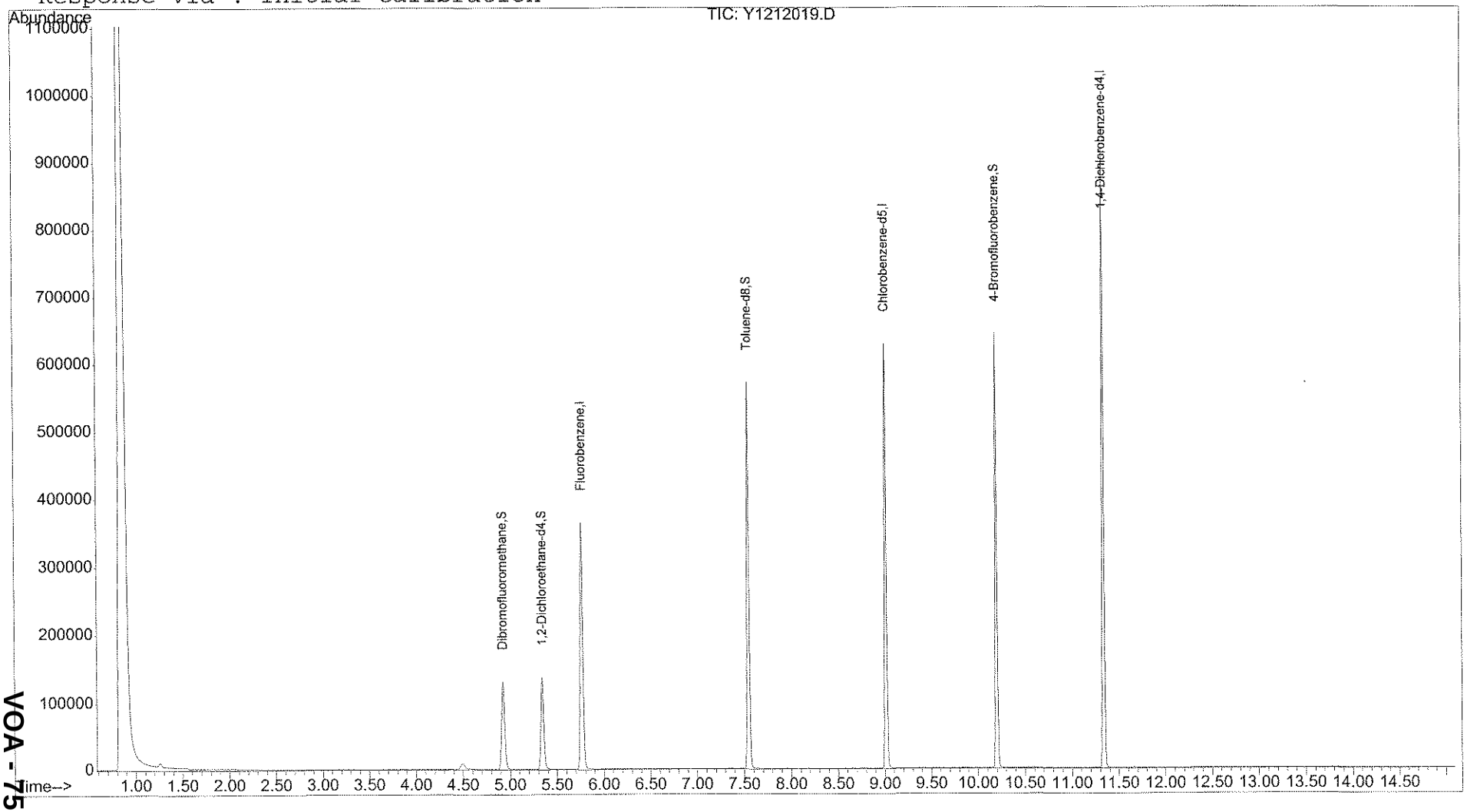
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212019.D
Acq On : 12 Dec 2006 17:19
Sample : JPL26-009 MW-1
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 11:44 2006

Vial: 28
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 75

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212019.D Vial: 28
Acq On : 12 Dec 2006 17:19 Operator: LH
Sample : JPL26-009 MW-1 Inst : yoda
Misc : 5mL+IS/SS #3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:44 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	336256	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	168434	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	196046	50.00 ug/l	0.00 NA%

System Monitoring Compounds

33) Dibromofluoromethane	4.93	111	93111	47.36 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.72%		
37) 1,2-Dichloroethane-d4	5.34	65	105632	50.01 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.02%		
51) Toluene-d8	7.55	98	339304	50.17 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 100.34%		
72) 4-Bromofluorobenzene	10.20	95	167506	56.59 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D. d	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212019.D
Acq On : 12 Dec 2006 17:19
Sample : JPL26-009 MW-1
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 11:44 2006

Vial: 28
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	0.00	83	0	N.D.	
32) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	0.00	117	0	N.D.	
36) 1,1-Dichloropropene	0.00	75	0	N.D.	
38) Benzene	0.00	78	0	N.D.	
39) 1,2-Dichloroethane	0.00	62	0	N.D.	
40) Isobutanol	0.00	43	0	N.D.	
41) Trichloroethene	0.00	130	0	N.D.	
42) Methylcyclohexane	0.00	83	0	N.D.	
43) 1,2-Dichloropropane	0.00	63	0	N.D.	
44) Dibromomethane	0.00	93	0	N.D.	
45) Methyl methacrylate	0.00	41	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52) Toluene	0.00	92	0	N.D.	
53) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54) Ethyl methacrylate	0.00	69	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	0.00	166	0	N.D.	
57) 1,3-Dichloropropane	0.00	76	0	N.D.	
58) 2-Hexanone	0.00	43	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	0.00	112	0	N.D.	
62) 1-Chlorohexane	9.02	91	525	N.D.	
63) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64) Ethylbenzene	9.29	91	196	N.D.	
65) m,p-Xylene	0.00	106	0	N.D.	
66) o-xylene	0.00	106	0	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212019.D
Acq On : 12 Dec 2006 17:19
Sample : JPL26-009 MW-1
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 11:44 2006

Vial: 28
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.20	105	198	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	149	N.D.	
78)	4-Chlorotoluene	10.47	91	149	N.D.	
79)	1,3,5-Trimethylbenzene	0.00	105	0	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.18	105	75	N.D.	
82)	sec-butylbenzene	11.18	105	75	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	229	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	194	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	0.00	128	0	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-010

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212020.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 17:44

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-010

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212020.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 17:44

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-9

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-010

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212020.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 17:44

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

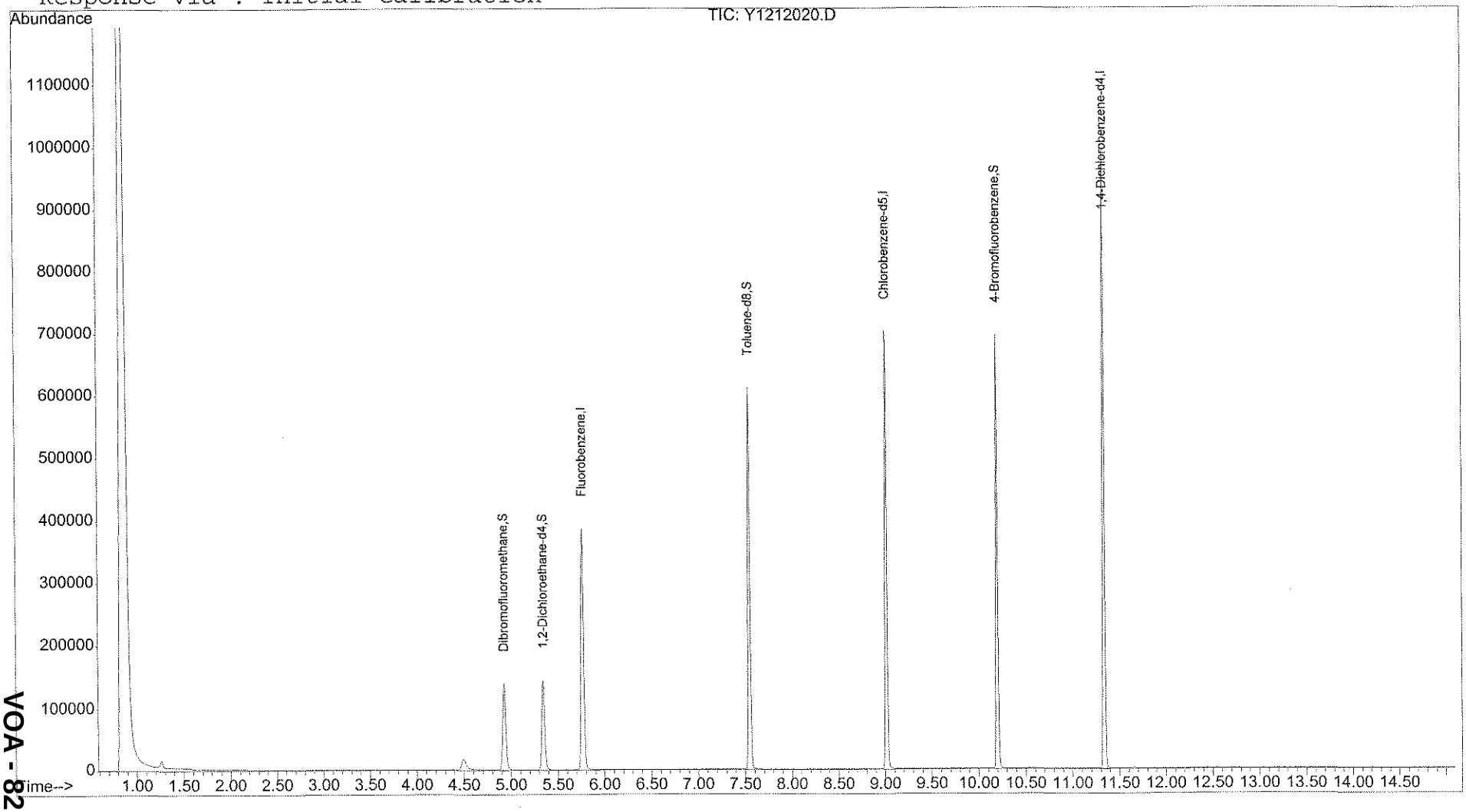
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212020.D
Acq On : 12 Dec 2006 17:44
Sample : JPL26-010 MW-9
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 12:16 2006

Vial: 29
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 82

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212020.D
Acq On : 12 Dec 2006 17:44
Sample : JPL26-010 MW-9
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 12:16 2006

Vial: 29
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	358198	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	181859	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	215582	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	99726	47.62 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 95.24%		
37) 1,2-Dichloroethane-d4	5.34	65	112695	50.09 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.18%		
51) Toluene-d8	7.55	98	359498	49.23 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 98.46%		
72) 4-Bromofluorobenzene	10.20	95	179504	55.14 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D. d	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212020.D
Acq On : 12 Dec 2006 17:44
Sample : JPL26-010 MW-9
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 12:16 2006

Vial: 29
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	0.00	83	0	N.D.	
32) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	0.00	117	0	N.D.	
36) 1,1-Dichloropropene	5.08	75	59	N.D.	
38) Benzene	0.00	78	0	N.D.	
39) 1,2-Dichloroethane	0.00	62	0	N.D.	
40) Isobutanol	0.00	43	0	N.D.	
41) Trichloroethene	0.00	130	0	N.D.	
42) Methylcyclohexane	0.00	83	0	N.D.	
43) 1,2-Dichloropropane	0.00	63	0	N.D.	
44) Dibromomethane	0.00	93	0	N.D.	
45) Methyl methacrylate	0.00	41	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52) Toluene	7.61	92	240	N.D.	
53) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54) Ethyl methacrylate	0.00	69	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	0.00	166	0	N.D.	
57) 1,3-Dichloropropane	0.00	76	0	N.D.	
58) 2-Hexanone	0.00	43	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	0.00	112	0	N.D.	
62) 1-Chlorohexane	9.01	91	643	N.D.	
63) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64) Ethylbenzene	9.29	91	371	N.D.	
65) m,p-Xylene	0.00	106	0	N.D.	
66) o-xylene	0.00	106	0	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212020.D
Acq On : 12 Dec 2006 17:44
Sample : JPL26-010 MW-9
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 12:16 2006

Vial: 29
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.20	105	133	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	142	N.D.	
78)	4-Chlorotoluene	10.47	91	142	N.D.	
79)	1,3,5-Trimethylbenzene	10.65	105	66	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.18	105	124	N.D.	
82)	sec-butylbenzene	11.18	105	124	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	234	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	238	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	114	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-15

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-011

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212021.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:08

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-15

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-011

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212021.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:08

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-15

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-011

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212021.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:08

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

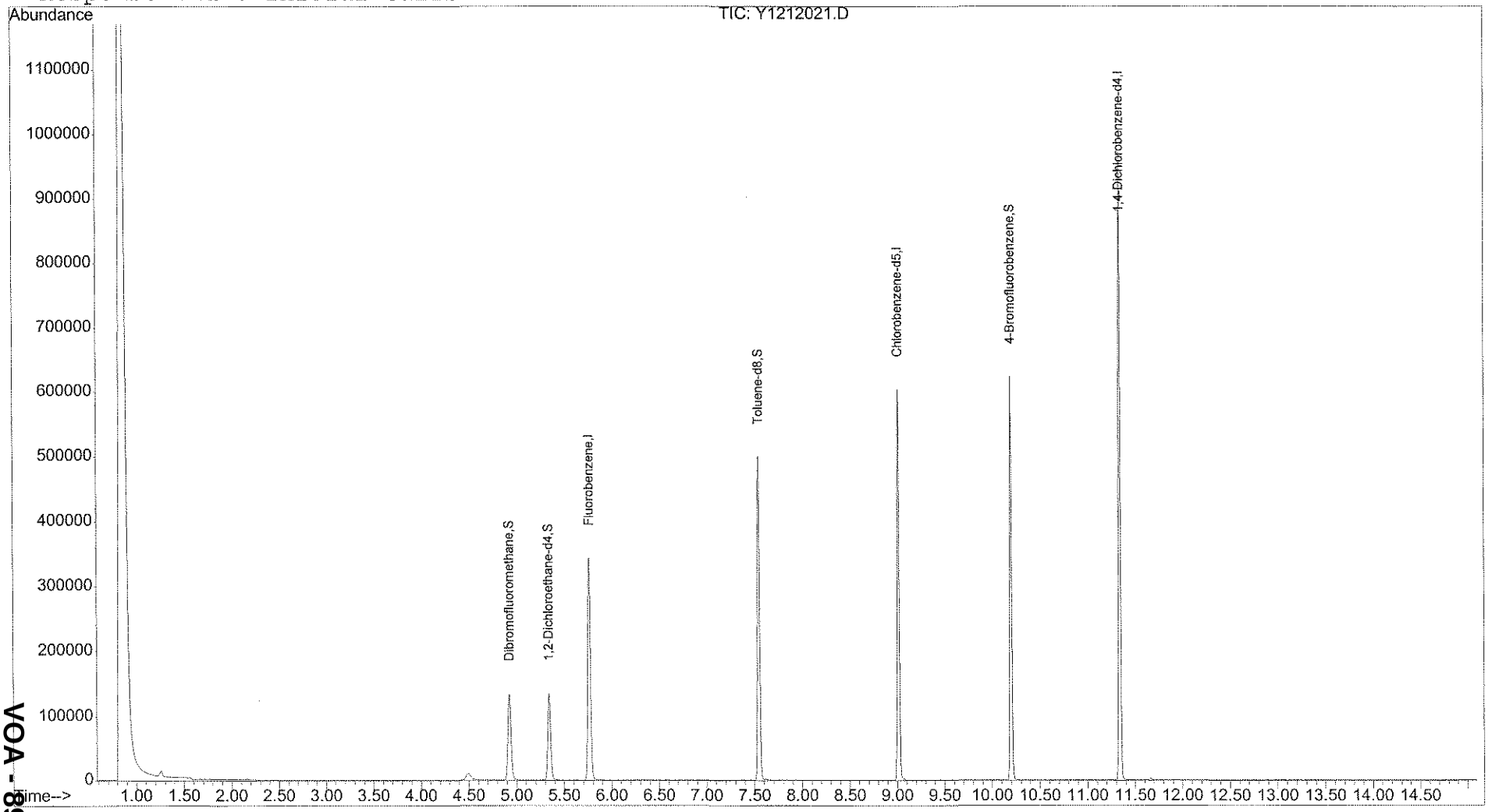
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212021.D
Acq On : 12 Dec 2006 18:08
Sample : JPL26-011 MW-15
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 12:24 2006

Vial: 30
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212021.D Vial: 30
Acq On : 12 Dec 2006 18:08 Operator: LH
Sample : JPL26-011 MW-15 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 12:24 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	318114	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	159936	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	214926	50.00 ug/l	0.00 NA%
System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	96449	51.86 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 103.72%		
37) 1,2-Dichloroethane-d4	5.34	65	102195	51.14 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 102.28%		
51) Toluene-d8	7.55	98	303965	47.34 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 94.68%		
72) 4-Bromofluorobenzene	10.20	95	165612	51.03 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D. d	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	2.39	40	295	~~Below Cal # 1~~	
17) Methyl Acetate	0.00	43	0	N.D. NN 12/13/06	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212021.D
Acq On : 12 Dec 2006 18:08
Sample : JPL26-011 MW-15
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 12:24 2006

Vial: 30
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	0.00	83	0	N.D.	
32) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	0.00	117	0	N.D.	
36) 1,1-Dichloropropene	0.00	75	0	N.D.	
38) Benzene	0.00	78	0	N.D.	
39) 1,2-Dichloroethane	0.00	62	0	N.D.	
40) Isobutanol	0.00	43	0	N.D.	
41) Trichloroethene	0.00	130	0	N.D.	
42) Methylcyclohexane	0.00	83	0	N.D.	
43) 1,2-Dichloropropane	0.00	63	0	N.D.	
44) Dibromomethane	0.00	93	0	N.D.	
45) Methyl methacrylate	0.00	41	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52) Toluene	7.61	92	57	N.D.	
53) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54) Ethyl methacrylate	0.00	69	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	0.00	166	0	N.D.	
57) 1,3-Dichloropropane	0.00	76	0	N.D.	
58) 2-Hexanone	0.00	43	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	0.00	112	0	N.D.	
62) 1-Chlorohexane	9.02	91	459	N.D.	
63) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64) Ethylbenzene	9.18	91	57	N.D.	
65) m,p-Xylene	0.00	106	0	N.D.	
66) o-xylene	0.00	106	0	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212021.D
Acq On : 12 Dec 2006 18:08
Sample : JPL26-011 MW-15
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 12:24 2006

Vial: 30
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	0.00	105	0	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	180	N.D.	
78)	4-Chlorotoluene	10.65	91	65	N.D.	
79)	1,3,5-Trimethylbenzene	0.00	105	0	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.19	105	131	N.D.	
82)	sec-butylbenzene	11.19	105	131	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	223	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	166	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	123	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-7-4Q06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-012

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212022.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:32

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-7-4Q06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-012

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212022.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:32

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-7-4Q06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-012

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212022.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:32

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

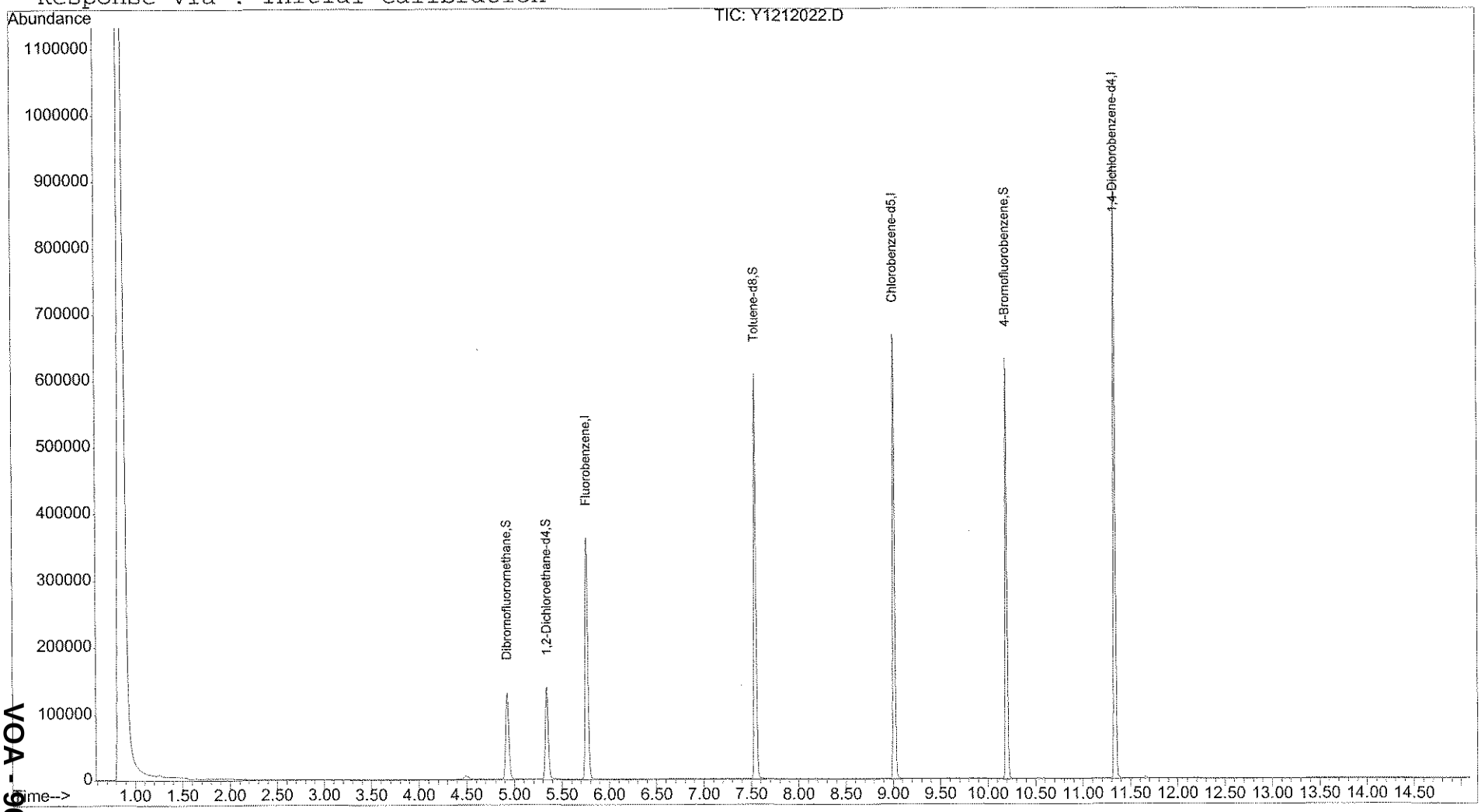
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212022.D
Acq On : 12 Dec 2006 18:32
Sample : JPL26-012 DUPE-7-4Q06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 15:13 2006

Vial: 31
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 96

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212022.D
Acq On : 12 Dec 2006 18:32
Sample : JPL26-012 DUPE-7-4Q06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 15:13 2006

Vial: 31
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	338382	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	176229	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	204907	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	94412	47.72 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 95.44%		
37) 1,2-Dichloroethane-d4	5.34	65	107148	50.41 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.82%		
51) Toluene-d8	7.55	98	359369	50.79 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 101.58%		
72) 4-Bromofluorobenzene	10.20	95	171013	55.27 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.16	43	294	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212022.D
Acq On : 12 Dec 2006 18:32
Sample : JPL26-012 DUPE-7-4Q06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 15:13 2006

Vial: 31
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24)	Chloroprene	0.00	53	0	N.D.	
25)	2,2-Dichloropropane	0.00	77	0	N.D.	
26)	cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27)	2-Butanone	0.00	43	0	N.D.	
28)	Propionitrile	0.00	54	0	N.D.	
29)	Bromochloromethane	0.00	128	0	N.D.	
30)	Methacrylonitrile	0.00	41	0	N.D.	
31)	Chloroform	0.00	83	0	N.D.	
32)	1,1,1-Trichloroethane	0.00	97	0	N.D.	
34)	Cyclohexane	0.00	56	0	N.D.	
35)	Carbon Tetrachloride	0.00	117	0	N.D.	
36)	1,1-Dichloropropene	0.00	75	0	N.D.	
38)	Benzene	0.00	78	0	N.D.	
39)	1,2-Dichloroethane	0.00	62	0	N.D.	
40)	Isobutanol	0.00	43	0	N.D.	
41)	Trichloroethene	0.00	130	0	N.D.	
42)	Methylcyclohexane	0.00	83	0	N.D.	
43)	1,2-Dichloropropane	0.00	63	0	N.D.	
44)	Dibromomethane	0.00	93	0	N.D.	
45)	Methyl methacrylate	0.00	41	0	N.D.	
46)	Bromodichloromethane	0.00	83	0	N.D.	
47)	2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48)	cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49)	4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52)	Toluene	7.61	92	124	N.D.	
53)	trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54)	Ethyl methacrylate	0.00	69	0	N.D.	
55)	1,1,2-Trichloroethane	0.00	97	0	N.D.	
56)	Tetrachloroethene	0.00	166	0	N.D.	
57)	1,3-Dichloropropane	0.00	76	0	N.D.	
58)	2-Hexanone	0.00	43	0	N.D.	
59)	Dibromochloromethane	0.00	129	0	N.D.	
60)	1,2-Dibromoethane	0.00	107	0	N.D.	
61)	Chlorobenzene	0.00	112	0	N.D.	
62)	1-Chlorohexane	9.01	91	643	N.D.	
63)	1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64)	Ethylbenzene	9.29	91	130	N.D.	
65)	m,p-Xylene	0.00	106	0	N.D.	
66)	o-xylene	0.00	106	0	N.D.	
67)	Styrene	0.00	104	0	N.D.	
68)	Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212022.D
Acq On : 12 Dec 2006 18:32
Sample : JPL26-012 DUPE-7-4Q06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 15:13 2006

Vial: 31
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.20	105	132	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	127	N.D.	
78)	4-Chlorotoluene	10.47	91	127	N.D.	
79)	1,3,5-Trimethylbenzene	0.00	105	0	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.02	105	57	N.D.	
82)	sec-butylbenzene	11.02	105	57	N.D.	
83)	1,3-Dichlorobenzene	11.35	146	60	N.D.	
84)	4-Isopropyltoluene	11.34	119	301	N.D.	
85)	1,4-Dichlorobenzene	11.35	146	60	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.75	91	125	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	55	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-23-12/4/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-013

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212015.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 15:42

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-23-12/4/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-013

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212015.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 15:42

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-23-12/4/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-013

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212015.D

Level: (LOW/MED)

Date Collected: 12/04/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 15:42

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

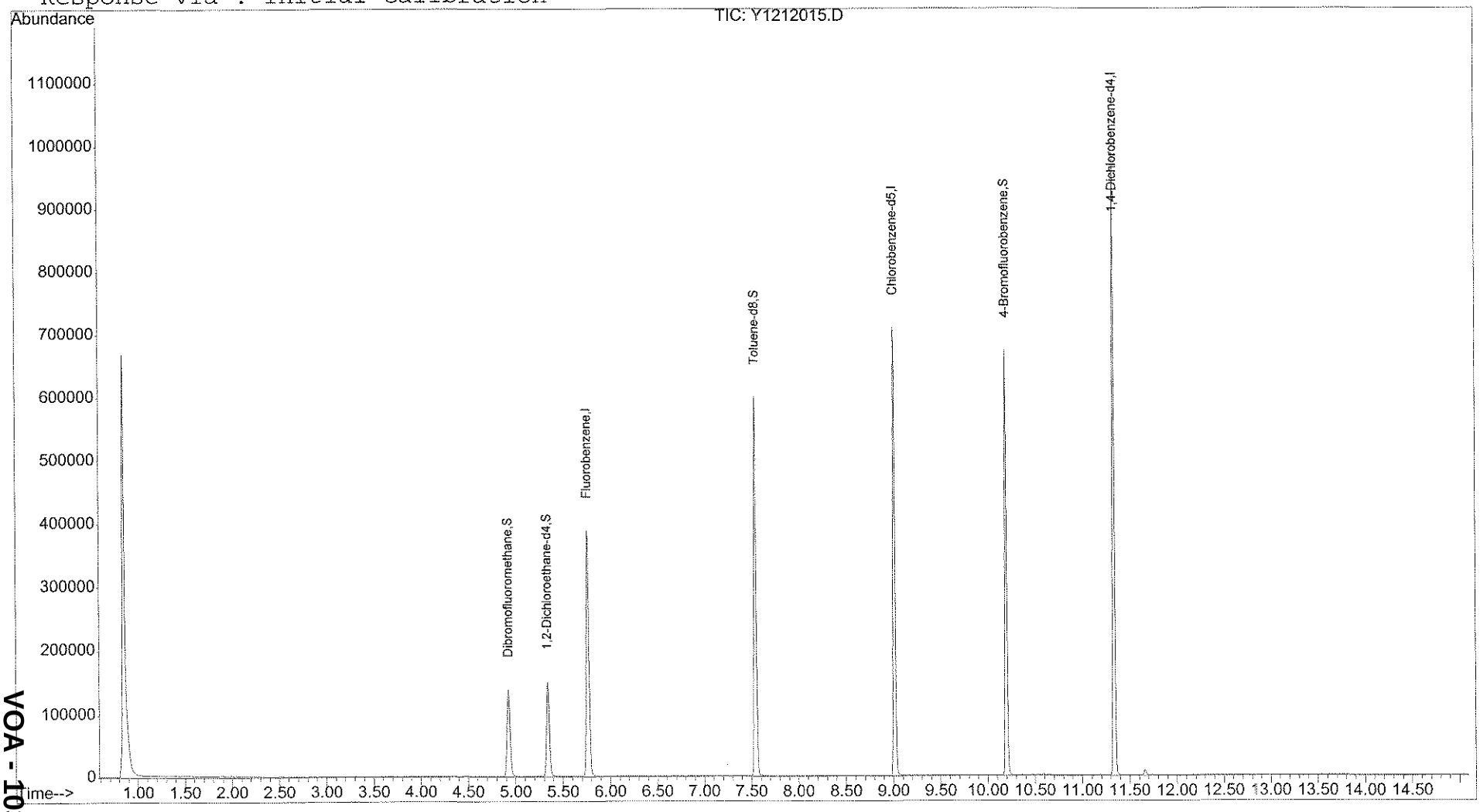
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212015.D
Acq On : 12 Dec 2006 15:42
Sample : JPL26-013 TB-23-12/4/06
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 11:39 2006

Vial: 25
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 103

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212015.D Vial: 25
Acq On : 12 Dec 2006 15:42 Operator: LH
Sample : JPL26-013 TB-23-12/4/06 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:39 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.76	96	357574	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	185647	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	215456	50.00 ug/l	0.00 NA%
System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	98911	47.31 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.62%		
37) 1,2-Dichloroethane-d4	5.34	65	112666	50.16 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.32%		
51) Toluene-d8	7.55	98	361785	48.54 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 97.08%		
72) 4-Bromofluorobenzene	10.20	95	180651	55.53 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D. d	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.21	76	257	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	2.51	84	505	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212015.D
Acq On : 12 Dec 2006 15:42
Sample : JPL26-013 TB-23-12/4/06
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 11:39 2006

Vial: 25
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24)	Chloroprene	0.00	53	0	N.D.	
25)	2,2-Dichloropropane	0.00	77	0	N.D.	
26)	cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27)	2-Butanone	0.00	43	0	N.D.	
28)	Propionitrile	0.00	54	0	N.D.	
29)	Bromochloromethane	0.00	128	0	N.D.	
30)	Methacrylonitrile	0.00	41	0	N.D.	
31)	Chloroform	0.00	83	0	N.D.	
32)	1,1,1-Trichloroethane	0.00	97	0	N.D.	
34)	Cyclohexane	0.00	56	0	N.D.	
35)	Carbon Tetrachloride	0.00	117	0	N.D.	
36)	1,1-Dichloropropene	0.00	75	0	N.D.	
38)	Benzene	0.00	78	0	N.D.	
39)	1,2-Dichloroethane	0.00	62	0	N.D.	
40)	Isobutanol	0.00	43	0	N.D.	
41)	Trichloroethene	0.00	130	0	N.D.	
42)	Methylcyclohexane	0.00	83	0	N.D.	
43)	1,2-Dichloropropane	0.00	63	0	N.D.	
44)	Dibromomethane	0.00	93	0	N.D.	
45)	Methyl methacrylate	0.00	41	0	N.D.	
46)	Bromodichloromethane	0.00	83	0	N.D.	
47)	2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48)	cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49)	4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52)	Toluene	0.00	92	0	N.D.	
53)	trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54)	Ethyl methacrylate	0.00	69	0	N.D.	
55)	1,1,2-Trichloroethane	0.00	97	0	N.D.	
56)	Tetrachloroethene	0.00	166	0	N.D.	
57)	1,3-Dichloropropane	0.00	76	0	N.D.	
58)	2-Hexanone	0.00	43	0	N.D.	
59)	Dibromochloromethane	0.00	129	0	N.D.	
60)	1,2-Dibromoethane	0.00	107	0	N.D.	
61)	Chlorobenzene	0.00	112	0	N.D.	
62)	1-Chlorohexane	9.02	91	573	N.D.	
63)	1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64)	Ethylbenzene	9.17	91	62	N.D.	
65)	m,p-Xylene	9.30	106	77	N.D.	
66)	o-xylene	0.00	106	0	N.D.	
67)	Styrene	0.00	104	0	N.D.	
68)	Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212015.D
Acq On : 12 Dec 2006 15:42
Sample : JPL26-013 TB-23-12/4/06
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 11:39 2006

Vial: 25
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.06	105	72	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	10.66	120	55	N.D.	
77)	2-Chlorotoluene	10.47	91	325	N.D.	
78)	4-Chlorotoluene	10.64	91	55	N.D.	
79)	1,3,5-Trimethylbenzene	10.65	105	121	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.01	105	65	N.D.	
82)	sec-butylbenzene	11.18	105	345	N.D.	
83)	1,3-Dichlorobenzene	11.35	146	73	N.D.	
84)	4-Isopropyltoluene	11.34	119	309	N.D.	
85)	1,4-Dichlorobenzene	11.35	146	73	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	420	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	13.31	180	65	N.D.	
90)	Hexachlorobutadiene	13.50	225	53	N.D.	
91)	Naphthalene	13.55	128	65	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-014

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212023.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:56

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-014

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212023.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:56

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-7

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-014

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212023.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 18:56

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

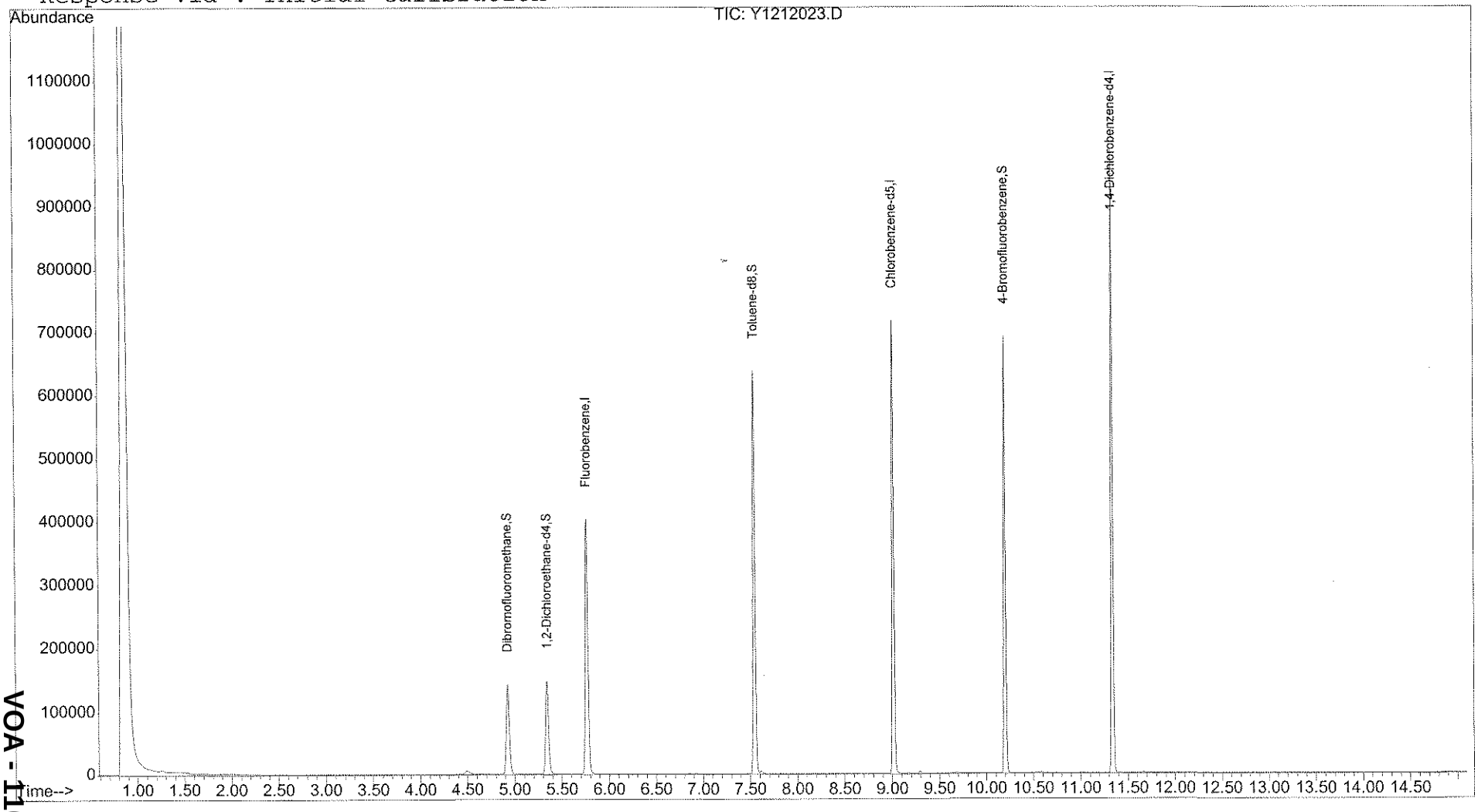
Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212023.D
Acq On : 12 Dec 2006 18:56
Sample : JPL26-014 MW-7
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:16 2006

Vial: 32
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 110

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212023.D Vial: 32
Acq On : 12 Dec 2006 18:56 Operator: LH
Sample : JPL26-014 MW-7 Inst : yoda
Misc : 5mL+IS/SS #3 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 15:16 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	369565	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	189467	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	215916	50.00 ug/l	0.00 NA%
System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	101443	46.95 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 93.90%		
37) 1,2-Dichloroethane-d4	5.34	65	114007	49.11 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 98.22%		
51) Toluene-d8	7.55	98	380935	50.08 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 100.16%		
72) 4-Bromofluorobenzene	10.20	95	182775	56.06 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.16	43	302	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212023.D
Acq On : 12 Dec 2006 18:56
Sample : JPL26-014 MW-7
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:16 2006

Vial: 32
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24)	Chloroprene	0.00	53	0	N.D.	
25)	2,2-Dichloropropane	0.00	77	0	N.D.	
26)	cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27)	2-Butanone	0.00	43	0	N.D.	
28)	Propionitrile	0.00	54	0	N.D.	
29)	Bromochloromethane	0.00	128	0	N.D.	
30)	Methacrylonitrile	0.00	41	0	N.D.	
31)	Chloroform	4.71	83	216	N.D.	
32)	1,1,1-Trichloroethane	0.00	97	0	N.D.	
34)	Cyclohexane	0.00	56	0	N.D.	
35)	Carbon Tetrachloride	0.00	117	0	N.D.	
36)	1,1-Dichloropropene	0.00	75	0	N.D.	
38)	Benzene	5.39	78	649	N.D.	
39)	1,2-Dichloroethane	0.00	62	0	N.D.	
40)	Isobutanol	0.00	43	0	N.D.	
41)	Trichloroethene	0.00	130	0	N.D.	
42)	Methylcyclohexane	0.00	83	0	N.D.	
43)	1,2-Dichloropropane	0.00	63	0	N.D.	
44)	Dibromomethane	0.00	93	0	N.D.	
45)	Methyl methacrylate	0.00	41	0	N.D.	
46)	Bromodichloromethane	0.00	83	0	N.D.	
47)	2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48)	cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49)	4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52)	Toluene	7.61	92	1918	N.D.	
53)	trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54)	Ethyl methacrylate	0.00	69	0	N.D.	
55)	1,1,2-Trichloroethane	0.00	97	0	N.D.	
56)	Tetrachloroethene	0.00	166	0	N.D.	
57)	1,3-Dichloropropane	0.00	76	0	N.D.	
58)	2-Hexanone	0.00	43	0	N.D.	
59)	Dibromochloromethane	0.00	129	0	N.D.	
60)	1,2-Dibromoethane	0.00	107	0	N.D.	
61)	Chlorobenzene	0.00	112	0	N.D.	
62)	1-Chlorohexane	9.01	91	670	N.D.	
63)	1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64)	Ethylbenzene	9.17	91	679	N.D.	
65)	m,p-Xylene	9.29	106	1186	N.D.	
66)	o-xylene	9.68	106	603	N.D.	
67)	Styrene	0.00	104	0	N.D.	
68)	Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212023.D
Acq On : 12 Dec 2006 18:56
Sample : JPL26-014 MW-7
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:16 2006

Vial: 32
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.20	105	115	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	10.66	120	217	N.D.	
77)	2-Chlorotoluene	10.47	91	274	N.D.	
78)	4-Chlorotoluene	10.47	91	274	N.D.	
79)	1,3,5-Trimethylbenzene	10.65	105	424	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.02	105	1103	N.D.	
82)	sec-butylbenzene	11.18	105	152	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	160	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	203	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	397	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-015

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212024.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 19:20

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	3.7	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	3.1	
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.71	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.56	

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-015

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212024.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 19:20

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.82	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	0.61	J
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-16

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-015

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212024.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 19:20

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

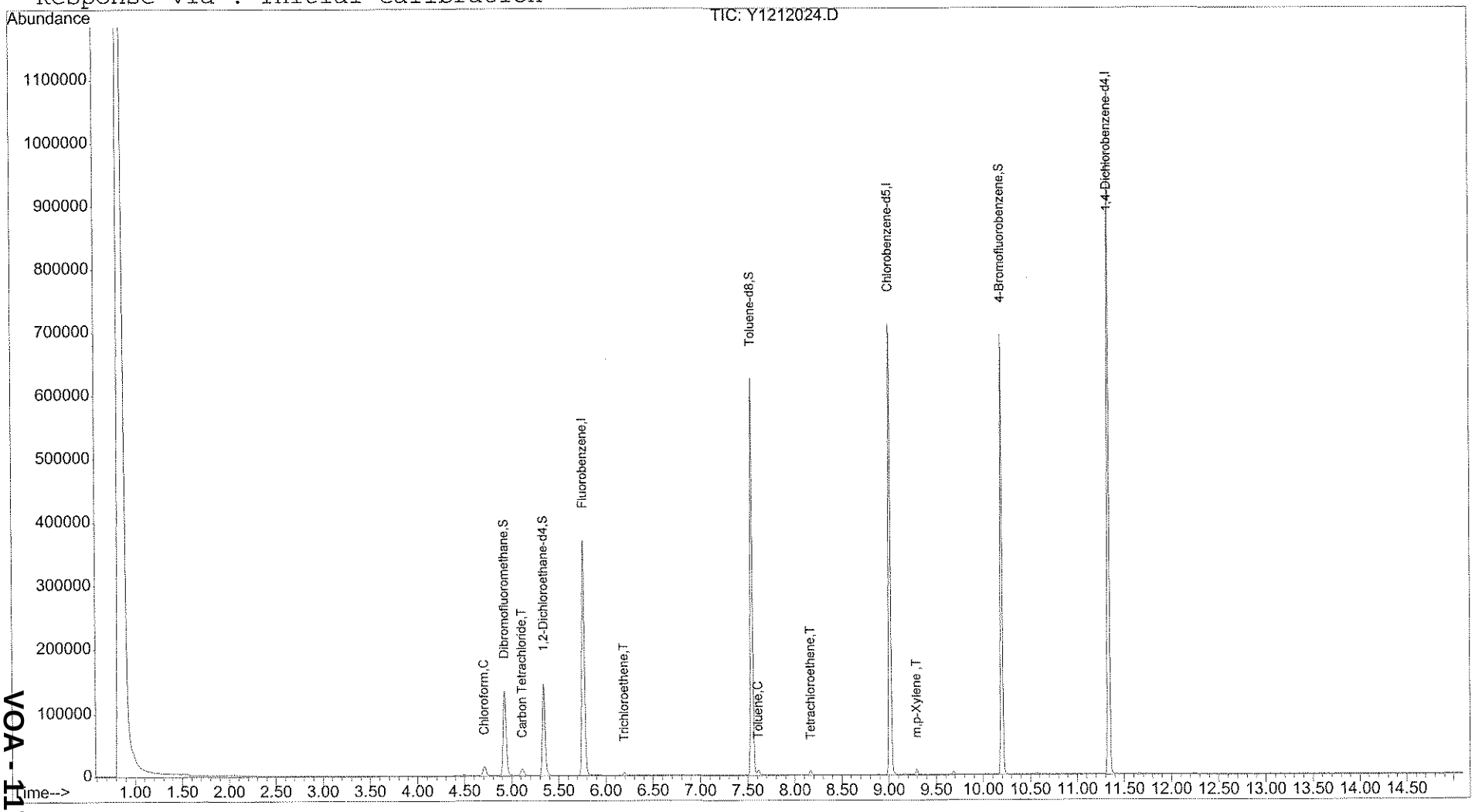
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212024.D
Acq On : 12 Dec 2006 19:20
Sample : JPL26-015 MW-16
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:20 2006

Vial: 33
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 117

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212024.D
Acq On : 12 Dec 2006 19:20
Sample : JPL26-015 MW-16
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:20 2006

Vial: 33
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	345774	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	188020	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	217411	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	95728	47.35 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.70%		
37) 1,2-Dichloroethane-d4	5.34	65	107815	49.64 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 99.28%		
51) Toluene-d8	7.55	98	367377	48.67 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 97.34%		
72) 4-Bromofluorobenzene	10.20	95	182770	55.68 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	2.05	96	665	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.15	43	221	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212024.D
Acq On : 12 Dec 2006 19:20
Sample : JPL26-015 MW-16
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:20 2006

Vial: 33
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	4.71	83	14951	3.70 ug/l	96
32) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	5.11	117	8334	3.06 ug/l	99
36) 1,1-Dichloropropene	0.00	75	0	N.D.	
38) Benzene	5.38	78	860	N.D.	
39) 1,2-Dichloroethane	0.00	62	0	N.D.	
40) Isobutanol	0.00	43	0	N.D.	
41) Trichloroethene	6.20	130	1630	0.71 ug/l	95
42) Methylcyclohexane	0.00	83	0	N.D.	
43) 1,2-Dichloropropane	0.00	63	0	N.D.	
44) Dibromomethane	0.00	93	0	N.D.	
45) Methyl methacrylate	0.00	41	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	0.00	43	0	N.D. d	
52) Toluene	7.61	92	3113	0.56 ug/l	98
53) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54) Ethyl methacrylate	0.00	69	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	8.17	166	2030	0.82 ug/l	95
57) 1,3-Dichloropropane	0.00	76	0	N.D.	
58) 2-Hexanone	0.00	43	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	0.00	112	0	N.D.	
62) 1-Chlorohexane	9.02	91	619	N.D.	
63) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64) Ethylbenzene	9.17	91	1543	N.D.	
65) m,p-Xylene	9.29	106	2392	0.61 ug/l	90
66) o-xylene	9.68	106	1398	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	

LH 12/13/06

(#) = qualifier out of range (m) = manual integration

Quantitation Report

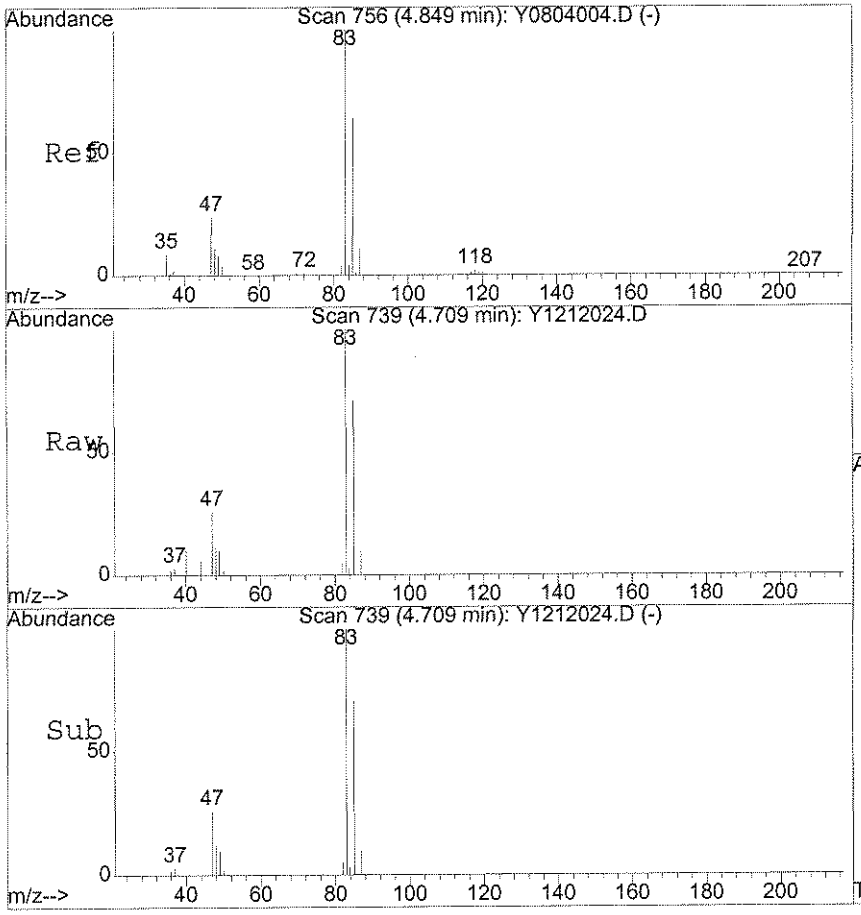
Data File : X:\MSVOA\YODA\121206\Y1212024.D
Acq On : 12 Dec 2006 19:20
Sample : JPL26-015 MW-16
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:20 2006

Vial: 33
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.06	105	68	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	10.46	120	61	N.D.	
77)	2-Chlorotoluene	10.57	91	53	N.D.	
78)	4-Chlorotoluene	10.57	91	53	N.D.	
79)	1,3,5-Trimethylbenzene	10.65	105	646	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.02	105	469	N.D.	
82)	sec-butylbenzene	11.18	105	177	N.D.	
83)	1,3-Dichlorobenzene	11.36	146	56	N.D.	
84)	4-Isopropyltoluene	11.34	119	217	N.D.	
85)	1,4-Dichlorobenzene	11.36	146	56	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	313	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	0.00	128	0	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

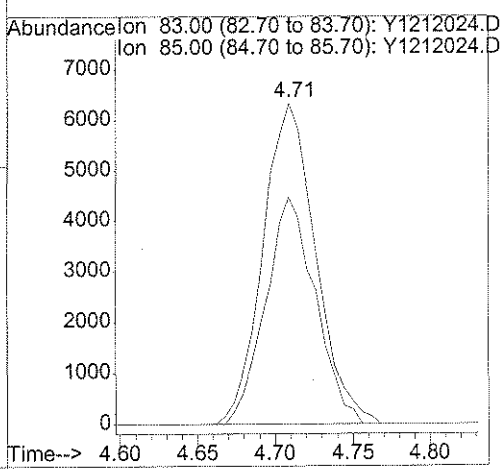
(#) = qualifier out of range (m) = manual integration

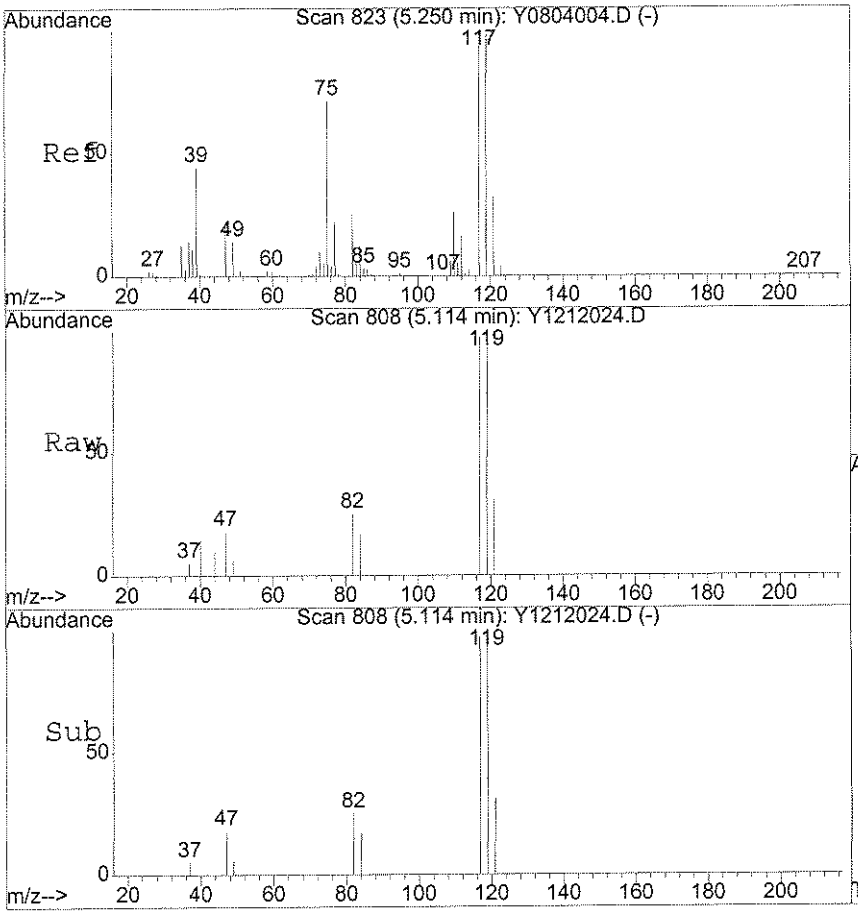


#31
Chloroform
Concen: 3.70 ug/l
RT: 4.71 min Scan# 739
Delta R.T. 0.00 min
Lab File: Y1212024.D
Acq: 12 Dec 2006 19:20

Tgt Ion: 83 Resp: 14951

Ion	Ratio	Lower	Upper
83	100		
85	66.7	43.3	83.3

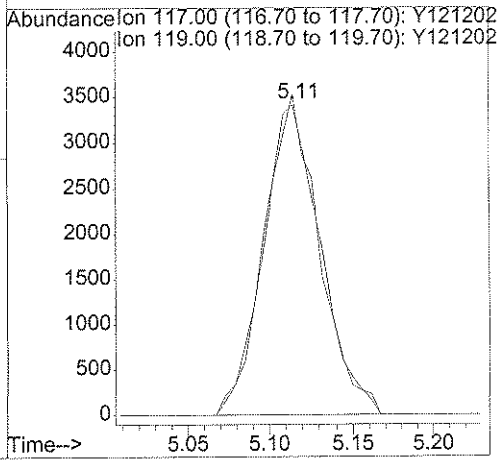


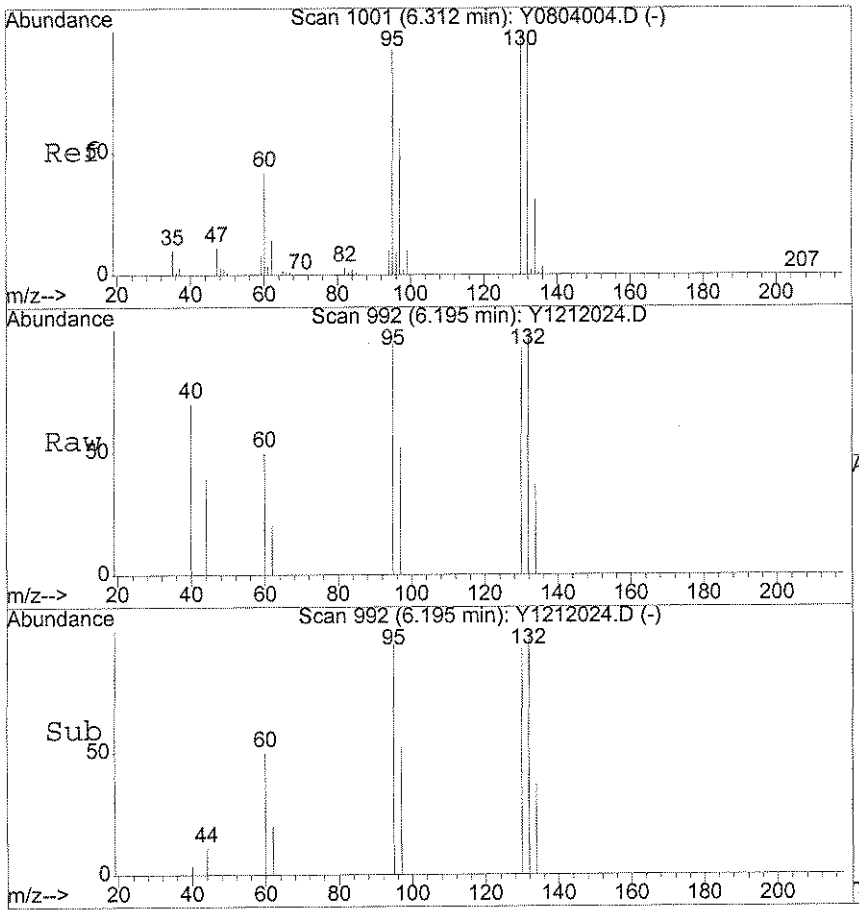


#35
Carbon Tetrachloride
Concen: 3.06 ug/l
RT: 5.11 min Scan# 808
Delta R.T. 0.01 min
Lab File: Y1212024.D
Acq: 12 Dec 2006 19:20

Tgt Ion:117 Resp: 8334

Ion	Ratio	Lower	Upper
117	100		
119	97.5	78.2	118.2

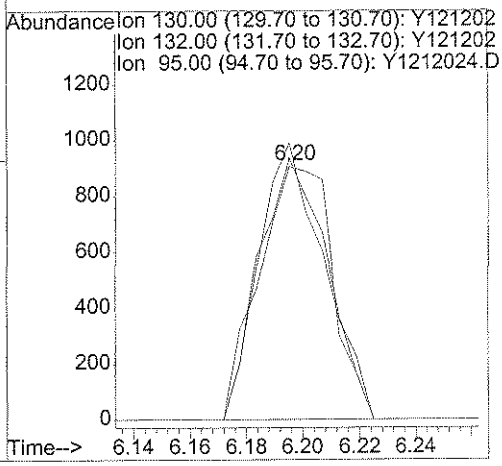


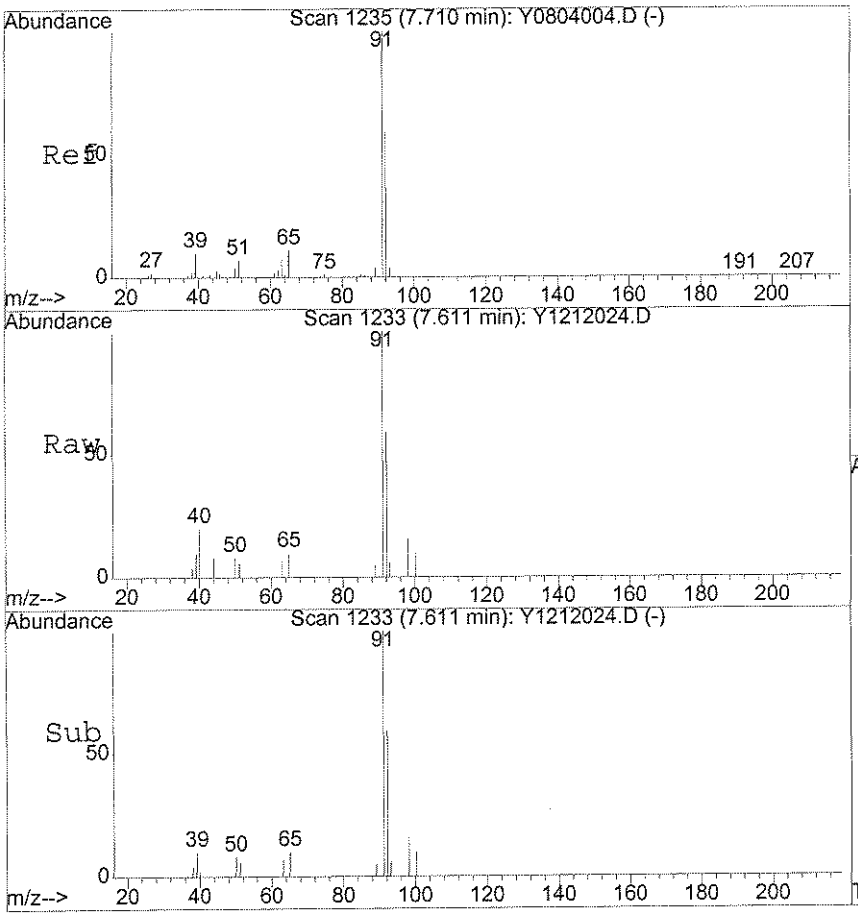


#41
Trichloroethene
Concen: 0.71 ug/l
RT: 6.20 min Scan# 992
Delta R.T. 0.00 min
Lab File: Y1212024.D
Acq: 12 Dec 2006 19:20

Tgt Ion:130 Resp: 1630

Ion	Ratio	Lower	Upper
130	100		
132	97.8	75.0	115.0
95	96.4	69.4	109.4

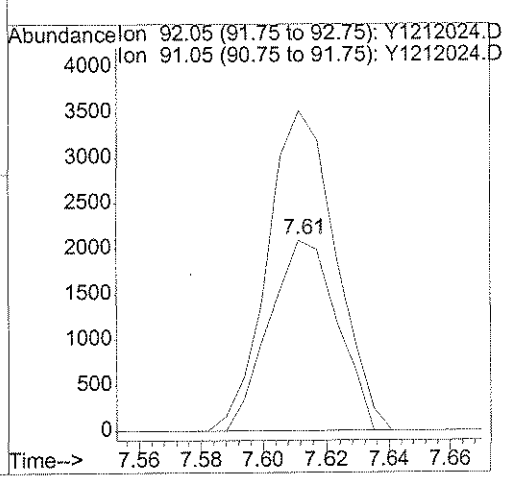


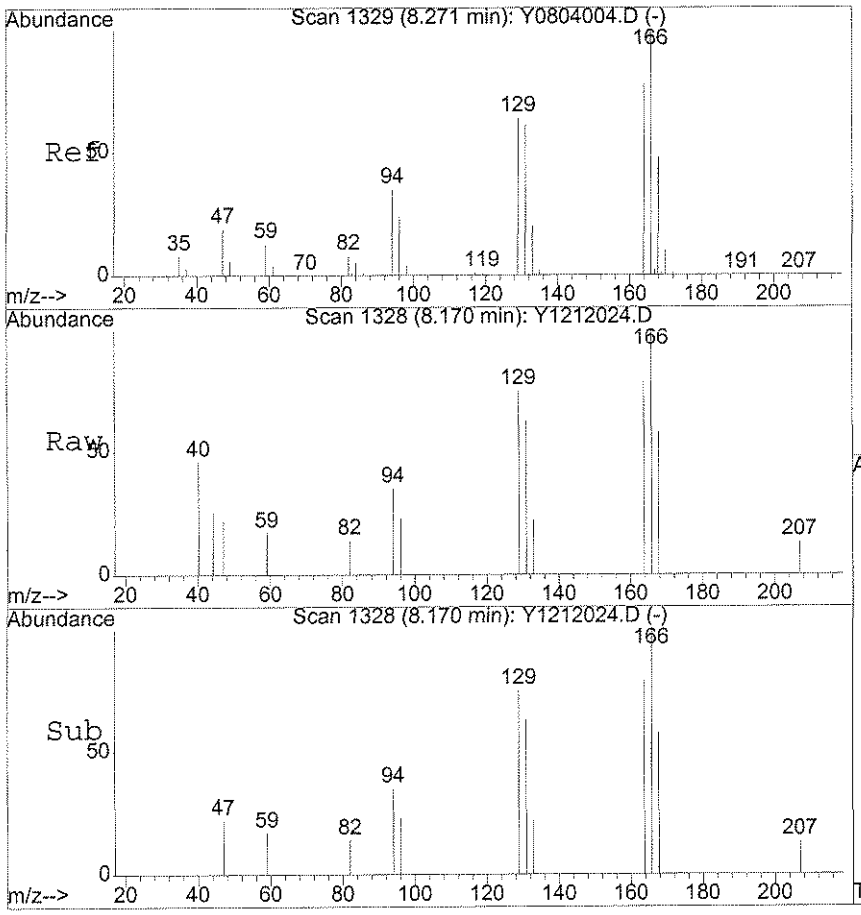


#52
Toluene
Concen: 0.56 ug/l
RT: 7.61 min Scan# 1233
Delta R.T. 0.00 min
Lab File: Y1212024.D
Acq: 12 Dec 2006 19:20

Tgt Ion: 92 Resp: 3113

Ion	Ratio	Lower	Upper
92	100		
91	170.1	133.7	200.5

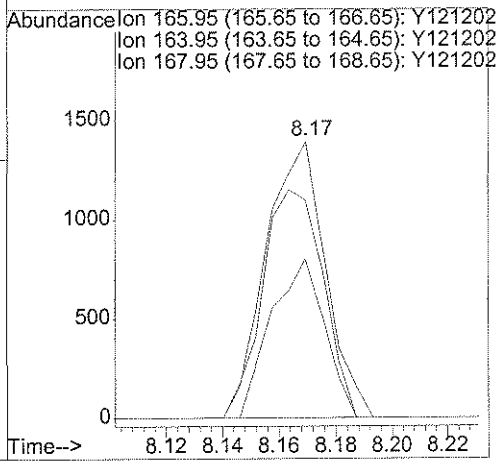


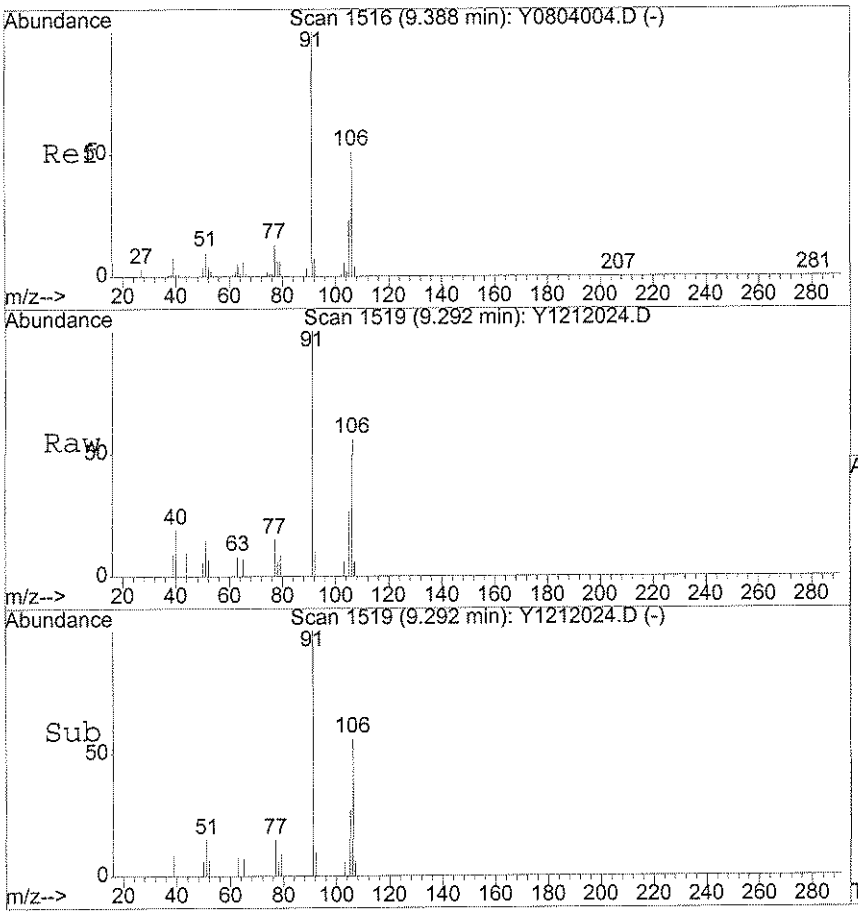


#56
Tetrachloroethene
Concen: 0.82 ug/l
RT: 8.17 min Scan# 1328
Delta R.T. 0.01 min
Lab File: Y1212024.D
Acq: 12 Dec 2006 19:20

Tgt Ion:166 Resp: 2030

Ion	Ratio	Lower	Upper
166	100		
164	84.4	63.3	94.9
168	51.7	39.6	59.4

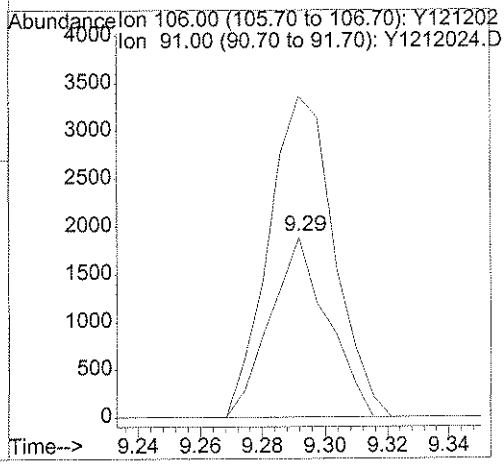




#65
m,p-Xylene
Concen: 0.61 ug/l
RT: 9.29 min Scan# 1519
Delta R.T. 0.00 min
Lab File: Y1212024.D
Acq: 12 Dec 2006 19:20

Tgt Ion:106 Resp: 2392

Ion	Ratio	Lower	Upper
106	100		
91	203.6	169.6	209.6



VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-24-12/5/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-016

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212016.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:06

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-24-12/5/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-016

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212016.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:06

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-24-12/5/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-016

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212016.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:06

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

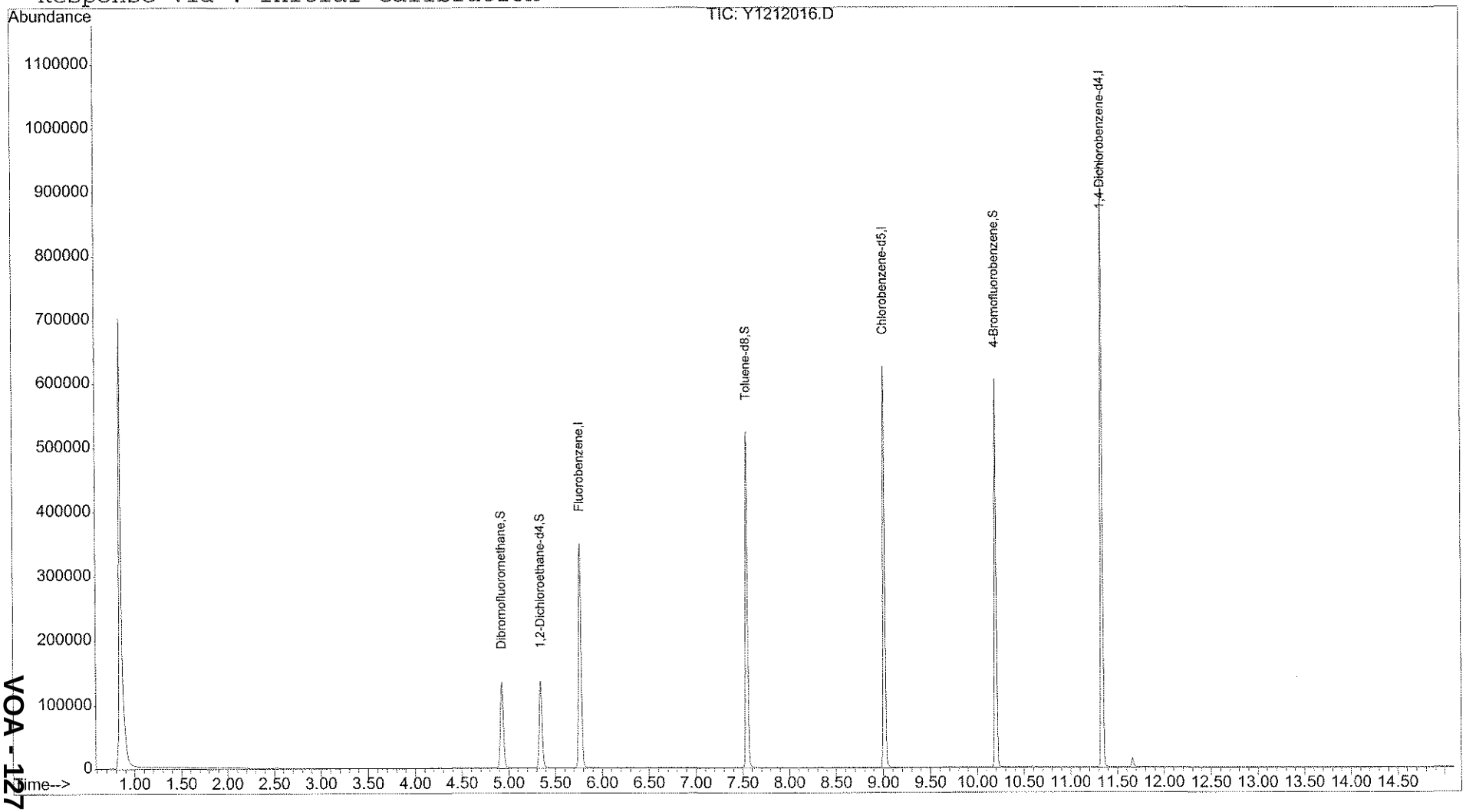
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212016.D
Acq On : 12 Dec 2006 16:06
Sample : JPL26-016 TB-24-12/5/06
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 11:40 2006

Vial: 26
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



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Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212016.D Vial: 26
Acq On : 12 Dec 2006 16:06 Operator: LH
Sample : JPL26-016 TB-24-12/5/06 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:40 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	321925	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	165460	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	213804	50.00 ug/l	0.00 NA%
System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	96332	51.18 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 102.36%		
37) 1,2-Dichloroethane-d4	5.34	65	103759	51.31 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 102.62%		
51) Toluene-d8	7.55	98	311041	46.82 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 93.64%		
72) 4-Bromofluorobenzene	10.20	95	167927	52.02 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	1.07	50	257	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D. d	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	2.22	76	64	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	2.51	84	626	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212016.D
Acq On : 12 Dec 2006 16:06
Sample : JPL26-016 TB-24-12/5/06
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 11:40 2006

Vial: 26
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	0.00	83	0	N.D.	
32) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	0.00	117	0	N.D.	
36) 1,1-Dichloropropene	0.00	75	0	N.D.	
38) Benzene	0.00	78	0	N.D.	
39) 1,2-Dichloroethane	0.00	62	0	N.D.	
40) Isobutanol	0.00	43	0	N.D.	
41) Trichloroethene	0.00	130	0	N.D.	
42) Methylcyclohexane	0.00	83	0	N.D.	
43) 1,2-Dichloropropane	0.00	63	0	N.D.	
44) Dibromomethane	0.00	93	0	N.D.	
45) Methyl methacrylate	0.00	41	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52) Toluene	0.00	92	0	N.D.	
53) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54) Ethyl methacrylate	0.00	69	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	0.00	166	0	N.D.	
57) 1,3-Dichloropropane	0.00	76	0	N.D.	
58) 2-Hexanone	0.00	43	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	0.00	112	0	N.D.	
62) 1-Chlorohexane	9.02	91	509	N.D.	
63) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64) Ethylbenzene	9.17	91	56	N.D.	
65) m,p-Xylene	9.29	106	129	N.D.	
66) o-xylene	0.00	106	0	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212016.D
Acq On : 12 Dec 2006 16:06
Sample : JPL26-016 TB-24-12/5/06
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 11:40 2006

Vial: 26
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	0.00	105	0	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	200	N.D.	
78)	4-Chlorotoluene	10.47	91	200	N.D.	
79)	1,3,5-Trimethylbenzene	0.00	105	0	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.01	105	56	N.D.	
82)	sec-butylbenzene	11.19	105	288	N.D.	
83)	1,3-Dichlorobenzene	11.36	146	127	N.D.	
84)	4-Isopropyltoluene	11.34	119	300	N.D.	
85)	1,4-Dichlorobenzene	11.36	146	127	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	358	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	13.31	180	61	N.D.	
90)	Hexachlorobutadiene	13.50	225	60	N.D.	
91)	Naphthalene	13.54	128	63	N.D.	
92)	1,2,3-Trichlorobenzene	13.79	180	111	N.D.	

(#) = qualifier out of range (m) = manual integration

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VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-017

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212025.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 19:45

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-017

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212025.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 19:45

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.66	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-13

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-017

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212025.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 19:45

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

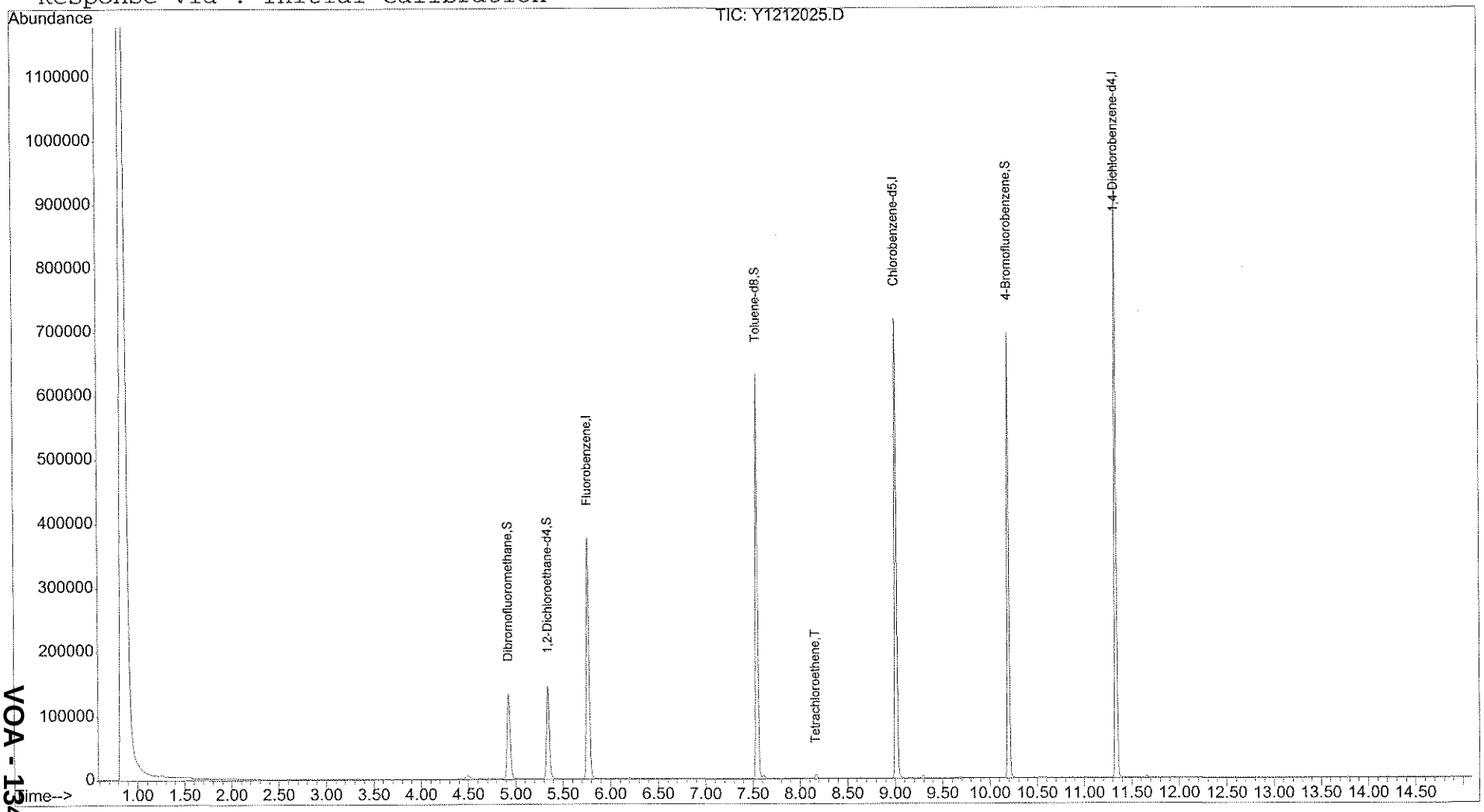
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212025.D
Acq On : 12 Dec 2006 19:45
Sample : JPL26-017 MW-13
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:22 2006

Vial: 34
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212025.D
Acq On : 12 Dec 2006 19:45
Sample : JPL26-017 MW-13
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:22 2006

Vial: 34
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	348515	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	191442	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	215645	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	96438	47.33 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.66%		
37) 1,2-Dichloroethane-d4	5.34	65	109737	50.13 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.26%		
51) Toluene-d8	7.55	98	369606	48.09 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 96.18%		
72) 4-Bromofluorobenzene	10.20	95	183931	56.49 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.17	43	360	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	3.33	63	1985	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212025.D
Acq On : 12 Dec 2006 19:45
Sample : JPL26-017 MW-13
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:22 2006

Vial: 34
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	4.71	83	985	N.D.	
32) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	0.00	117	0	N.D.	
36) 1,1-Dichloropropene	0.00	75	0	N.D.	
38) Benzene	5.38	78	466	N.D.	
39) 1,2-Dichloroethane	0.00	62	0	N.D.	
40) Isobutanol	0.00	43	0	N.D.	
41) Trichloroethene	6.20	130	837	N.D.	
42) Methylcyclohexane	0.00	83	0	N.D.	
43) 1,2-Dichloropropane	0.00	63	0	N.D.	
44) Dibromomethane	0.00	93	0	N.D.	
45) Methyl methacrylate	0.00	41	0	N.D.	
46) Bromodichloromethane	0.00	83	0	N.D.	
47) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	0.00	43	0	N.D. d	
52) Toluene	7.61	92	1647	N.D.	
53) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54) Ethyl methacrylate	0.00	69	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	8.17	166	1670	0.66 ug/l	86
57) 1,3-Dichloropropane	0.00	76	0	N.D.	
58) 2-Hexanone	0.00	43	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	0.00	112	0	N.D.	
62) 1-Chlorohexane	9.01	91	644	N.D.	
63) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64) Ethylbenzene	9.17	91	672	N.D.	
65) m,p-Xylene	9.29	106	1031	N.D.	
66) o-xylene	9.69	106	495	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	

LH 12/13/06

(#) = qualifier out of range (m) = manual integration

Quantitation Report

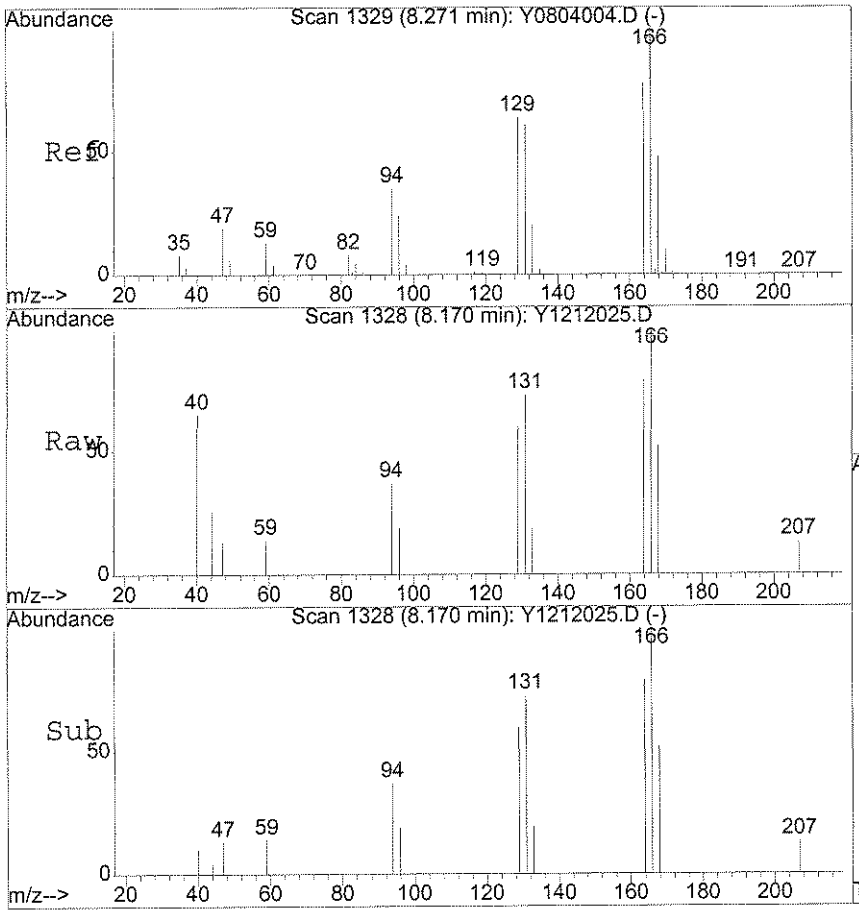
Data File : X:\MSVOA\YODA\121206\Y1212025.D
Acq On : 12 Dec 2006 19:45
Sample : JPL26-017 MW-13
Misc : 5mL+IS/SS #3
MS Integration Params: rteint.p
Quant Time: Dec 13 15:22 2006

Vial: 34
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.06	105	55	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	10.57	120	112	N.D.	
77)	2-Chlorotoluene	10.47	91	161	N.D.	
78)	4-Chlorotoluene	10.47	91	161	N.D.	
79)	1,3,5-Trimethylbenzene	10.66	105	338	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.02	105	923	N.D.	
82)	sec-butylbenzene	11.18	105	54	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	232	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	11.72	146	84	N.D.	
87)	n-Butylbenzene	11.74	91	133	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	284	N.D.	
92)	1,2,3-Trichlorobenzene	13.79	180	458	N.D.	

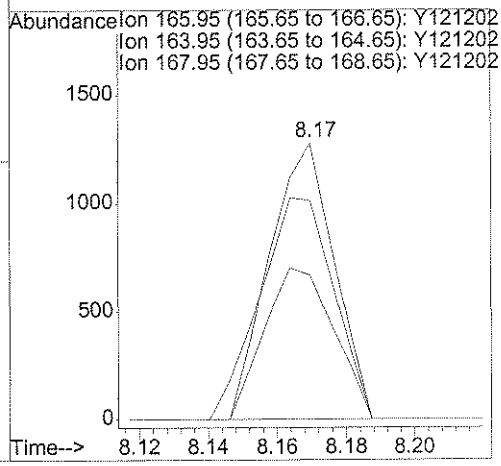
(#) = qualifier out of range (m) = manual integration



#56
Tetrachloroethene
Concen: 0.66 ug/l
RT: 8.17 min Scan# 1328
Delta R.T. 0.01 min
Lab File: Y1212025.D
Acq: 12 Dec 2006 19:45

Tgt Ion:166 Resp: 1670

Ion	Ratio	Lower	Upper
166	100		
164	91.6	63.3	94.9
168	58.8	39.6	59.4



VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-018

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212026.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:09

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-018

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212026.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:09

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-8

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-018

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212026.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:09

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

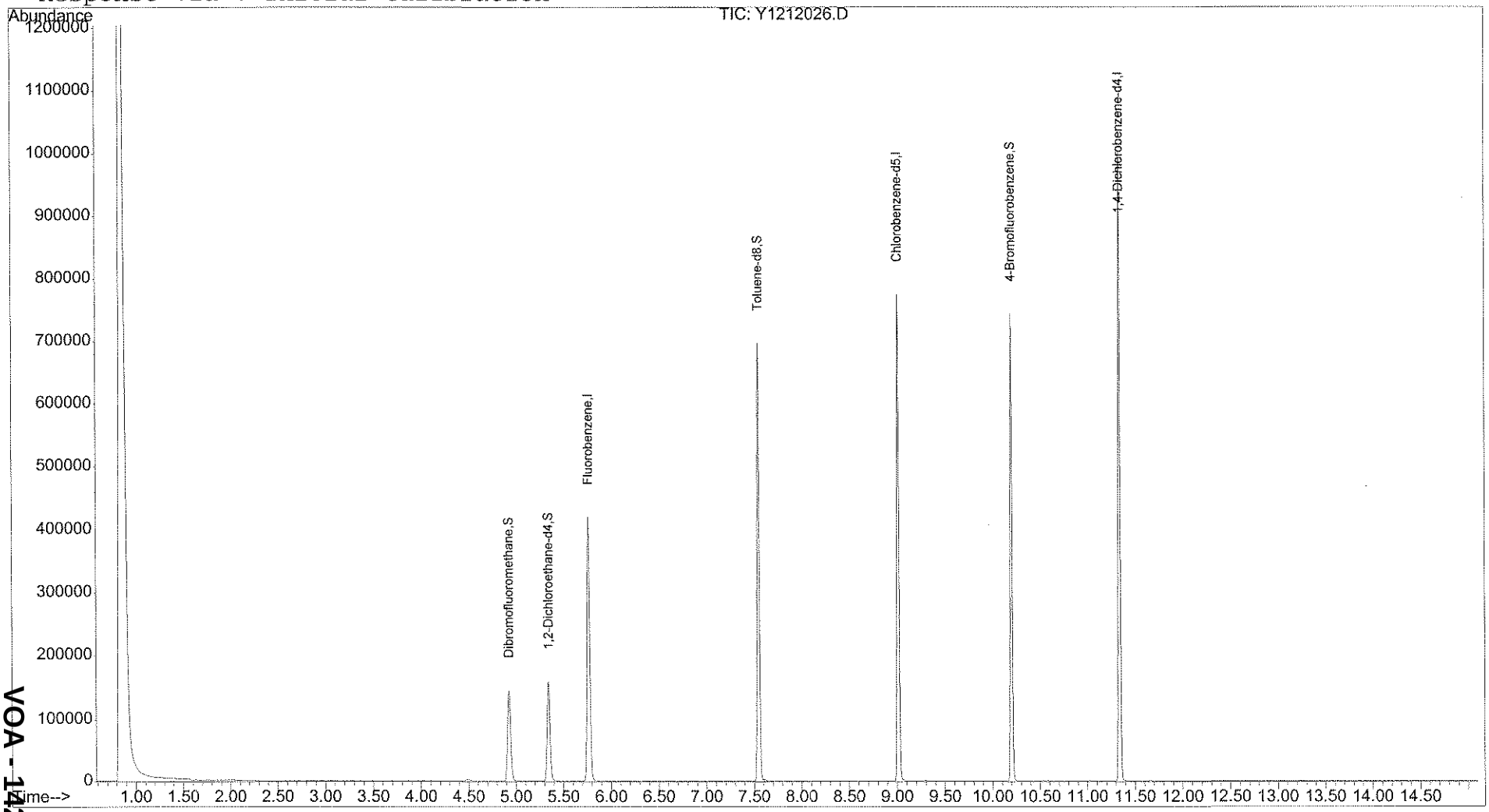
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212026.D Vial: 35
Acq On : 12 Dec 2006 20:09 Operator: LH
Sample : JPL26-018 MW-8 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 15:37 2006 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 142

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212026.D
Acq On : 12 Dec 2006 20:09
Sample : JPL26-018 MW-8
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 15:37 2006

Vial: 35
Operator: LH
Inst : yoda
Multiplr: 1.00

Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	386817	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	203493	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	226843	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	105393	46.60 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 93.20%		
37) 1,2-Dichloroethane-d4	5.34	65	120373	49.54 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 99.08%		
51) Toluene-d8	7.55	98	411996	50.43 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 100.86%		
72) 4-Bromofluorobenzene	10.20	95	195485	57.07 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	1.64	101	597	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212026.D
Acq On : 12 Dec 2006 20:09
Sample : JPL26-018 MW-8
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 15:37 2006

Vial: 35
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24)	Chloroprene	0.00	53	0	N.D.	
25)	2,2-Dichloropropane	0.00	77	0	N.D.	
26)	cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27)	2-Butanone	0.00	43	0	N.D.	
28)	Propionitrile	0.00	54	0	N.D.	
29)	Bromochloromethane	0.00	128	0	N.D.	
30)	Methacrylonitrile	0.00	41	0	N.D.	
31)	Chloroform	4.71	83	601	N.D.	
32)	1,1,1-Trichloroethane	0.00	97	0	N.D.	
34)	Cyclohexane	0.00	56	0	N.D.	
35)	Carbon Tetrachloride	0.00	117	0	N.D.	
36)	1,1-Dichloropropene	0.00	75	0	N.D.	
38)	Benzene	5.38	78	283	N.D.	
39)	1,2-Dichloroethane	0.00	62	0	N.D.	
40)	Isobutanol	0.00	43	0	N.D.	
41)	Trichloroethene	0.00	130	0	N.D.	
42)	Methylcyclohexane	0.00	83	0	N.D.	
43)	1,2-Dichloropropane	0.00	63	0	N.D.	
44)	Dibromomethane	0.00	93	0	N.D.	
45)	Methyl methacrylate	0.00	41	0	N.D.	
46)	Bromodichloromethane	0.00	83	0	N.D.	
47)	2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48)	cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49)	4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52)	Toluene	7.62	92	793	N.D.	
53)	trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54)	Ethyl methacrylate	0.00	69	0	N.D.	
55)	1,1,2-Trichloroethane	0.00	97	0	N.D.	
56)	Tetrachloroethene	0.00	166	0	N.D.	
57)	1,3-Dichloropropane	0.00	76	0	N.D.	
58)	2-Hexanone	0.00	43	0	N.D.	
59)	Dibromochloromethane	0.00	129	0	N.D.	
60)	1,2-Dibromoethane	0.00	107	0	N.D.	
61)	Chlorobenzene	0.00	112	0	N.D.	
62)	1-Chlorohexane	9.02	91	666	N.D.	
63)	1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64)	Ethylbenzene	9.17	91	330	N.D.	
65)	m,p-Xylene	9.30	106	492	N.D.	
66)	o-xylene	0.00	106	0	N.D.	
67)	Styrene	0.00	104	0	N.D.	
68)	Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212026.D
Acq On : 12 Dec 2006 20:09
Sample : JPL26-018 MW-8
Misc : 5mL+IS/SS #2
MS Integration Params: rteint.p
Quant Time: Dec 13 15:37 2006

Vial: 35
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.20	105	73	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	142	N.D.	
78)	4-Chlorotoluene	10.65	91	56	N.D.	
79)	1,3,5-Trimethylbenzene	10.66	105	172	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.02	105	512	N.D.	
82)	sec-butylbenzene	11.18	105	65	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	288	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.75	91	58	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	76	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-25-12/~~8~~6/06 Eac

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-019

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212017.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:31

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	14	
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-25-12/~~8~~6/06 Eac

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-019

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212017.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:31

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-25-12/~~8~~6/06 Eac

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-019

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212017.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:31

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

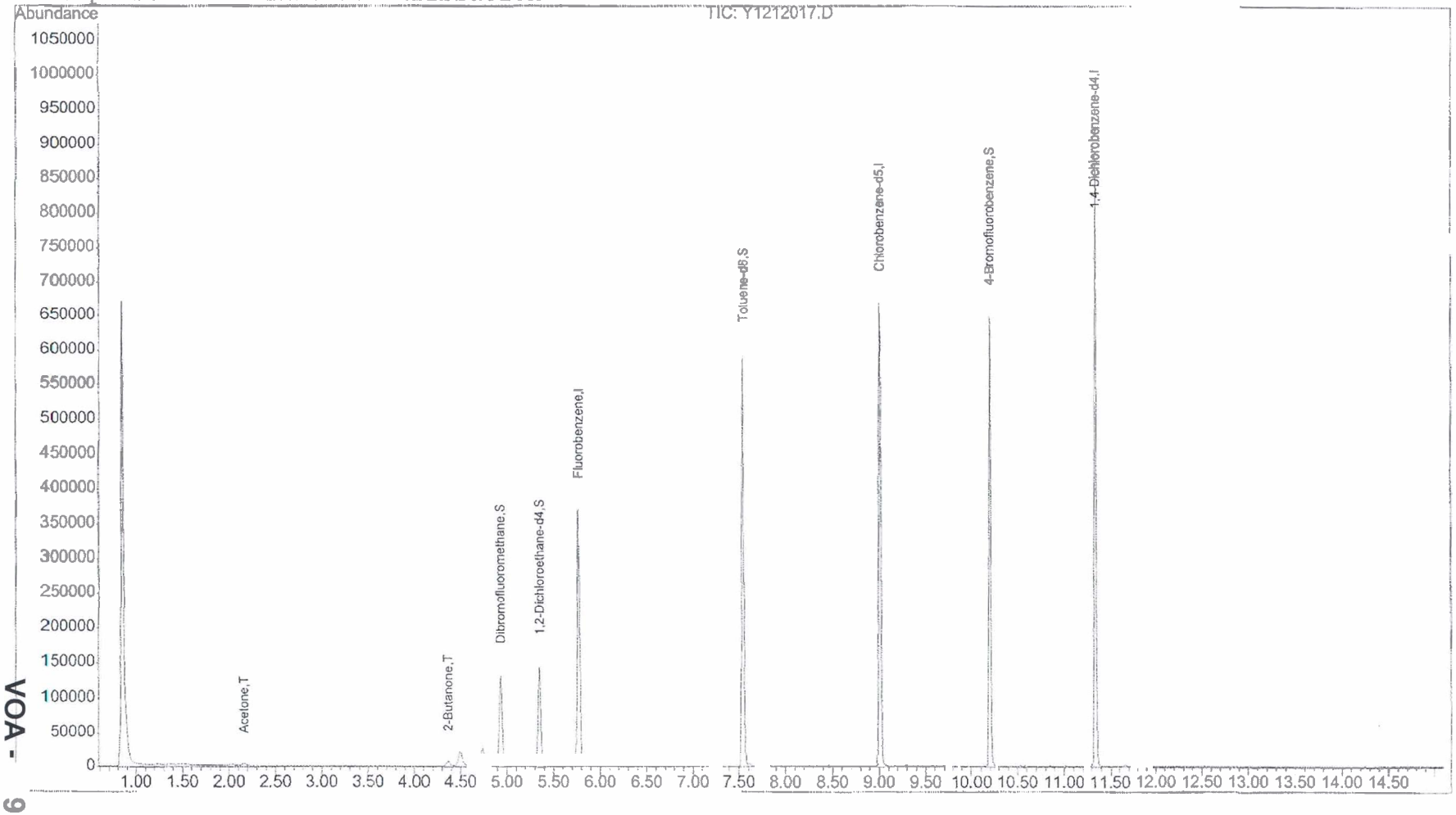
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212017.D
Acq On : 12 Dec 2006 16:31 6 ee
Sample : JPL26-019 TB-25-12/~~8~~/06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 11:42 2006

Vial: 27
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 9

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212017.D Vial: 27
Acq On : 12 Dec 2006 16:31 6 Dec Operator: LH
Sample : JPL26-019 TB-25-12/8/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:42 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	340616	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	178081	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	200000	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	93379	46.89 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 93.78%		
37) 1,2-Dichloroethane-d4	5.34	65	107582	50.28 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.56%		
51) Toluene-d8	7.55	98	350199	48.98 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 97.96%		
72) 4-Bromofluorobenzene	10.20	95	169725	56.20 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.16	43	6755	7.29 ug/l #	85
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

LH 12/18/06

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212017.D Vial: 27
Acq On : 12 Dec 2006 16:31 6 ee Operator: LH
Sample : JPL26-019 TB-25-12/8/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:42 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24)	Chloroprene	0.00	53	0	N.D.	
25)	2,2-Dichloropropane	0.00	77	0	N.D.	
26)	cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27)	2-Butanone	4.36	43	15491	14.22 ug/l #	93
28)	Propionitrile	0.00	54	0	N.D.	
29)	Bromochloromethane	0.00	128	0	N.D.	
30)	Methacrylonitrile	0.00	41	0	N.D.	
31)	Chloroform	0.00	83	0	N.D.	
32)	1,1,1-Trichloroethane	0.00	97	0	N.D.	
34)	Cyclohexane	0.00	56	0	N.D.	
35)	Carbon Tetrachloride	0.00	117	0	N.D.	
36)	1,1-Dichloropropene	5.13	75	54	N.D.	
38)	Benzene	5.39	78	291	N.D.	
39)	1,2-Dichloroethane	0.00	62	0	N.D.	
40)	Isobutanol	0.00	43	0	N.D.	
41)	Trichloroethene	0.00	130	0	N.D.	
42)	Methylcyclohexane	0.00	83	0	N.D.	
43)	1,2-Dichloropropane	0.00	63	0	N.D.	
44)	Dibromomethane	0.00	93	0	N.D.	
45)	Methyl methacrylate	0.00	41	0	N.D.	
46)	Bromodichloromethane	0.00	83	0	N.D.	
47)	2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48)	cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49)	4-Methyl-2-pentanone	0.00	43	0	N.D. a	
52)	Toluene	7.61	92	1330	N.D.	
53)	trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54)	Ethyl methacrylate	0.00	69	0	N.D.	
55)	1,1,2-Trichloroethane	0.00	97	0	N.D.	
56)	Tetrachloroethene	0.00	166	0	N.D.	
57)	1,3-Dichloropropane	0.00	76	0	N.D.	
58)	2-Hexanone	8.47	43	257	N.D.	
59)	Dibromochloromethane	0.00	129	0	N.D.	
60)	1,2-Dibromoethane	0.00	107	0	N.D.	
61)	Chlorobenzene	0.00	112	0	N.D.	
62)	1-Chlorohexane	9.01	91	414	N.D.	
63)	1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64)	Ethylbenzene	9.17	91	438	N.D.	
65)	m,p-Xylene	9.29	106	692	N.D.	
66)	o-xylene	9.67	106	290	N.D.	
67)	Styrene	0.00	104	0	N.D.	
68)	Bromoform	0.00	173	0	N.D.	

LH 12/12/06

(#) = qualifier out of range (m) = manual integration

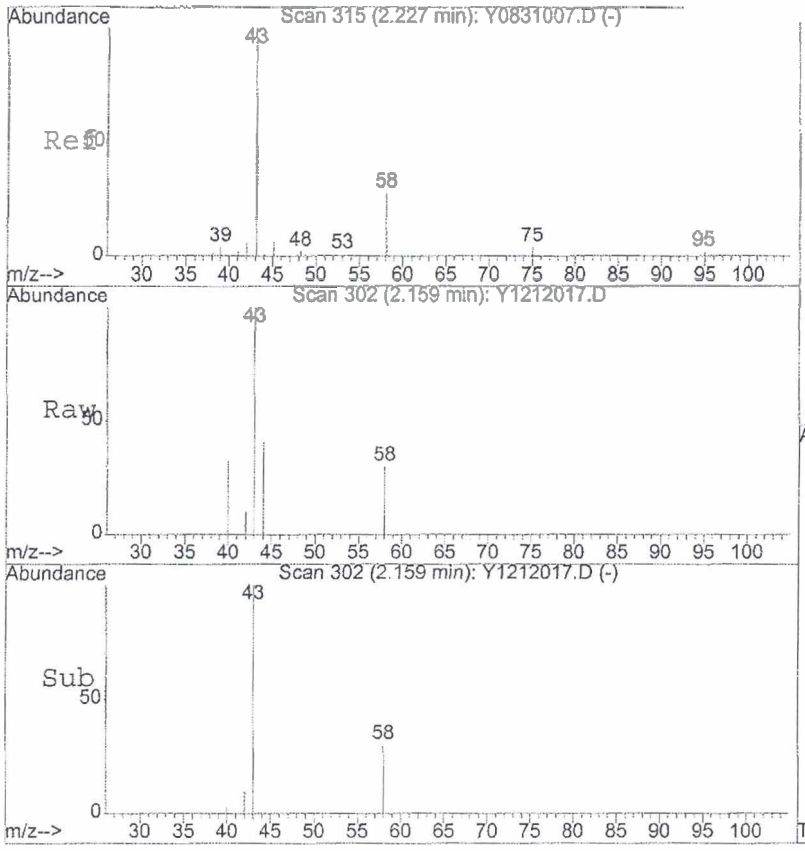
Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212017.D Vial: 27
Acq On : 12 Dec 2006 16:31 6 ee Operator: LH
Sample : JPL26-019 TB-25-12/8/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:42 2006 Quant Results File: 8260B RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.20	105	128	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	10.56	120	54	N.D.	
77)	2-Chlorotoluene	10.53	91	55	N.D.	
78)	4-Chlorotoluene	10.53	91	55	N.D.	
79)	1,3,5-Trimethylbenzene	10.65	105	272	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.01	105	732	N.D.	
82)	sec-butylbenzene	11.18	105	221	N.D.	
83)	1,3-Dichlorobenzene	11.36	146	72	N.D.	
84)	4-Isopropyltoluene	11.34	119	433	N.D.	
85)	1,4-Dichlorobenzene	11.36	146	72	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	255	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	594	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

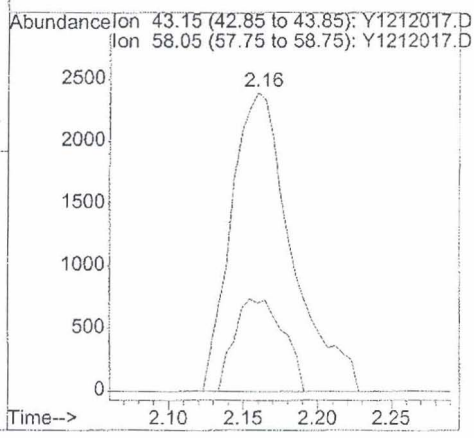
(#) = qualifier out of range (m) = manual integration
Y1212017.D 8260B.M Wed Dec 13 11:42:33 2006

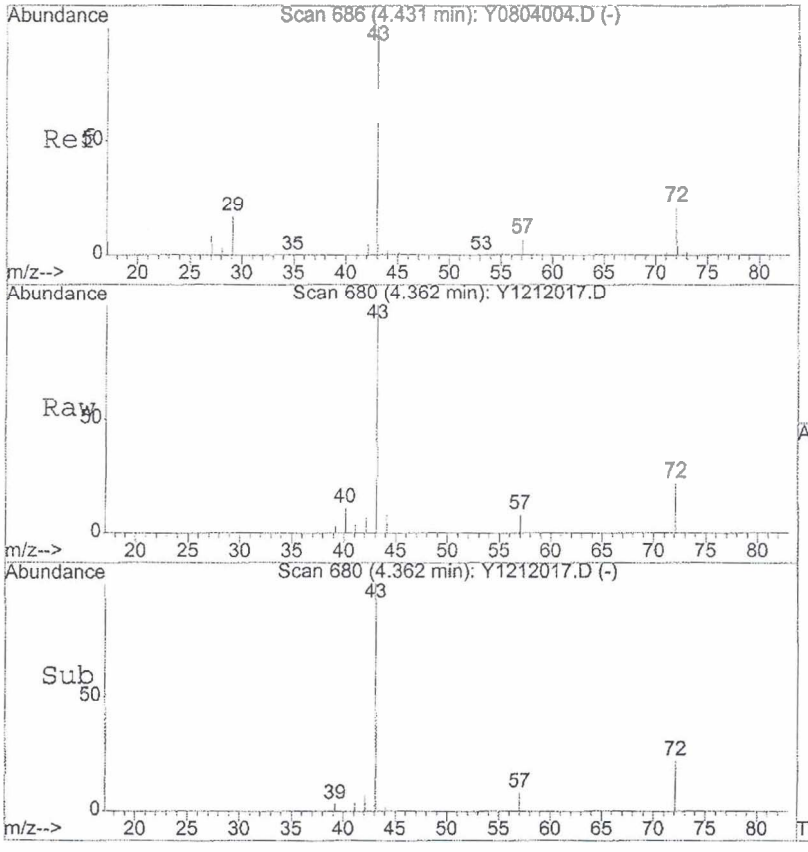


#11
Acetone
Concen: 7.29 ug/l
RT: 2.16 min Scan# 302
Delta R.T. 0.01 min
Lab File: Y1212017.D
Acq: 12 Dec 2006 16:31

Tgt Ion: 43 Resp: 6755

Ion	Ratio	Lower	Upper
43	100		
58	25.0	26.8	40.2#

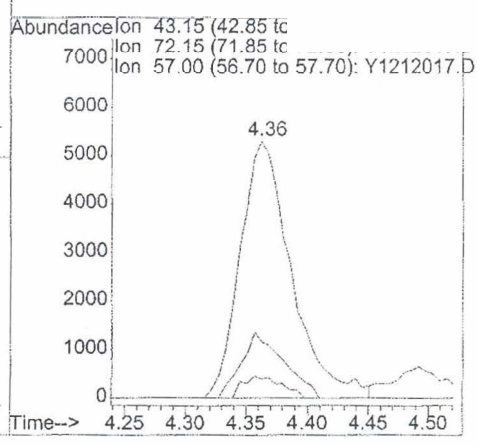




#27
2-Butanone
Concen: 14.22 ug/l
RT: 4.36 min Scan# 680
Delta R.T. -0.01 min
Lab File: Y1212017.D
Acq: 12 Dec 2006 16:31

Tgt Ion: 43 Resp: 15491

Ion	Ratio	Lower	Upper
43	100		
72	21.2	19.8	29.6
57	6.4	6.6	9.8#



VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-10

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-020

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212027.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:34

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.77	
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.90	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	7.6	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-10

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-020

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212027.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:34

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	1.4	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-10

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-020

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212027.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:34

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

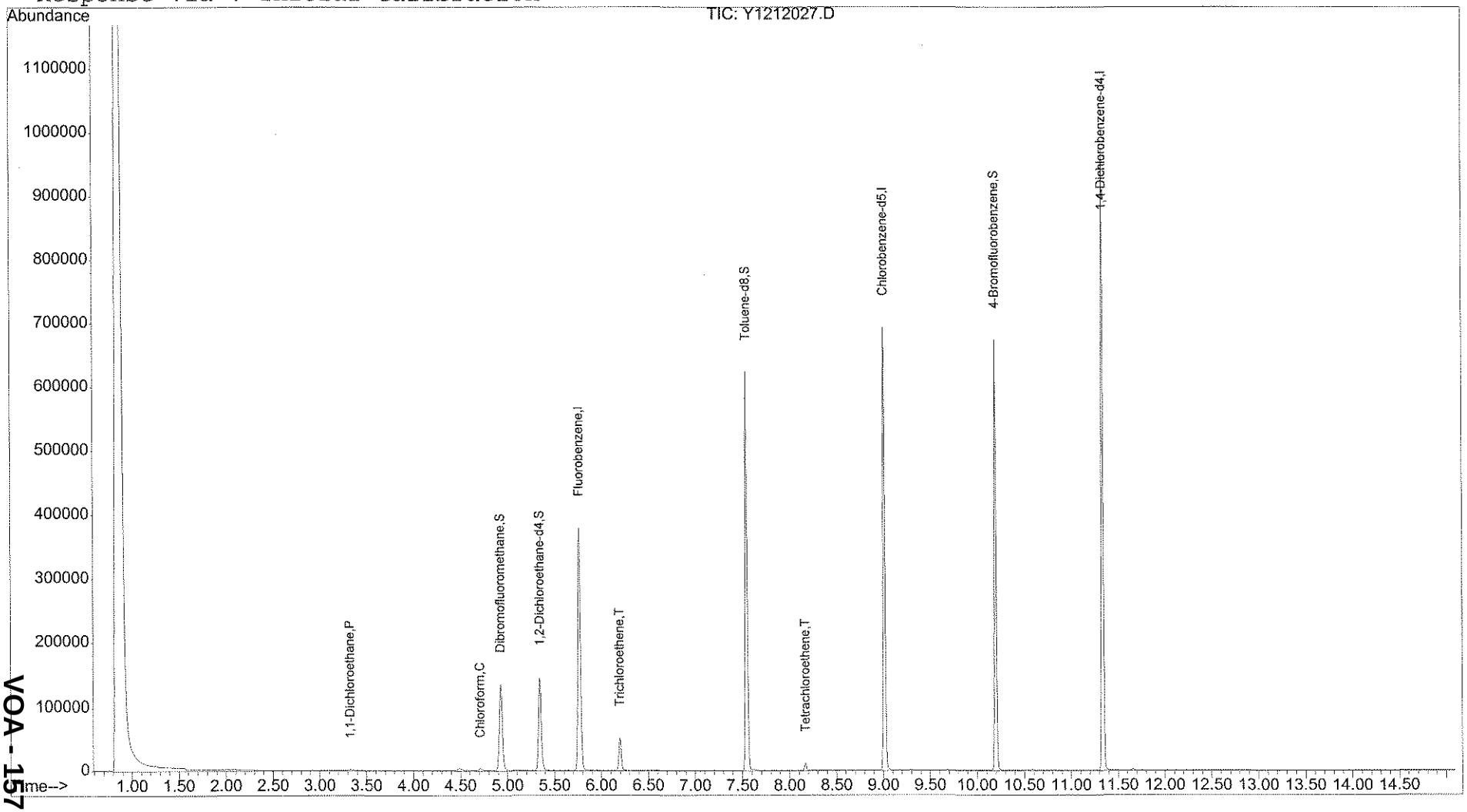
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212027.D Vial: 35
Acq On : 12 Dec 2006 20:34 Operator: LH
Sample : JPL26-020 MW-10 Inst : yoda
Misc : 5mL+IS/SS #8 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 15:40 2006 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 157

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212027.D
Acq On : 12 Dec 2006 20:34
Sample : JPL26-020 MW-10
Misc : 5mL+IS/SS #8
MS Integration Params: rteint.p
Quant Time: Dec 13 15:40 2006

Vial: 35
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	341887	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	183099	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	216135	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	95718	47.88 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 95.76%		
37) 1,2-Dichloroethane-d4	5.34	65	107501	50.06 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.12%		
51) Toluene-d8	7.55	98	361702	49.20 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 98.40%		
72) 4-Bromofluorobenzene	10.20	95	177167	54.29 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	2.05	96	65	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.15	43	307	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	3.33	63	3274	0.77 ug/l	88
23) Vinyl acetate	0.00	43	0	N.D.	

LN 12/13/06

(#) = qualifier out of range (m) = manual integration
Y1212027.D 8260B.M Wed Dec 13 15:40:30 2006

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212027.D
Acq On : 12 Dec 2006 20:34
Sample : JPL26-020 MW-10
Misc : 5mL+IS/SS #8
MS Integration Params: rteint.p
Quant Time: Dec 13 15:40 2006

Vial: 35
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	4.71	83	3609	0.90 ug/l	96
32) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	5.12	117	273	N.D.	
36) 1,1-Dichloropropene	0.00	75	0	N.D.	
38) Benzene	5.40	78	197	N.D.	
39) 1,2-Dichloroethane	0.00	62	0	N.D.	
40) Isobutanol	0.00	43	0	N.D.	
41) Trichloroethene	6.20	130	17137	7.55 ug/l	94
42) Methylcyclohexane	0.00	83	0	N.D.	
43) 1,2-Dichloropropane	0.00	63	0	N.D.	
44) Dibromomethane	0.00	93	0	N.D.	
45) Methyl methacrylate	0.00	41	0	N.D.	
46) Bromodichloromethane	6.78	83	67	N.D.	
47) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	0.00	43	0	N.D. d	
52) Toluene	7.61	92	624	N.D.	
53) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54) Ethyl methacrylate	0.00	69	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	8.16	166	3299	1.37 ug/l	94
57) 1,3-Dichloropropane	0.00	76	0	N.D.	
58) 2-Hexanone	0.00	43	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	9.04	112	76	N.D.	
62) 1-Chlorohexane	9.02	91	618	N.D.	
63) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64) Ethylbenzene	9.17	91	355	N.D.	
65) m,p-Xylene	9.30	106	503	N.D.	
66) o-xylene	9.69	106	125	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	

LH 12/13/06

(#) = qualifier out of range (m) = manual integration

Quantitation Report

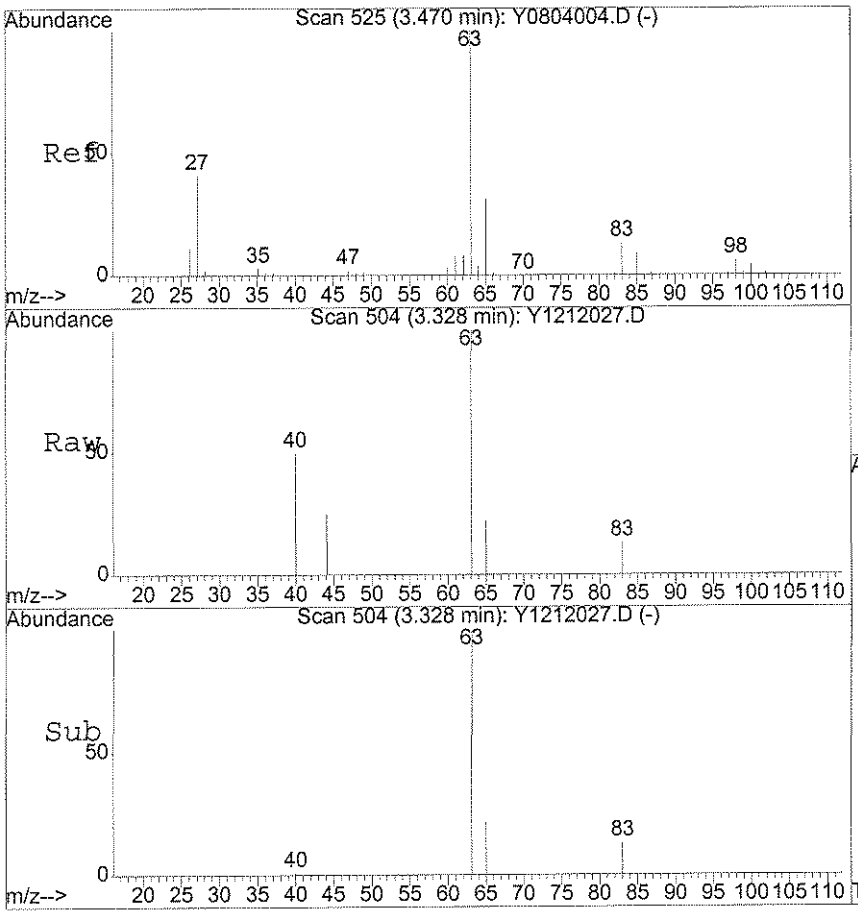
Data File : X:\MSVOA\YODA\121206\Y1212027.D
Acq On : 12 Dec 2006 20:34
Sample : JPL26-020 MW-10
Misc : 5mL+IS/SS #8
MS Integration Params: rteint.p
Quant Time: Dec 13 15:40 2006

Vial: 35
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.20	105	57	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	68	N.D.	
78)	4-Chlorotoluene	10.47	91	68	N.D.	
79)	1,3,5-Trimethylbenzene	10.66	105	140	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.01	105	431	N.D.	
82)	sec-butylbenzene	11.18	105	66	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	217	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.75	91	65	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	57	N.D.	
92)	1,2,3-Trichlorobenzene	13.78	180	247	N.D.	

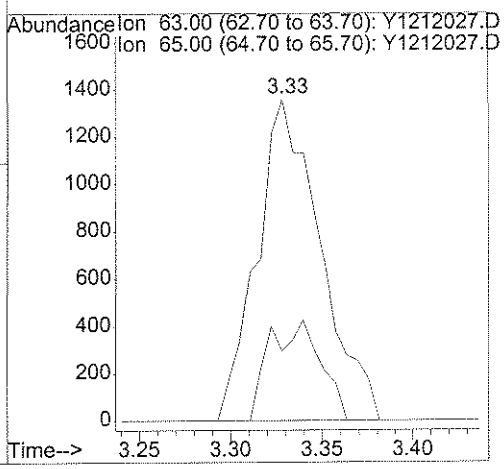
(#) = qualifier out of range (m) = manual integration

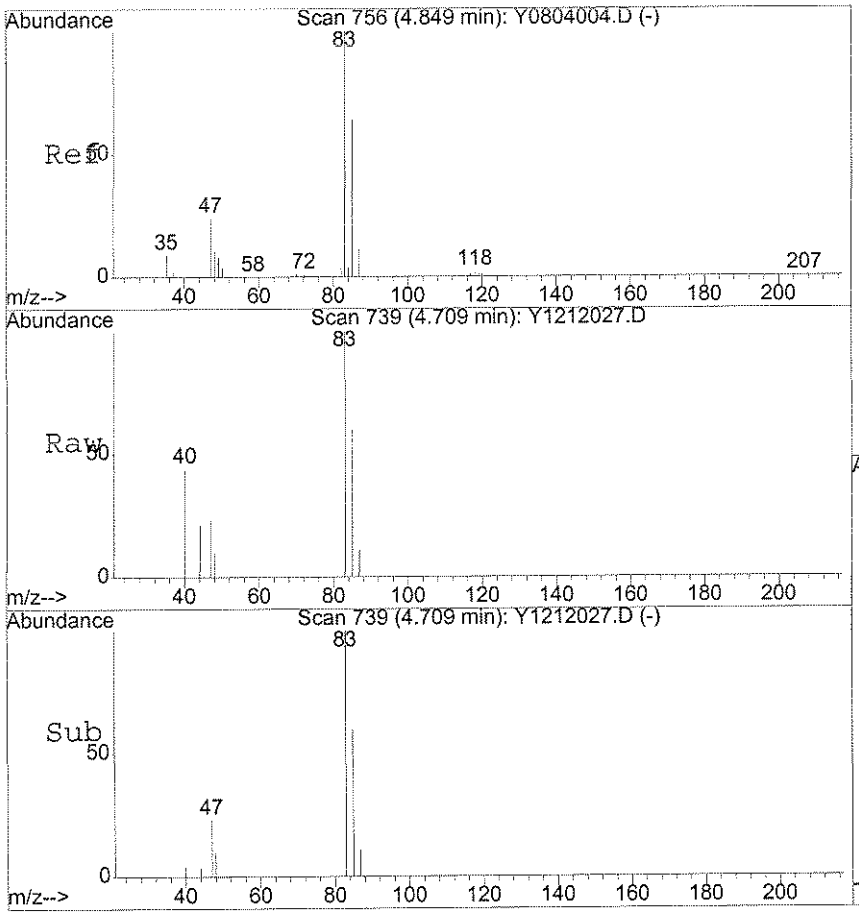


#22
1,1-Dichloroethane
Concen: 0.77 ug/l
RT: 3.33 min Scan# 504
Delta R.T. 0.01 min
Lab File: Y1212027.D
Acq: 12 Dec 2006 20:34

Tgt Ion: 63 Resp: 3274

Ion	Ratio	Lower	Upper
63	100		
65	25.3	12.3	52.3

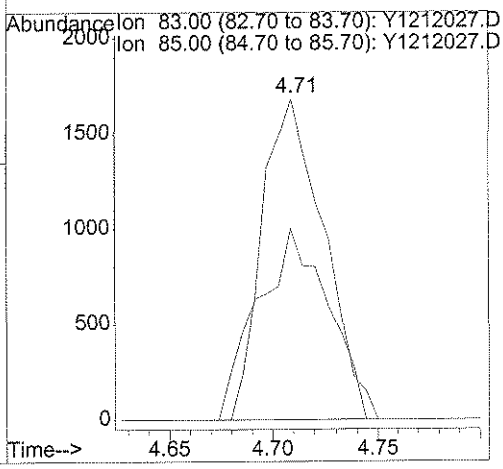


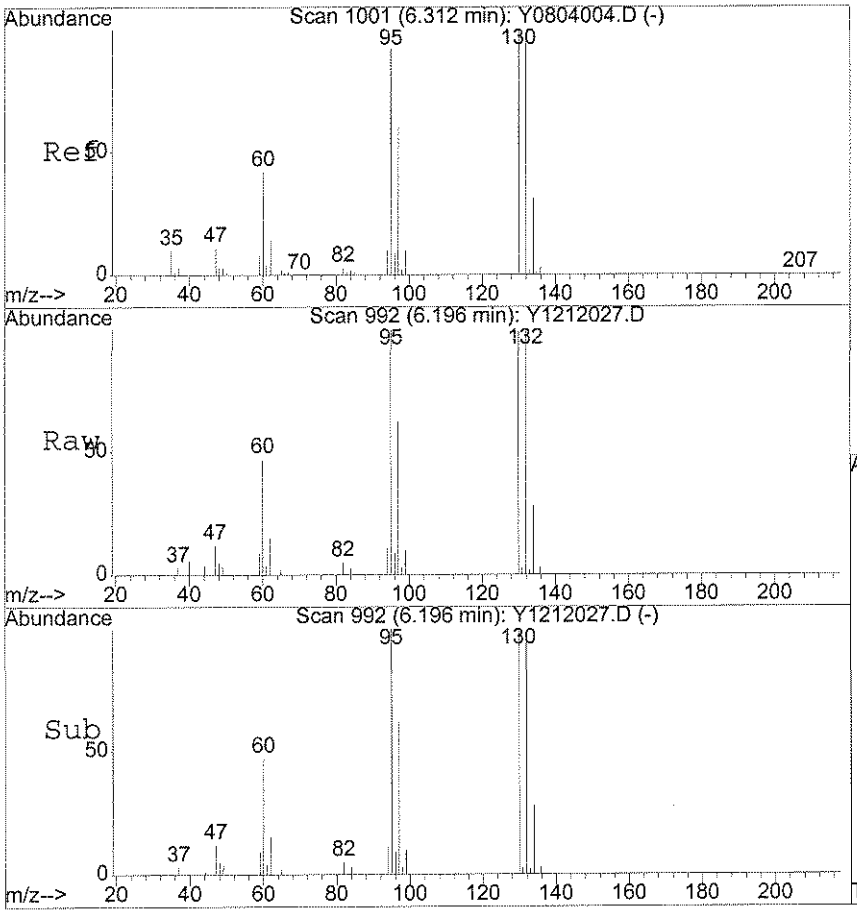


#31
Chloroform
Concen: 0.90 ug/l
RT: 4.71 min Scan# 739
Delta R.T. 0.00 min
Lab File: Y1212027.D
Acq: 12 Dec 2006 20:34

Tgt Ion: 83 Resp: 3609

Ion	Ratio	Lower	Upper
83	100		
85	60.2	43.3	83.3

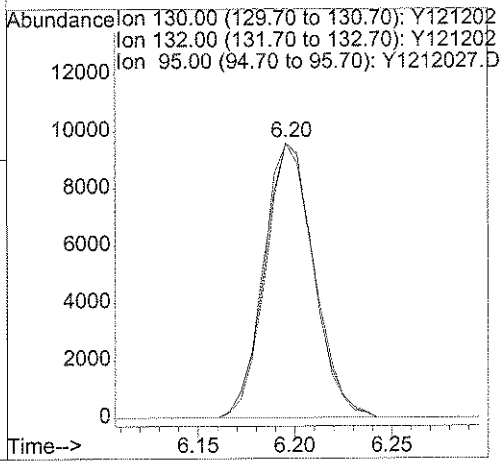


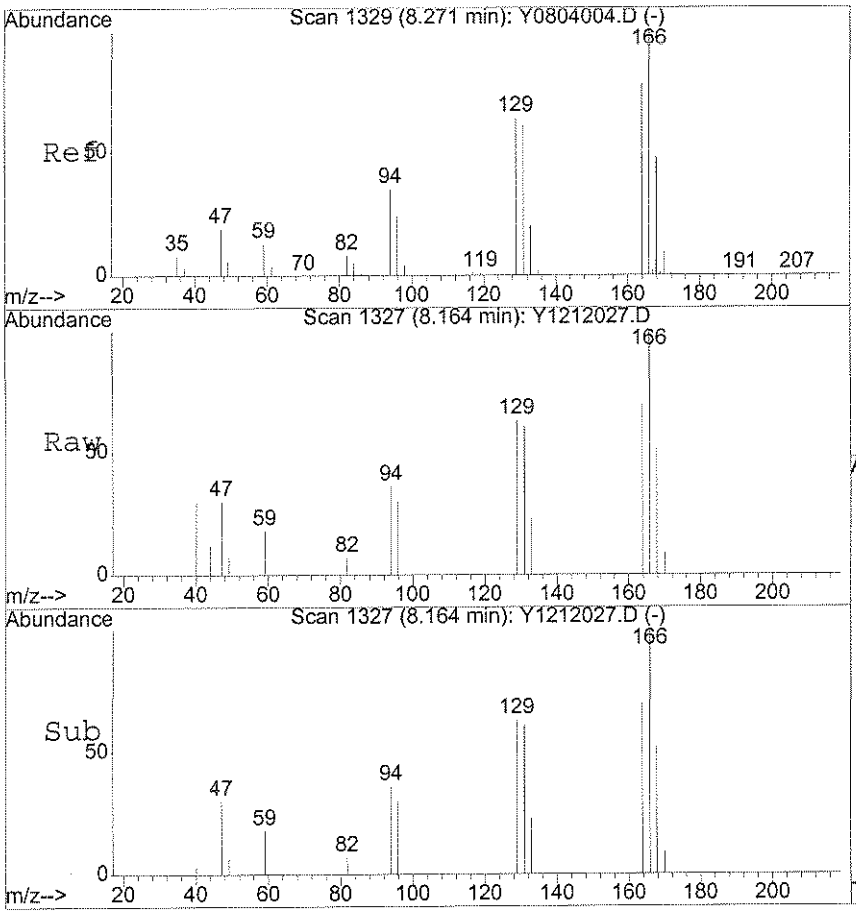


#41
Trichloroethene
Concen: 7.55 ug/l
RT: 6.20 min Scan# 992
Delta R.T. 0.00 min
Lab File: Y1212027.D
Acq: 12 Dec 2006 20:34

Tgt Ion:130 Resp: 17137

Ion	Ratio	Lower	Upper
130	100		
132	96.9	75.0	115.0
95	98.9	69.4	109.4

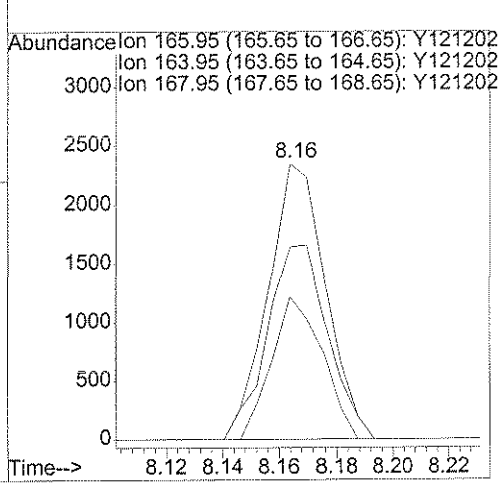




#56
Tetrachloroethene
Concen: 1.37 ug/l
RT: 8.16 min Scan# 1327
Delta R.T. 0.00 min
Lab File: Y1212027.D
Acq: 12 Dec 2006 20:34

Tgt Ion:166 Resp: 3299

Ion	Ratio	Lower	Upper
166	100		
164	74.2	63.3	94.9
168	45.7	39.6	59.4



VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-8-4Q06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-021

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212028.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:58

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.70	
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.86	
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	7.7	
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-8-4Q06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-021

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212028.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:58

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	1.4	
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-8-4Q06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-021

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212028.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 20:58

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

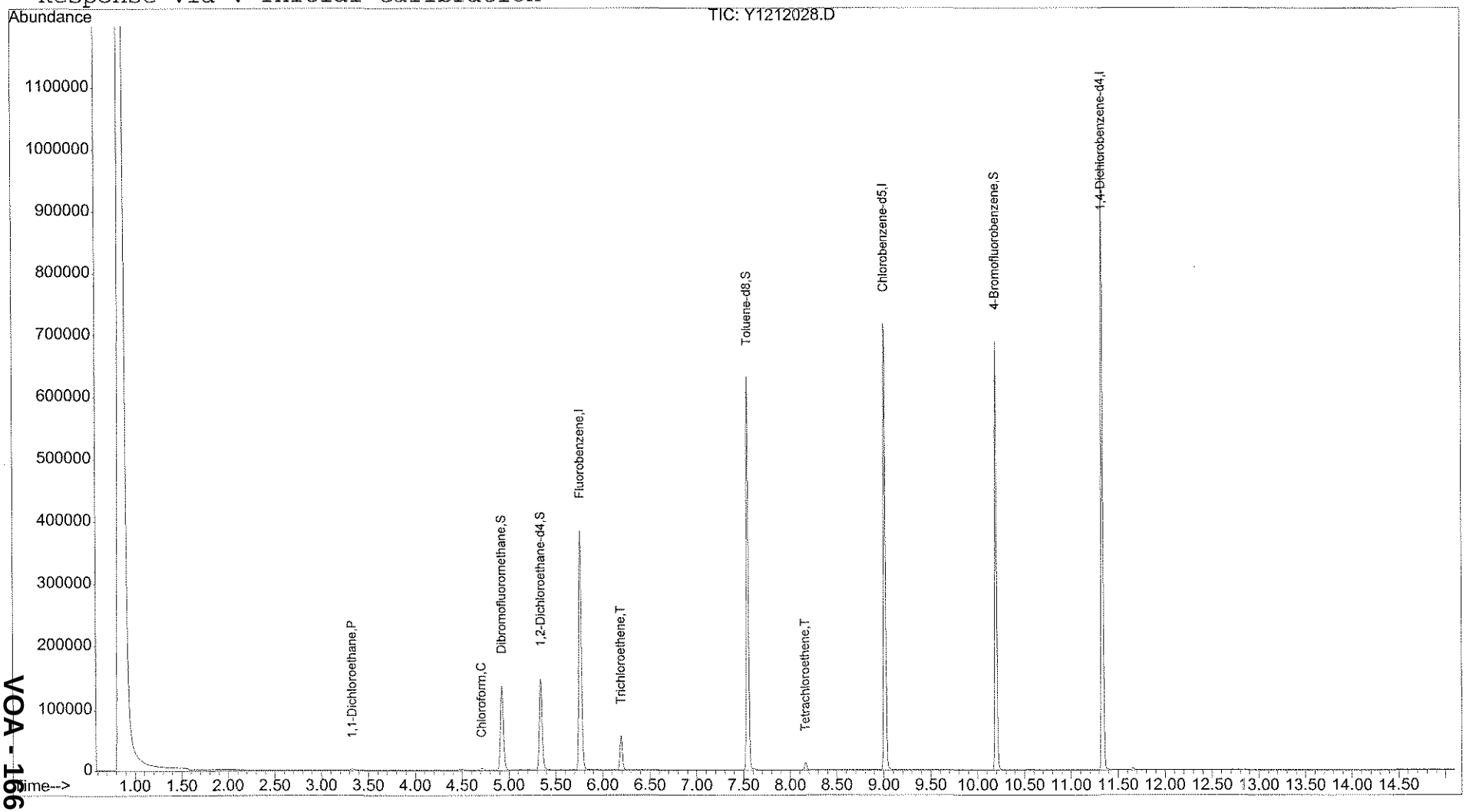
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212028.D Vial: 36
Acq On : 12 Dec 2006 20:58 Operator: LH
Sample : JPL26-021 DUPE-8-4Q06 Inst : yoda
Misc : 5mL+IS/SS #5 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 15:42 2006 Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 196

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212028.D Vial: 36
Acq On : 12 Dec 2006 20:58 Operator: LH
Sample : JPL26-021 DUPE-8-4Q06 Inst : yoda
Misc : 5mL+IS/SS #5 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 15:42 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	355096	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	189869	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	215090	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	96911	46.68 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 93.36%		
37) 1,2-Dichloroethane-d4	5.34	65	112184	50.30 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 100.60%		
51) Toluene-d8	7.55	98	374798	49.16 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 98.32%		
72) 4-Bromofluorobenzene	10.20	95	183807	56.60 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	2.16	43	193	N.D.	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	2.81	96	59	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	3.33	63	3097	0.70 ug/l	90
23) Vinyl acetate	0.00	43	0	N.D.	

LH 12/13/06

(#) = qualifier out of range (m) = manual integration
Y1212028.D 8260B.M Wed Dec 13 15:43:00 2006

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212028.D
Acq On : 12 Dec 2006 20:58
Sample : JPL26-021 DUPE-8-4Q06
Misc : 5mL+IS/SS #5
MS Integration Params: rteint.p
Quant Time: Dec 13 15:42 2006

Vial: 36
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24) Chloroprene	0.00	53	0	N.D.	
25) 2,2-Dichloropropane	0.00	77	0	N.D.	
26) cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27) 2-Butanone	0.00	43	0	N.D.	
28) Propionitrile	0.00	54	0	N.D.	
29) Bromochloromethane	0.00	128	0	N.D.	
30) Methacrylonitrile	0.00	41	0	N.D.	
31) Chloroform	4.71	83	3559	0.86 ug/l	94
32) 1,1,1-Trichloroethane	0.00	97	0	N.D.	
34) Cyclohexane	0.00	56	0	N.D.	
35) Carbon Tetrachloride	5.12	117	226	N.D.	
36) 1,1-Dichloropropene	0.00	75	0	N.D.	
38) Benzene	5.38	78	71	N.D.	
39) 1,2-Dichloroethane	0.00	62	0	N.D.	
40) Isobutanol	0.00	43	0	N.D.	
41) Trichloroethene	6.20	130	18249	7.74 ug/l	95
42) Methylcyclohexane	0.00	83	0	N.D.	
43) 1,2-Dichloropropane	0.00	63	0	N.D.	
44) Dibromomethane	0.00	93	0	N.D.	
45) Methyl methacrylate	0.00	41	0	N.D.	
46) Bromodichloromethane	6.78	83	147	N.D.	
47) 2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48) cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49) 4-Methyl-2-pentanone	0.00	43	0	N.D. d	
52) Toluene	7.61	92	674	N.D.	
53) trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54) Ethyl methacrylate	0.00	69	0	N.D.	
55) 1,1,2-Trichloroethane	0.00	97	0	N.D.	
56) Tetrachloroethene	8.16	166	3556	1.42 ug/l	94
57) 1,3-Dichloropropane	0.00	76	0	N.D.	
58) 2-Hexanone	0.00	43	0	N.D.	
59) Dibromochloromethane	0.00	129	0	N.D.	
60) 1,2-Dibromoethane	0.00	107	0	N.D.	
61) Chlorobenzene	9.04	112	62	N.D.	
62) 1-Chlorohexane	9.01	91	487	N.D.	
63) 1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64) Ethylbenzene	9.17	91	295	N.D.	
65) m,p-Xylene	9.30	106	443	N.D.	
66) o-xylene	9.68	106	126	N.D.	
67) Styrene	0.00	104	0	N.D.	
68) Bromoform	0.00	173	0	N.D.	

LH 12/13/06

(#) = qualifier out of range (m) = manual integration

Quantitation Report

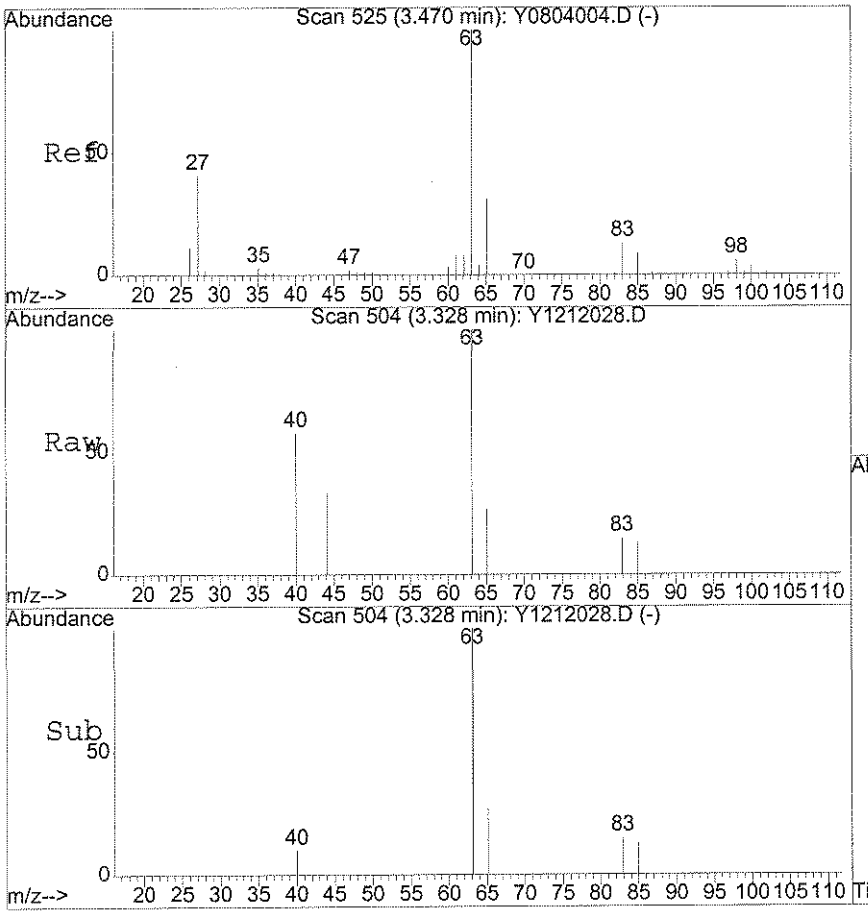
Data File : X:\MSVOA\YODA\121206\Y1212028.D
Acq On : 12 Dec 2006 20:58
Sample : JPL26-021 DUPE-8-4Q06
Misc : 5mL+IS/SS #5
MS Integration Params: rteint.p
Quant Time: Dec 13 15:42 2006

Vial: 36
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.20	105	126	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	0.00	156	0	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	117	N.D.	
78)	4-Chlorotoluene	10.47	91	117	N.D.	
79)	1,3,5-Trimethylbenzene	10.65	105	54	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.01	105	391	N.D.	
82)	sec-butylbenzene	11.18	105	73	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	196	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	54	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	0.00	128	0	N.D.	
92)	1,2,3-Trichlorobenzene	13.79	180	252	N.D.	

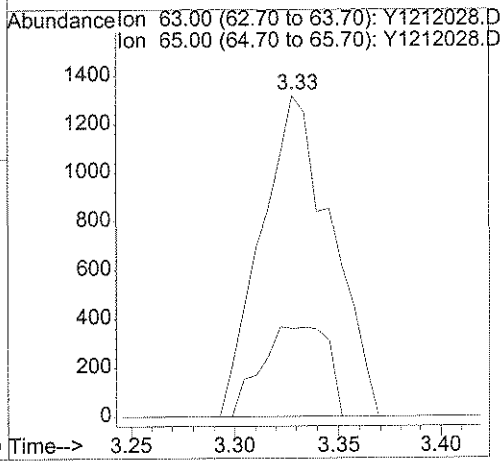
(#) = qualifier out of range (m) = manual integration

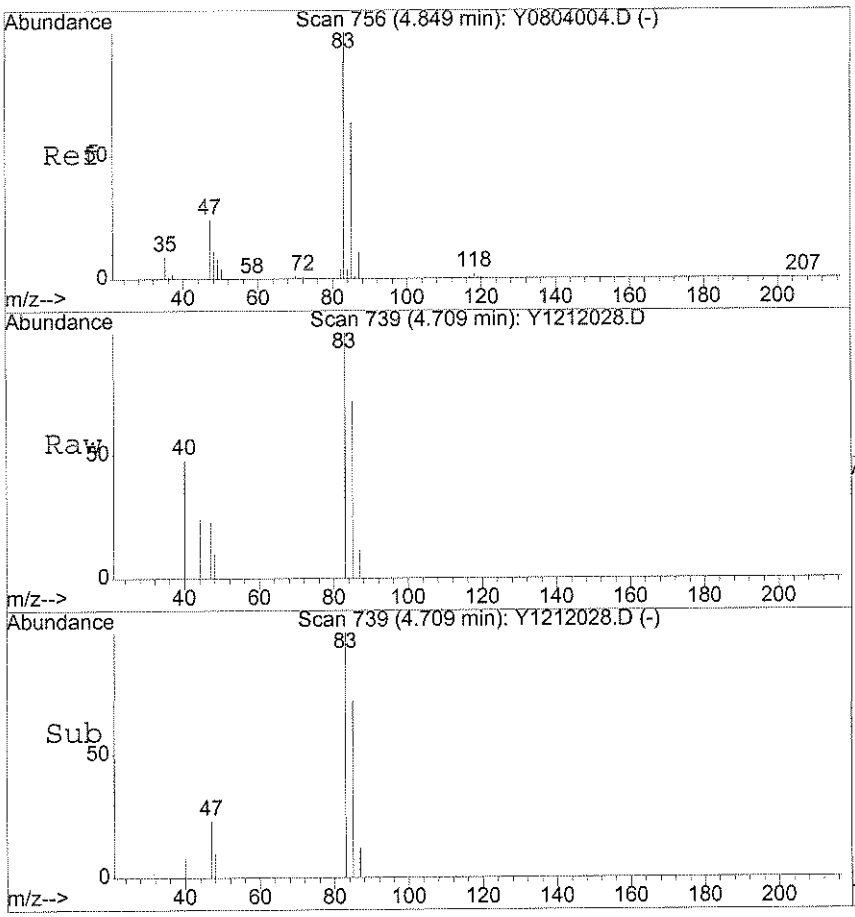


#22
1,1-Dichloroethane
Concen: 0.70 ug/l
RT: 3.33 min Scan# 504
Delta R.T. 0.01 min
Lab File: Y1212028.D
Acq: 12 Dec 2006 20:58

Tgt Ion: 63 Resp: 3097

Ion	Ratio	Lower	Upper
63	100		
65	26.4	12.3	52.3

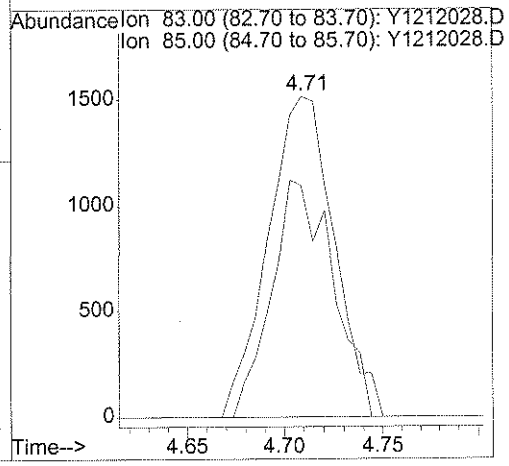


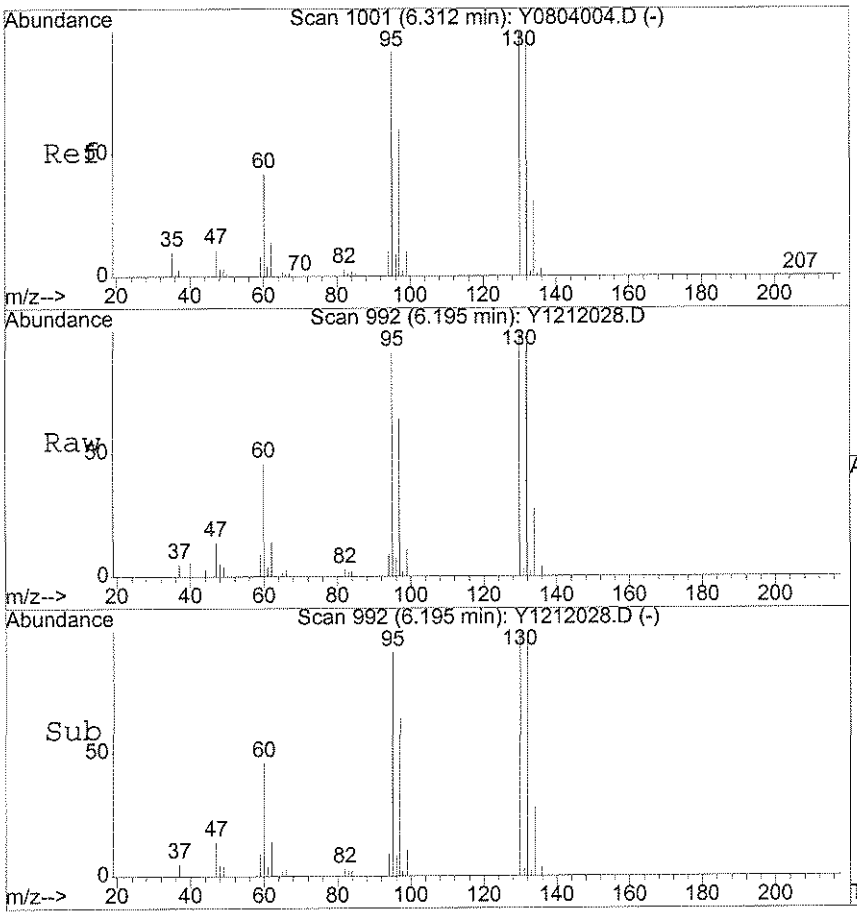


#31
Chloroform
Concen: 0.86 ug/l
RT: 4.71 min Scan# 739
Delta R.T. 0.00 min
Lab File: Y1212028.D
Acq: 12 Dec 2006 20:58

Tgt Ion: 83 Resp: 3559

Ion	Ratio	Lower	Upper
83	100		
85	68.2	43.3	83.3

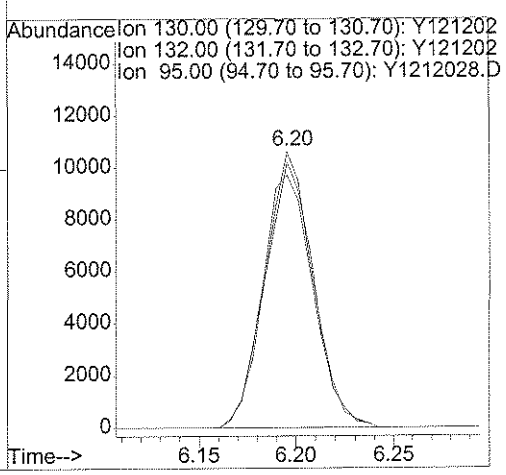


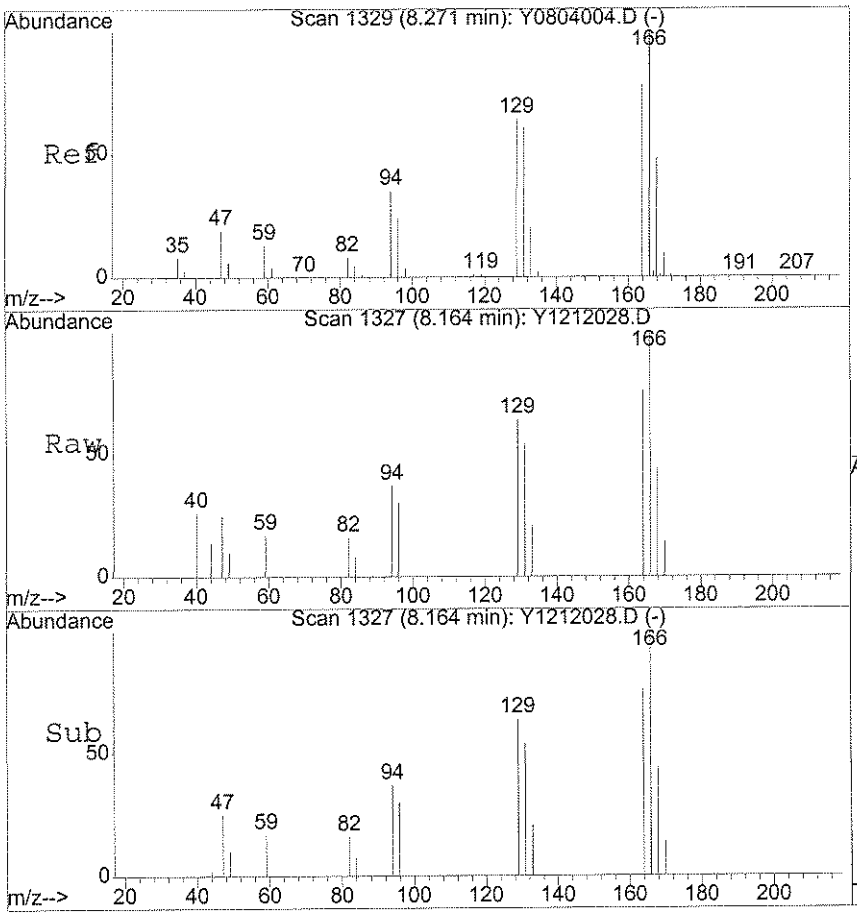


#41
Trichloroethene
Concen: 7.74 ug/l
RT: 6.20 min Scan# 992
Delta R.T. 0.00 min
Lab File: Y1212028.D
Acq: 12 Dec 2006 20:58

Tgt Ion:130 Resp: 18249

Ion	Ratio	Lower	Upper
130	100		
132	97.2	75.0	115.0
95	97.0	69.4	109.4

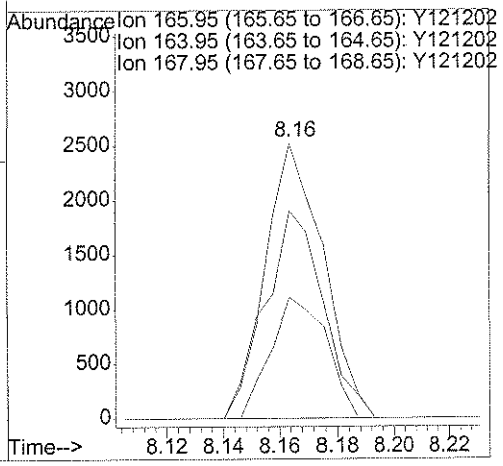




#56
Tetrachloroethene
Concen: 1.42 ug/l
RT: 8.16 min Scan# 1327
Delta R.T. 0.00 min
Lab File: Y1212028.D
Acq: 12 Dec 2006 20:58

Tgt Ion:166 Resp: 3556

Ion	Ratio	Lower	Upper
166	100		
164	76.4	63.3	94.9
168	42.2	39.6	59.4



1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12/7/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-022

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212018.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:55

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
75-09-2	Methylene chloride	0.50	U
1634-04-4	Methyl tert-butyl ether	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
594-20-7	2,2-Dichloropropane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
563-58-6	1,1-Dichloropropene	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U
79-01-6	Trichloroethene	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
74-95-3	Dibromomethane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12/7/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-022

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212018.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:55

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
10061-02-	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
142-28-9	1,3-Dichloropropane	0.50	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
630-20-6	1,1,1,2-Tetrachloroethane	0.50	U
179601-23	m,p-Xylene	1.0	U
95-47-6	o-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
103-65-1	n-Propylbenzene	0.50	U
108-86-1	Bromobenzene	0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	U
95-49-8	2-Chlorotoluene	0.50	U
108-67-8	1,3,5-Trimethylbenzene	0.50	U
106-43-4	4-Chlorotoluene	0.50	U
98-06-6	tert-Butylbenzene	0.50	U
95-63-6	1,2,4-Trimethylbenzene	0.50	U
135-98-8	sec-Butylbenzene	0.50	U
99-87-6	4-Isopropyltoluene	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
104-51-8	n-Butylbenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U

1

VOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

TB-12/7/06

Lab Name: Laucks Testing Laboratories, Inc.

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: JPL26-022

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212018.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: not dec.

Date/Time Analyzed: 12/12/2006 16:55

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Heated Purge: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-68-3	Hexachlorobutadiene	0.50	U
91-20-3	Naphthalene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

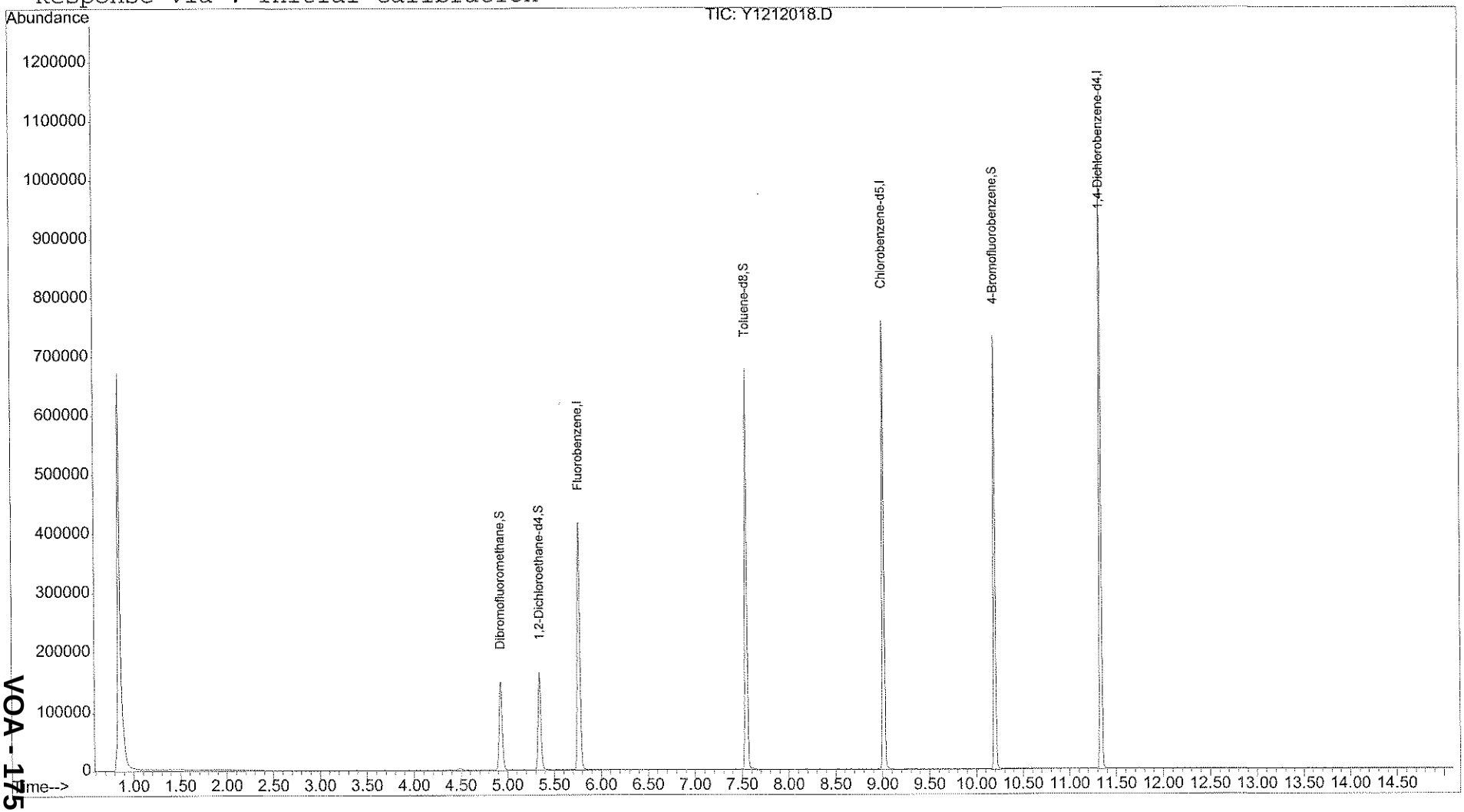
Comments:

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212018.D
Acq On : 12 Dec 2006 16:55
Sample : JPL26-022 TB-12/7/06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 11:43 2006

Vial: 28
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration



VOA - 175

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212018.D Vial: 28
Acq On : 12 Dec 2006 16:55 Operator: LH
Sample : JPL26-022 TB-12/7/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Dec 13 11:43 2006 Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B
IS QA File : cc level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) Fluorobenzene	5.77	96	392320	50.00 ug/l	0.00 NA%
50) Chlorobenzene-d5	9.01	82	198608	50.00 ug/l	0.00 NA%
70) 1,4-Dichlorobenzene-d4	11.34	152	229126	50.00 ug/l	0.00 NA%

System Monitoring Compounds					
33) Dibromofluoromethane	4.93	111	108159	47.15 ug/l	0.00
Spiked Amount 50.000	Range 85 - 115		Recovery = 94.30%		
37) 1,2-Dichloroethane-d4	5.34	65	124601	50.56 ug/l	0.00
Spiked Amount 50.000	Range 70 - 120		Recovery = 101.12%		
51) Toluene-d8	7.55	98	400040	50.17 ug/l	0.00
Spiked Amount 50.000	Range 85 - 120		Recovery = 100.34%		
72) 4-Bromofluorobenzene	10.20	95	194124	56.11 ug/l	0.00

Target Compounds					Qvalue
2) Dichlorodifluoromethane	0.00	85	0	N.D.	
3) Chloromethane	0.00	50	0	N.D.	
4) Vinyl Chloride	0.00	62	0	N.D.	
5) Bromomethane	0.00	96	0	N.D.	
6) Chloroethane	0.00	64	0	N.D.	
7) Trichlorofluoromethane	0.00	101	0	N.D.	
8) Acrolein	0.00	56	0	N.D.	
9) 1,1-Dichloroethene	0.00	96	0	N.D.	
10) 1,1,2-Trichloro-1,2,2-trif	0.00	101	0	N.D.	
11) Acetone	0.00	43	0	N.D. d	
12) Iodomethane	0.00	142	0	N.D.	
13) Bromoethane	0.00	108	0	N.D.	
14) Carbon Disulfide	0.00	76	0	N.D.	
15) Allyl chloride	0.00	76	0	N.D.	
16) Acetonitrile	0.00	40	0	N.D. d	
17) Methyl Acetate	0.00	43	0	N.D.	
18) Methylene Chloride	0.00	84	0	N.D.	
19) trans-1,2-Dichloroethene	0.00	96	0	N.D.	
20) Acrylonitrile	0.00	53	0	N.D.	
21) Methyl tert-butyl ether	0.00	73	0	N.D.	
22) 1,1-Dichloroethane	0.00	63	0	N.D.	
23) Vinyl acetate	0.00	43	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212018.D
Acq On : 12 Dec 2006 16:55
Sample : JPL26-022 TB-12/7/06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 11:43 2006

Vial: 28
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
24)	Chloroprene	0.00	53	0	N.D.	
25)	2,2-Dichloropropane	0.00	77	0	N.D.	
26)	cis-1,2-Dichloroethene	0.00	96	0	N.D.	
27)	2-Butanone	0.00	43	0	N.D.	d
28)	Propionitrile	0.00	54	0	N.D.	
29)	Bromochloromethane	0.00	128	0	N.D.	
30)	Methacrylonitrile	0.00	41	0	N.D.	
31)	Chloroform	0.00	83	0	N.D.	
32)	1,1,1-Trichloroethane	0.00	97	0	N.D.	
34)	Cyclohexane	0.00	56	0	N.D.	
35)	Carbon Tetrachloride	0.00	117	0	N.D.	
36)	1,1-Dichloropropene	0.00	75	0	N.D.	
38)	Benzene	5.40	78	59	N.D.	
39)	1,2-Dichloroethane	0.00	62	0	N.D.	
40)	Isobutanol	0.00	43	0	N.D.	
41)	Trichloroethene	0.00	130	0	N.D.	
42)	Methylcyclohexane	0.00	83	0	N.D.	
43)	1,2-Dichloropropane	0.00	63	0	N.D.	
44)	Dibromomethane	0.00	93	0	N.D.	
45)	Methyl methacrylate	0.00	41	0	N.D.	
46)	Bromodichloromethane	0.00	83	0	N.D.	
47)	2-Chloroethyl vinyl ether	0.00	63	0	N.D.	
48)	cis-1,3-Dichloropropene	0.00	75	0	N.D.	
49)	4-Methyl-2-pentanone	0.00	43	0	N.D.	d
52)	Toluene	7.62	92	335	N.D.	
53)	trans-1,3-Dichloropropene	0.00	75	0	N.D.	
54)	Ethyl methacrylate	0.00	69	0	N.D.	
55)	1,1,2-Trichloroethane	0.00	97	0	N.D.	
56)	Tetrachloroethene	0.00	166	0	N.D.	
57)	1,3-Dichloropropane	0.00	76	0	N.D.	
58)	2-Hexanone	0.00	43	0	N.D.	
59)	Dibromochloromethane	0.00	129	0	N.D.	
60)	1,2-Dibromoethane	0.00	107	0	N.D.	
61)	Chlorobenzene	0.00	112	0	N.D.	
62)	1-Chlorohexane	9.02	91	721	N.D.	
63)	1,1,1,2-Tetrachloroethane	0.00	131	0	N.D.	
64)	Ethylbenzene	9.17	91	56	N.D.	
65)	m,p-Xylene	9.29	106	290	N.D.	
66)	o-xylene	0.00	106	0	N.D.	
67)	Styrene	0.00	104	0	N.D.	
68)	Bromoform	0.00	173	0	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSVOA\YODA\121206\Y1212018.D
Acq On : 12 Dec 2006 16:55
Sample : JPL26-022 TB-12/7/06
Misc : 5mL+IS/SS #1
MS Integration Params: rteint.p
Quant Time: Dec 13 11:43 2006

Vial: 28
Operator: LH
Inst : yoda
Multiplr: 1.00
Quant Results File: 8260B.RES

Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Last Update : Fri Dec 08 06:30:05 2006
Response via : Initial Calibration
DataAcq Meth : 8260B

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
69)	Isopropylbenzene	10.18	105	73	N.D.	
71)	trans-1,4-Dichloro-2-buten	0.00	53	0	N.D.	
73)	Bromobenzene	10.20	156	55	N.D.	
74)	1,1,2,2-Tetrachloroethane	0.00	83	0	N.D.	
75)	1,2,3-Trichloropropane	0.00	110	0	N.D.	
76)	n-Propylbenzene	0.00	120	0	N.D.	
77)	2-Chlorotoluene	10.47	91	166	N.D.	
78)	4-Chlorotoluene	10.47	91	166	N.D.	
79)	1,3,5-Trimethylbenzene	10.65	105	134	N.D.	
80)	tert-Butylbenzene	0.00	119	0	N.D.	
81)	1,2,4-Trimethylbenzene	11.01	105	224	N.D.	
82)	sec-butylbenzene	11.18	105	144	N.D.	
83)	1,3-Dichlorobenzene	0.00	146	0	N.D.	
84)	4-Isopropyltoluene	11.34	119	257	N.D.	
85)	1,4-Dichlorobenzene	0.00	146	0	N.D.	
86)	1,2-Dichlorobenzene	0.00	146	0	N.D.	
87)	n-Butylbenzene	11.74	91	146	N.D.	
88)	1,2-Dibromo-3-chloropropan	0.00	157	0	N.D.	
89)	1,2,4-Trichlorobenzene	13.32	180	66	N.D.	
90)	Hexachlorobutadiene	0.00	225	0	N.D.	
91)	Naphthalene	13.55	128	170	N.D.	
92)	1,2,3-Trichlorobenzene	0.00	180	0	N.D.	

(#) = qualifier out of range (m) = manual integration

TIC FORMS

SDG JPL26

VOLATILES ANALYSIS

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

B121206MVOWY1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: B121206MVOWY1

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212009.D

Level: (LOW/MED)

Date Collected:

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212009.D Vial: 21
Acq On : 12 Dec 2006 13:16 Operator: LH
Sample : B121206MVOWY1 Inst : yoda
Misc : 5mLpfw+IS/SS(MV8-36-16) Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212009.D 8260B.M Tue Dec 12 15:44:46 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MW-26-2

Lab Name: Laucks Testing Laboratories, Inc
Contract: JPL Groundwater Monitorin

SDG No.: JPL26
Run Sequence: R013147

Matrix: (SOIL/WATER) Water
Lab Sample ID: JPL26-001

Sample wt/vol: 5.00 (g/mL) mL
Lab File ID: Y1204017.D

Level: (LOW/MED)
Date Collected: 12/02/2006

% Moisture: not dec.
Date Analyzed: 12/04/2006

GC Column: DB-624 20m ID: 0.18 (mm)
Dilution Factor: 1.0

Soil Extract Volume: (uL)
Soil Aliquot Volume: (uL)

Number TICs Found: 0
CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Tentatively Identified Compound (LSC) summary

Operator ID: LH Date Acquired: 4 Dec 2006 17:41
Data File: X:\MSVOA\YODA\120406\Y1204017.D
Name: JPL26-001 MW-26-2
Misc: 5mL+IS/SS #2
Method: X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title: VOA Standards for 8 point calibration 8260- 5ML
Library Searched: D:\DATABASE\NIST129K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

Y1204017.D 8260B.M Tue Dec 05 10:33:10 2006

Tentatively Identified Compound (LSC) summary

Operator ID: LH Date Acquired: 4 Dec 2006 18:06
Data File: X:\MSVOA\YODA\120406\Y1204018.D
Name: JPL26-002 MW-26-1
Misc: 5mL+IS/SS #2
Method: X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title: VOA Standards for 8 point calibration 8260- 5ML
Library Searched: D:\DATABASE\NIST129K.L

TIC	Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

Y1204018.D 8260B.M Tue Dec 05 10:34:26 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-26-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-002

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204018.D

Level: (LOW/MED)

Date Collected: 12/02/2006

% Moisture: not dec.

Date Analyzed: 12/04/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
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Comments:

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
EB-21-11/30/06

Lab Name: Laucks Testing Laboratories, Inc
Contract: JPL Groundwater Monitorin

SDG No.: JPL26
Run Sequence: R013147

Matrix: (SOIL/WATER) Water
Lab Sample ID: JPL26-003

Sample wt/vol: 5.00 (g/mL) mL
Lab File ID: Y1204019.D

Level: (LOW/MED)
Date Collected: 12/02/2006

% Moisture: not dec.
Date Analyzed: 12/04/2006

GC Column: DB-624 20m ID: 0.18 (mm)
Dilution Factor: 1.0

Soil Extract Volume: (uL)
Soil Aliquot Volume: (uL)

Number TICs Found: 0
CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
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Comments:

Tentatively Identified Compound (LSC) summary

Operator ID: LH Date Acquired: 4 Dec 2006 18:30
Data File: X:\MSVOA\YODA\120406\Y1204019.D
Name: JPL26-003 EB-21-11/30/06
Misc: 5mL+IS/SS #2
Method: X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title: VOA Standards for 8 point calibration 8260- 5ML
Library Searched: D:\DATABASE\NIST129K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

Y1204019.D 8260B.M Tue Dec 05 10:36:25 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-21-11/30/06

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-005

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204015.D

Level: (LOW/MED)

Date Collected: 12/02/2006

% Moisture: not dec.

Date Analyzed: 12/04/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
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Comments:

Tentatively Identified Compound (LSC) summary

Operator ID: LH Date Acquired: 4 Dec 2006 16:53
Data File: X:\MSVOA\YODA\120406\Y1204015.D
Name: JPL26-005 TB-21-11/30/06
Misc: 5mL+IS/SS #1
Method: X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title: VOA Standards for 8 point calibration 8260- 5ML
Library Searched: D:\DATABASE\NIST129K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

Y1204015.D 8260B.M Tue Dec 05 10:28:46 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-5

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-006

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204020.D

Level: (LOW/MED)

Date Collected: 12/02/2006

% Moisture: not dec.

Date Analyzed: 12/04/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:

Tentatively Identified Compound (LSC) summary

Operator ID: LH Date Acquired: 4 Dec 2006 18:54
Data File: X:\MSVOA\YODA\120406\Y1204020.D
Name: JPL26-006 MW-5
Misc: 5mL+IS/SS #2
Method: X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title: VOA Standards for 8 point calibration 8260- 5ML
Library Searched: D:\DATABASE\NIST129K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

Y1204020.D 8260B.M Tue Dec 05 10:38:05 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-6

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013147

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-007

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1204021.D

Level: (LOW/MED)

Date Collected: 12/02/2006

% Moisture: not dec.

Date Analyzed: 12/04/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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Comments:

Tentatively Identified Compound (LSC) summary

Operator ID: LH Date Acquired: 4 Dec 2006 19:18
Data File: X:\MSVOA\YODA\120406\Y1204021.D
Name: JPL26-007 MW-6
Misc: 5mL+IS/SS #1
Method: X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title: VOA Standards for 8 point calibration 8260- 5ML
Library Searched: D:\DATABASE\NIST129K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

Y1204021.D 8260B.M Tue Dec 05 10:40:07 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
TB-22-12/1/06

Lab Name: Laucks Testing Laboratories, Inc
Contract: JPL Groundwater Monitorin

SDG No.: JPL26
Run Sequence: R013147

Matrix: (SOIL/WATER) Water
Lab Sample ID: JPL26-008

Sample wt/vol: 5.00 (g/mL) mL
Lab File ID: Y1204016.D

Level: (LOW/MED)
Date Collected: 12/02/2006

% Moisture: not dec.
Date Analyzed: 12/04/2006

GC Column: DB-624 20m ID: 0.18 (mm)
Dilution Factor: 1.0

Soil Extract Volume: (uL)
Soil Aliquot Volume: (uL)

Number TICs Found: 0
CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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Comments:

Tentatively Identified Compound (LSC) summary

Operator ID: LH Date Acquired: 4 Dec 2006 17:17
Data File: X:\MSVOA\YODA\120406\Y1204016.D
Name: JPL26-008 TB-22-12/01/06
Misc: 5mL+IS/SS #2
Method: X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title: VOA Standards for 8 point calibration 8260- 5ML
Library Searched: D:\DATABASE\NIST129K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

Y1204016.D 8260B.M Tue Dec 05 10:31:02 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-1

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-009

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212019.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212019.D Vial: 28
Acq On : 12 Dec 2006 17:19 Operator: LH
Sample : JPL26-009 MW-1 Inst : yoda
Misc : 5mL+IS/SS #3 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212019.D 8260B.M Wed Dec 13 12:15:28 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-9

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-010

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212020.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212020.D Vial: 29
Acq On : 12 Dec 2006 17:44 Operator: LH
Sample : JPL26-010 MW-9 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212020.D 8260B.M Wed Dec 13 12:16:44 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-15

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-011

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212021.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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07					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212021.D Vial: 30
Acq On : 12 Dec 2006 18:08 Operator: LH
Sample : JPL26-011 MW-15 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212021.D 8260B.M Wed Dec 13 12:24:50 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-7-4Q06

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-012

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212022.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212022.D Vial: 31
Acq On : 12 Dec 2006 18:32 Operator: LH
Sample : JPL26-012 DUPE-7-4Q06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212022.D 8260B.M Wed Dec 13 15:14:24 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-23-12/4/06

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-013

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212015.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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29					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212015.D Vial: 25
Acq On : 12 Dec 2006 15:42 Operator: LH
Sample : JPL26-013 TB-23-12/4/06 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212015.D 8260B.M Wed Dec 13 11:40:12 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-7

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-014

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212023.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212023.D Vial: 32
Acq On : 12 Dec 2006 18:56 Operator: LH
Sample : JPL26-014 MW-7 Inst : yoda
Misc : 5mL+IS/SS #3 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212023.D 8260B.M Wed Dec 13 15:17:23 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.
MW-7MS

Lab Name: Laucks Testing Laboratories, Inc
Contract: JPL Groundwater Monitorin

SDG No.: JPL26
Run Sequence: R013275

Matrix: (SOIL/WATER) Water
Lab Sample ID: JPL26-014MS

Sample wt/vol: 5.00 (g/mL) mL
Lab File ID: Y1212029.D

Level: (LOW/MED)
Date Collected: 12/05/2006

% Moisture: not dec.
Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)
Dilution Factor: 1.0

Soil Extract Volume: (uL)
Soil Aliquot Volume: (uL)

Number TICs Found: 2
CONCENTRATION UNITS: (ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000108-20-3	Diisopropyl ether	3.546	62	JN
02	000637-92-3	Propane, 2-ethoxy-2-methyl- $	4.115	57	JN
03					
04					
05					
06					
07					
08					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212029.D Vial: 32
Acq On : 12 Dec 2006 21:23 Operator: LH
Sample : JPL26-014MS MW-7 Inst : yoda
Misc : 5mL+IS/SS #3 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

****
Peak Number 1 Diisopropyl ether Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
3.55	62.21 ug/l	938055	Fluorobenzene	753939	5.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diisopropyl ether	102	C6H14O	000108-20-3	91
2	Diisopropyl ether	102	C6H14O	000108-20-3	83
3	Diisopropyl ether $$ Propane, 2,2'-	102	C6H14O	000108-20-3	83
4	Ether, sec-butyl isopropyl	116	C7H16O	018641-81-1	78
5	Ether, 2-chloro-1-methylethyl isopr	136	C6H13ClO	098277-76-0	78

****
Peak Number 2 Propane, 2-ethoxy-2-methyl- $$ Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
4.12	56.80 ug/l	856445	Fluorobenzene	753939	5.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane, 2-ethoxy-2-methyl- $$ Ethe	102	C6H14O	000637-92-3	83
2	Propane, 2-ethoxy-2-methyl-	102	C6H14O	000637-92-3	83
3	Propane, 2-ethoxy-2-methyl-	102	C6H14O	000637-92-3	78
4	Propane, 2-ethoxy-2-methyl-	102	C6H14O	000637-92-3	74
5	3-Hexanol, 5-methyl-	116	C7H16O	000623-55-2	64

Y1212029.D 8260B.M Wed Dec 13 15:56:19 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-7MSD

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-014MSD

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212030.D

Level: (LOW/MED)

Date Collected: 12/05/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 2

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	000108-20-3	Diisopropyl ether	3.552	59	JN
02	000637-92-3	Propane, 2-ethoxy-2-methyl- $	4.116	53	JN
03					
04					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212030.D Vial: 33
Acq On : 12 Dec 2006 21:47 Operator: LH
Sample : JPL26-014MSD MW-7 Inst : yoda
Misc : 5mL+IS/SS #3 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

****
Peak Number 1 Diisopropyl ether Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
3.55	59.40 ug/l	915645	Fluorobenzene	770743	5.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Diisopropyl ether	102	C6H14O	000108-20-3	91
2	Diisopropyl ether	102	C6H14O	000108-20-3	83
3	Diisopropyl ether	102	C6H14O	000108-20-3	83
4	Diisopropyl ether $$ Propane, 2,2'-	102	C6H14O	000108-20-3	83
5	Ether, sec-butyl isopropyl	116	C7H16O	018641-81-1	78

****
Peak Number 2 Propane, 2-ethoxy-2-methyl- $$ Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	IS Area	R.T.
4.12	53.41 ug/l	823243	Fluorobenzene	770743	5.77

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Propane, 2-ethoxy-2-methyl- $$ Ethe	102	C6H14O	000637-92-3	83
2	Propane, 2-ethoxy-2-methyl-	102	C6H14O	000637-92-3	83
3	Propane, 2-ethoxy-2-methyl-	102	C6H14O	000637-92-3	83
4	Propane, 2-ethoxy-2-methyl-	102	C6H14O	000637-92-3	83
5	2-Pentanol, 2-methyl-	102	C6H14O	000590-36-3	64

Y1212030.D 8260B.M Wed Dec 13 15:59:29 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-16

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-015

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212024.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
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Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212024.D Vial: 33
Acq On : 12 Dec 2006 19:20 Operator: LH
Sample : JPL26-015 MW-16 Inst : yoda
Misc : 5mL+IS/SS #3 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212024.D 8260B.M Wed Dec 13 15:20:44 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-24-12/5/06

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-016

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212016.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
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04					
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29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212016.D Vial: 26
Acq On : 12 Dec 2006 16:06 Operator: LH
Sample : JPL26-016 TB-24-12/5/06 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212016.D 8260B.M Wed Dec 13 11:41:09 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-13

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-017

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212025.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
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10					
11					
12					
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28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212025.D Vial: 34
Acq On : 12 Dec 2006 19:45 Operator: LH
Sample : JPL26-017 MW-13 Inst : yoda
Misc : 5mL+IS/SS #3 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212025.D 8260B.M Wed Dec 13 16:47:40 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-8

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-018

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212026.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212026.D Vial: 35
Acq On : 12 Dec 2006 20:09 Operator: LH
Sample : JPL26-018 MW-8 Inst : yoda
Misc : 5mL+IS/SS #2 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212026.D 8260B.M Wed Dec 13 15:38:00 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-25-12/8/06

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-019

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212017.D

Level: (LOW/MED)

Date Collected: 12/06/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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15					
16					
17					
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22					
23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212017.D Vial: 27
Acq On : 12 Dec 2006 16:31 Operator: LH
Sample : JPL26-019 TB-25-12/8/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212017.D 8260B.M Wed Dec 13 11:42:52 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

MW-10

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-020

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212027.D

Level: (LOW/MED)

Date Collected: 12/08/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
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23					
24					
25					
26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212027.D Vial: 35
Acq On : 12 Dec 2006 20:34 Operator: LH
Sample : JPL26-020 MW-10 Inst : yoda
Misc : 5mL+IS/SS #8 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212027.D 8260B.M Wed Dec 13 15:40:59 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

DUPE-8-4Q06

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-021

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212028.D

Level: (LOW/MED)

Date Collected: 12/08/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
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27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212028.D Vial: 36
Acq On : 12 Dec 2006 20:58 Operator: LH
Sample : JPL26-021 DUPE-8-4Q06 Inst : yoda
Misc : 5mL+IS/SS #5 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212028.D 8260B.M Wed Dec 13 15:43:09 2006

1 TIC
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

CLIENT SAMPLE NO.

TB-12/7/06

Lab Name: Laucks Testing Laboratories, Inc

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013275

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-022

Sample wt/vol: 5.00 (g/mL) mL

Lab File ID: Y1212018.D

Level: (LOW/MED)

Date Collected: 12/08/2006

% Moisture: not dec.

Date Analyzed: 12/12/2006

GC Column: DB-624 20m ID: 0.18 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Number TICs Found: 0

CONCENTRATION UNITS:
(ug/L or ug/kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01					
02					
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
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24					
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26					
27					
28					
29					
30					

Comments:

Library Search Compound Report

Data File : X:\MSVOA\YODA\121206\Y1212018.D Vial: 28
Acq On : 12 Dec 2006 16:55 Operator: LH
Sample : JPL26-022 TB-12/7/06 Inst : yoda
Misc : 5mL+IS/SS #1 Multiplr: 1.00
MS Integration Params: LSCINT.P
Quant Method : X:\MSVOA\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA 8260- 5ML Calibration 5973Y
Library : D:\DATABASE\NIST129K.L

No Library Search Compounds Detected

****
Y1212018.D 8260B.M Wed Dec 13 11:44:10 2006

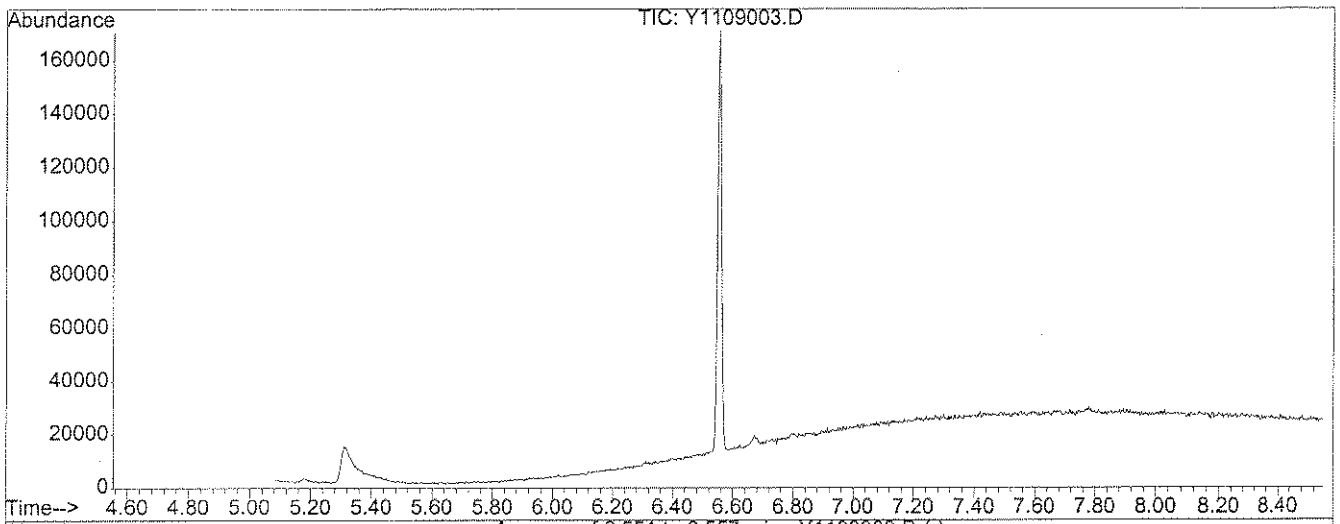
RAW QC DATA

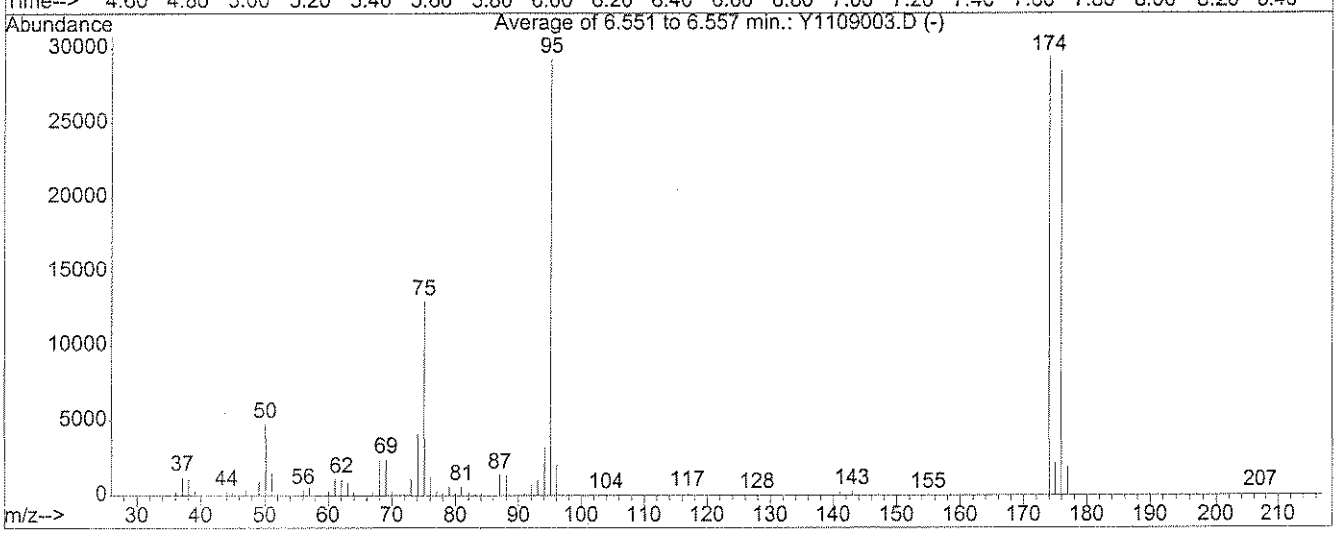
SDG JPL26

VOLATILES ANALYSIS

BFB

Data File : I:\YODA\110906\Y1109003.D Vial: 3
Acq On : 9 Nov 2006 8:17 Operator: JMD
Sample : BFB25NG Inst : yoda
Misc : 1uL dir. inject MV8-34-8 Multiplr: 1.00
MS Integration Params: rteint.p
Method : I:\YODA\QUANT\8260B.M (RTE Integrator)
Title : VOA Standards for 5 point calibration 8260- 5ML





AutoFind: Scans 528, 529, 530; Background Corrected with Scan 518

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.3	4785	PASS
75	95	30	60	44.3	12983	PASS
95	95	100	100	100.0	29280	PASS
96	95	5	9	7.1	2079	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	100.3	29379	PASS
175	174	5	9	7.3	2142	PASS
176	174	95	101	96.8	28448	PASS
177	176	5	9	6.7	1900	PASS

SAMPLE DATA

SDG# JPL26

Semivolatiles

1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-3-2

Lab Name: Laucks Testing Laboratories,

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013387

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-004

Sample wt/vol: 960.0 (g/mL) mL

Lab File ID: Z1212005.D

Level: (LOW/MED)

Date Collected: 11/30/2006

% Moisture: Decanted: (Y/N) N

Date Extracted: 12/07/2006

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/12/2006

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: <2

Extraction: (Type) CONT

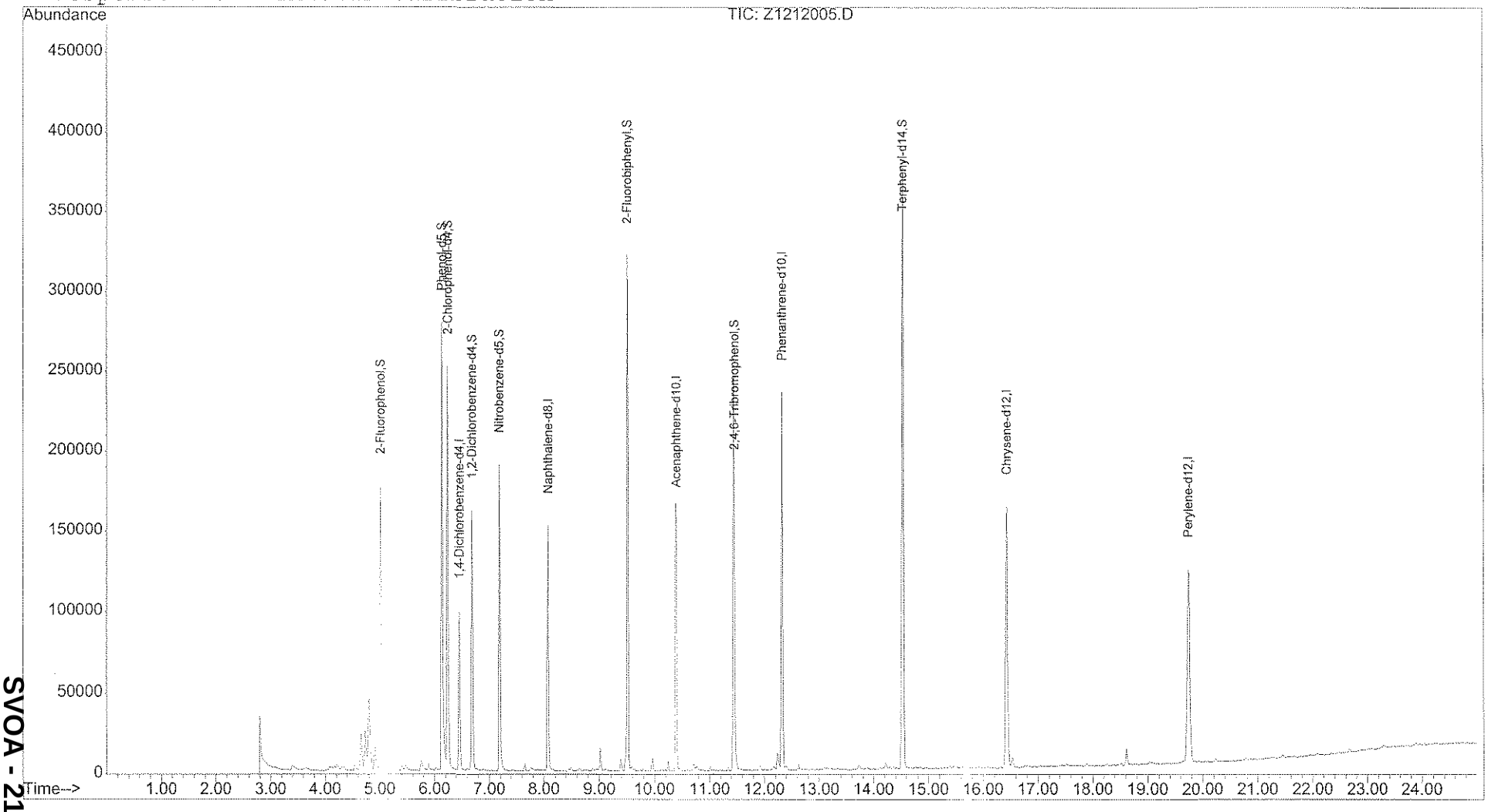
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
123-91-1	1,4-Dioxane	1.6	U

Comments:

Quantitation Report

Data File : X:\MSABN\ZOOEY\121206\Z1212005.D Vial: 3
Acq On : 12 Dec 2006 15:03 Operator: AP
Sample : JPL26-004 MW-3-2 Inst : Zooey
Misc : 5970Z 960ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 13 8:40 2006 Quant Results File: Z8270M.RES

Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Mon Dec 18 09:00:44 2006
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\ZOOEY\121206\Z1212005.D Vial: 3
Acq On : 12 Dec 2006 15:03 Operator: AP
Sample : JPL26-004 MW-3-2 Inst : Zooey
Misc : 5970Z 960ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 13 8:40 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Wed Dec 13 08:36:15 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	6.45	152	25096	20.00 ng/ul	0.00 NA%
24) Naphthalene-d8	8.08	136	102884	20.00 ng/ul	0.00 NA%
40) Acenaphthene-d10	10.40	164	67100	20.00 ng/ul	0.00 NA%
68) Phenanthrene-d10	12.32	188	128391	20.00 ng/ul	-0.02 NA%
82) Chrysene-d12	16.43	240	121564	20.00 ng/ul	-0.02 NA%
92) Perylene-d12	19.74	264	109877	20.00 ng/ul	-0.02 NA%

System Monitoring Compounds

5) 2-Fluorophenol	5.01	112	95741	64.69 ng/ul	-0.01
Spiked Amount 75.000	Range 20 - 110		Recovery = 86.25%		
7) Phenol-d5	6.14	99	142814	71.16 ng/ul	0.00
Spiked Amount 75.000	Range 10 - 115		Recovery = 94.88%		
11) 2-Chlorophenol-d4	6.24	132	122325	69.19 ng/ul	0.00
Spiked Amount 75.000	Range 48 - 117		Recovery = 92.25%		
15) 1,2-Dichlorobenzene-d4	6.68	152	39228	36.73 ng/ul	-0.01
Spiked Amount 50.000	Range 38 - 82		Recovery = 73.46%		
25) Nitrobenzene-d5	7.18	82	88681	47.08 ng/ul	-0.01
Spiked Amount 50.000	Range 40 - 110		Recovery = 94.16%		
46) 2-Fluorobiphenyl	9.50	172	179867	43.31 ng/ul	-0.02
Spiked Amount 50.000	Range 50 - 100		Recovery = 86.62%		
72) 2,4,6-Tribromophenol	11.46	330	52653	55.55 ng/ul	0.00
Spiked Amount 75.000	Range 40 - 125		Recovery = 74.07%		
85) Terphenyl-d14	14.54	244	243144	42.02 ng/ul	0.01
Spiked Amount 50.000	Range 50 - 135		Recovery = 84.04%		

Target Compounds				Qvalue
2) 1,4-Dioxane	3.00	88	89	N.D.
3) N-nitrosodimethylamine	3.47	74	46	N.D.
4) Pyridine	3.38	79	109	N.D.
6) Benzaldehyde	5.98	77	153	N.D.
8) Phenol	6.15	94	326	N.D.
9) Aniline	6.15	93	39	N.D.
10) Bis(2-Chloroethyl)ether	6.15	93	39	N.D.

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\ZOOEY\121206\Z1212005.D
Acq On : 12 Dec 2006 15:03
Sample : JPL26-004 MW-3-2
Misc : 5970Z 960ML->1ML+IS
MS Integration Params: RTEINT.P
Quant Time: Dec 13 8:40 2006

Vial: 3
Operator: AP
Inst : Zooey
Multiplr: 1.00
Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Wed Dec 13 08:36:15 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
12)	2-Chlorophenol	6.26	128	27	N.D.	
13)	1,3-Dichlorobenzene	6.42	146	12	N.D.	
14)	1,4-Dichlorobenzene	6.50	146	13	N.D.	
16)	Benzyl alcohol	6.68	108	310	N.D.	
17)	1,2-Dichlorobenzene	6.82	146	17	N.D.	
18)	2-Methylphenol	6.85	108	28	N.D.	
19)	Bis(2-chloroisopropyl)ethe	6.86	45	230	N.D.	
20)	3 & 4-Methylphenol	7.09	108	13	N.D.	
21)	Acetophenone	6.99	105	99	N.D.	
22)	n-Nitroso-di-n-propylamine	0.00	70	0	N.D.	
23)	Hexachloroethane	7.09	117	15	N.D.	
26)	Nitrobenzene	7.18	77	389	N.D.	
27)	Isophorone	7.61	82	86	N.D.	
28)	2-Nitrophenol	7.53	139	32	N.D.	
29)	2,4-Dimethylphenol	7.67	107	17	N.D.	
30)	bis(2-Chloroethoxy)methane	7.64	93	63	N.D.	
31)	Benzoic acid	7.94	105	335	Below Cal	90
32)	2,4-Dichlorophenol	7.94	162	12	N.D.	
33)	1,2,4-Trichlorobenzene	0.00	180	0	N.D.	
34)	Naphthalene	8.09	128	111	N.D.	
35)	4-Chloroaniline	8.26	127	40	N.D.	
36)	Hexachlorobutadiene	8.38	225	12	N.D.	
37)	Caprolactam	8.74	113	100	N.D.	
38)	4-Chloro-3-methylphenol	8.90	107	32	N.D.	
39)	2-Methylnaphthalene	9.02	142	35	N.D.	
41)	1-Methylnaphthalene	9.15	142	15	N.D.	
42)	Hexachlorocyclopentadiene	0.00	237	0	N.D.	
43)	1,2,4,5-Tetrachlorobenzene	9.31	216	12	N.D.	
44)	2,4,6-Trichlorophenol	9.43	196	14	N.D.	
45)	2,4,5-Trichlorophenol	9.50	196	16	N.D.	
47)	1,1'-Biphenyl	9.62	154	556	N.D.	
48)	2-Chloronaphthalene	9.65	162	20	N.D.	
49)	2-Nitroaniline	9.84	65	103	N.D.	
50)	Dimethylphthalate	10.15	163	103	N.D.	
51)	1,4-Dinitrobenzene	9.91	168	15	N.D.	
52)	1,3-Dinitrobenzene	0.00	168	0	N.D.	
53)	2,6-Dinitrotoluene	0.00	165	0	N.D.	
54)	Acenaphthylene	10.22	152	50	N.D.	
55)	1,2-Dinitrobenzene	10.32	168	16	N.D.	
56)	3-Nitroaniline	10.40	138	75	N.D.	
57)	Acenaphthene	0.00	153	0	N.D. d	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\ZOOEY\121206\Z1212005.D Vial: 3
Acq On : 12 Dec 2006 15:03 Operator: AP
Sample : JPL26-004 MW-3-2 Inst : Zooey
Misc : 5970Z 960ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 13 8:40 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Wed Dec 13 08:36:15 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
58)	2,4-Dinitrophenol	0.00	184	0	N.D. d	
59)	4-Nitrophenol	0.00	109	0	N.D. d	
60)	Dibenzofuran	10.67	168	37	N.D.	
61)	2,4-Dinitrotoluene	10.72	165	30	N.D.	
62)	2,3,5,6-tetrachlorophenol	10.96	232	23	N.D.	
63)	2,3,4,6-tetrachlorophenol	10.96	232	23	N.D.	
64)	Diethylphthalate	11.02	149	601	N.D.	
65)	Fluorene	11.02	166	12	N.D.	
66)	4-Chlorophenyl-phenylether	11.03	204	18	N.D.	
67)	4-Nitroaniline	11.28	138	36	N.D.	
69)	4,6-Dinitro-2-methylphenol	11.28	198	15	N.D.	
70)	N-nitrosodiphenylamine	11.44	169	1726	N.D.	
71)	1,2-Diphenylhydrazine	11.34	77	84	N.D.	
73)	4-Bromophenyl-phenylether	11.67	248	15	N.D.	
74)	Hexachlorobenzene	11.76	284	13	N.D.	
75)	Atrazine	11.91	200	20	N.D.	
76)	Pentachlorophenol	12.26	266	28	N.D.	
77)	Phenanthrene	12.22	178	14	N.D.	
78)	Anthracene	12.22	178	14	N.D.	
79)	Carbazole	12.63	167	92	N.D.	
80)	Di-n-butylphthalate	13.14	149	1166	N.D.	
81)	Fluoranthene	13.99	202	81	N.D.	
83)	Benzidine	0.00	184	0	N.D.	
84)	Pyrene	14.31	202	16	N.D.	
86)	Butylbenzylphthalate	15.33	149	50	N.D.	
87)	Bis(2-ethylhexyl)adipate	15.49	129	704	N.D.	
88)	3,3'-Dichlorobenzidine	16.52	252	13	N.D.	
89)	Benzo[a]anthracene	16.43	228	398	N.D.	
90)	bis(2-Ethylhexyl)phthalate	16.54	149	2820	N.D.	
91)	Chrysene	16.43	228	398	N.D.	
93)	Di-n-octylphthalate	17.91	149	257	N.D.	
94)	Benzo[b]fluoranthene	18.77	252	17	N.D.	
95)	Benzo[k]fluoranthene	18.94	252	19	N.D.	
96)	Benzo[a]pyrene	19.74	252	510	N.D.	
97)	Indeno[1,2,3-cd]pyrene	22.47	276	25	N.D.	
98)	Dibenz[a,h]anthracene	22.40	278	11	N.D.	
99)	Benzo[g,h,i]perylene	23.11	276	23	N.D.	

(#) = qualifier out of range (m) = manual integration

1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: Laucks Testing Laboratories,

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013387

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-006

Sample wt/vol: 1050.0 (g/mL) mL

Lab File ID: Z1212006.D

Level: (LOW/MED)

Date Collected: 12/01/2006

% Moisture: Decanted: (Y/N) N

Date Extracted: 12/07/2006

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/12/2006

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: <2

Extraction: (Type) CONT

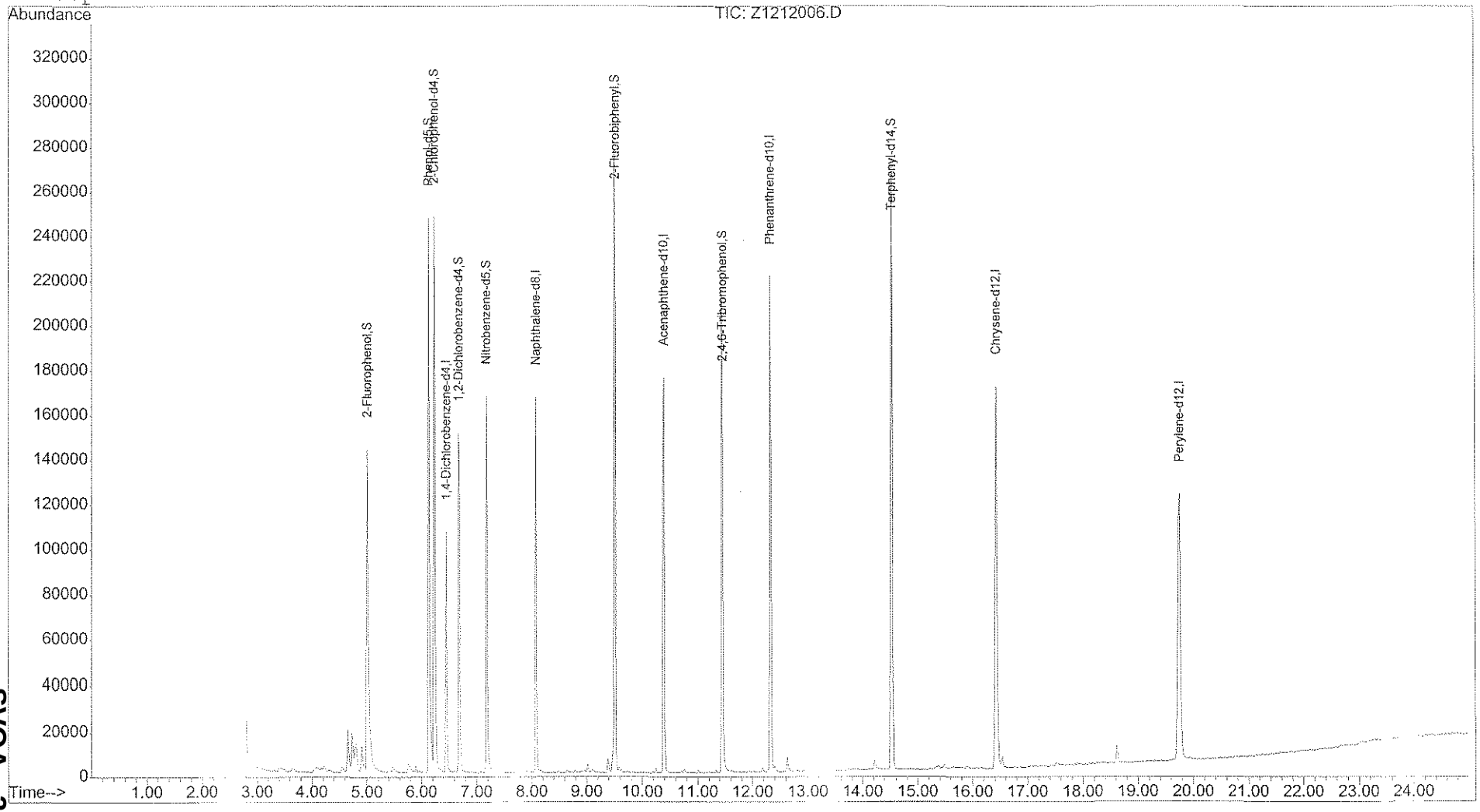
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
123-91-1	1,4-Dioxane	1.4	U

Comments:

Quantitation Report

Data File : X:\MSABN\ZOOEY\121206\Z1212006.D Vial: 4
Acq On : 12 Dec 2006 15:39 Operator: AP
Sample : JPL26-006 MW-5 Inst : Zooey
Misc : 5970Z 1050ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 13 8:41 2006 Quant Results File: Z8270M.RES

Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Mon Dec 18 09:00:44 2006
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\ZOOEY\121206\Z1212006.D Vial: 4
Acq On : 12 Dec 2006 15:39 Operator: AP
Sample : JPL26-006 MW-5 Inst : Zooey
Misc : 5970Z 1050ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 13 8:41 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Wed Dec 13 08:36:15 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	6.45	152	25483	20.00 ng/ul	0.00 NA%
24) Naphthalene-d8	8.08	136	106491	20.00 ng/ul	0.00 NA%
40) Acenaphthene-d10	10.40	164	68178	20.00 ng/ul	0.00 NA%
68) Phenanthrene-d10	12.32	188	130562	20.00 ng/ul	-0.02 NA%
82) Chrysene-d12	16.43	240	124281	20.00 ng/ul	-0.02 NA%
92) Perylene-d12	19.75	264	115285	20.00 ng/ul	0.00 NA%

System Monitoring Compounds					
5) 2-Fluorophenol	5.01	112	84084	55.95 ng/ul	-0.02
Spiked Amount 75.000	Range 20 - 110		Recovery = 74.60%		
7) Phenol-d5	6.14	99	124727	61.21 ng/ul	0.00
Spiked Amount 75.000	Range 10 - 115		Recovery = 81.61%		
11) 2-Chlorophenol-d4	6.24	132	111256	61.97 ng/ul	0.00
Spiked Amount 75.000	Range 48 - 117		Recovery = 82.63%		
15) 1,2-Dichlorobenzene-d4	6.68	152	39496	36.42 ng/ul	-0.01
Spiked Amount 50.000	Range 38 - 82		Recovery = 72.84%		
25) Nitrobenzene-d5	7.18	82	82036	42.08 ng/ul	-0.02
Spiked Amount 50.000	Range 40 - 110		Recovery = 84.16%		
46) 2-Fluorobiphenyl	9.52	172	168846	40.01 ng/ul	0.00
Spiked Amount 50.000	Range 50 - 100		Recovery = 80.02%		
72) 2,4,6-Tribromophenol	11.46	330	45868	47.59 ng/ul	0.00
Spiked Amount 75.000	Range 40 - 125		Recovery = 63.45%		
85) Terphenyl-d14	14.54	244	169456	28.64 ng/ul	0.01
Spiked Amount 50.000	Range 50 - 135		Recovery = 57.28%		

Target Compounds				Qvalue
2) 1,4-Dioxane	2.97	88	251	N.D.
3) N-nitrosodimethylamine	3.42	74	47	N.D.
4) Pyridine	3.38	79	65	N.D.
6) Benzaldehyde	5.95	77	57	N.D.
8) Phenol	6.14	94	182	N.D.
9) Aniline	6.12	93	26	N.D.
10) Bis(2-Chloroethyl)ether	6.24	93	211	N.D.

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\ZOOEY\121206\Z1212006.D Vial: 4
Acq On : 12 Dec 2006 15:39 Operator: AP
Sample : JPL26-006 MW-5 Inst : Zooey
Misc : 5970Z 1050ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 13 8:41 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Wed Dec 13 08:36:15 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
12)	2-Chlorophenol	6.30	128	18	N.D.	
13)	1,3-Dichlorobenzene	6.38	146	14	N.D.	
14)	1,4-Dichlorobenzene	6.38	146	14	N.D.	
16)	Benzyl alcohol	6.68	108	332	N.D.	
17)	1,2-Dichlorobenzene	6.88	146	20	N.D.	
18)	2-Methylphenol	6.82	108	27	N.D.	
19)	Bis(2-chloroisopropyl)ethe	6.77	45	352	N.D.	
20)	3 & 4-Methylphenol	7.00	108	11	N.D.	
21)	Acetophenone	6.99	105	51	N.D.	
22)	n-Nitroso-di-n-propylamine	0.00	70	0	N.D.	
23)	Hexachloroethane	7.20	117	40	N.D.	
26)	Nitrobenzene	7.18	77	293	N.D.	
27)	Isophorone	0.00	82	0	N.D.	
28)	2-Nitrophenol	7.58	139	27	N.D.	
29)	2,4-Dimethylphenol	7.71	107	36	N.D.	
30)	bis(2-Chloroethoxy)methane	7.76	93	44	N.D.	
31)	Benzoic acid	7.89	105	44	Below Cal #	63
32)	2,4-Dichlorophenol	7.97	162	13	N.D.	
33)	1,2,4-Trichlorobenzene	8.15	180	15	N.D.	
34)	Naphthalene	7.97	128	25	N.D.	
35)	4-Chloroaniline	8.17	127	14	N.D.	
36)	Hexachlorobutadiene	8.26	225	15	N.D.	
37)	Caprolactam	8.73	113	53	N.D.	
38)	4-Chloro-3-methylphenol	8.97	107	14	N.D.	
39)	2-Methylnaphthalene	9.02	142	73	N.D.	
41)	1-Methylnaphthalene	9.12	142	13	N.D.	
42)	Hexachlorocyclopentadiene	0.00	237	0	N.D. d	
43)	1,2,4,5-Tetrachlorobenzene	9.27	216	18	N.D.	
44)	2,4,6-Trichlorophenol	9.35	196	27	N.D.	
45)	2,4,5-Trichlorophenol	9.52	196	38	N.D.	
47)	1,1'-Biphenyl	9.62	154	653	N.D.	
48)	2-Chloronaphthalene	0.00	162	0	N.D.	
49)	2-Nitroaniline	9.84	65	45	N.D.	
50)	Dimethylphthalate	10.14	163	32	N.D.	
51)	1,4-Dinitrobenzene	10.00	168	27	N.D.	
52)	1,3-Dinitrobenzene	10.00	168	27	N.D.	
53)	2,6-Dinitrotoluene	0.00	165	0	N.D.	
54)	Acenaphthylene	10.25	152	38	N.D.	
55)	1,2-Dinitrobenzene	10.31	168	29	N.D.	
56)	3-Nitroaniline	10.40	138	13	N.D.	
57)	Acenaphthene	10.46	153	15	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\ZOOEY\121206\Z1212006.D
Acq On : 12 Dec 2006 15:39
Sample : JPL26-006 MW-5
Misc : 5970Z 1050ML->1ML+IS
MS Integration Params: RTEINT.P
Quant Time: Dec 13 8:41 2006

Vial: 4
Operator: AP
Inst : Zooey
Multiplr: 1.00
Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Wed Dec 13 08:36:15 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
58)	2,4-Dinitrophenol	0.00	184	0	N.D. d	
59)	4-Nitrophenol	0.00	109	0	N.D. d	
60)	Dibenzofuran	10.62	168	11	N.D.	
61)	2,4-Dinitrotoluene	10.76	165	78	N.D.	
62)	2,3,5,6-tetrachlorophenol	10.70	232	19	N.D.	
63)	2,3,4,6-tetrachlorophenol	11.00	232	14	N.D.	
64)	Diethylphthalate	11.02	149	368	N.D.	
65)	Fluorene	11.15	166	15	N.D.	
66)	4-Chlorophenyl-phenylether	0.00	204	0	N.D.	
67)	4-Nitroaniline	11.22	138	22	N.D.	
69)	4,6-Dinitro-2-methylphenol	11.28	198	13	N.D.	
70)	N-nitrosodiphenylamine	11.44	169	1507	N.D.	
71)	1,2-Diphenylhydrazine	11.31	77	186	N.D.	
73)	4-Bromophenyl-phenylether	0.00	248	0	N.D.	
74)	Hexachlorobenzene	0.00	284	0	N.D.	
75)	Atrazine	12.05	200	12	N.D.	
76)	Pentachlorophenol	12.03	266	14	N.D.	
77)	Phenanthrene	12.32	178	127	N.D.	
78)	Anthracene	12.53	178	28	N.D.	
79)	Carbazole	12.63	167	137	N.D.	
80)	Di-n-butylphthalate	13.14	149	910	N.D.	
81)	Fluoranthene	14.05	202	17	N.D.	
83)	Benzidine	0.00	184	0	N.D. d	
84)	Pyrene	14.32	202	64	N.D.	
86)	Butylbenzylphthalate	15.37	149	273	N.D.	
87)	Bis(2-ethylhexyl)adipate	15.49	129	564	N.D.	
88)	3,3'-Dichlorobenzidine	16.25	252	11	N.D.	
89)	Benzo[a]anthracene	16.43	228	381	N.D.	
90)	bis(2-Ethylhexyl)phthalate	16.54	149	2016	N.D.	
91)	Chrysene	16.43	228	381	N.D.	
93)	Di-n-octylphthalate	17.92	149	1108	N.D.	
94)	Benzo[b]fluoranthene	18.84	252	26	N.D.	
95)	Benzo[k]fluoranthene	18.84	252	26	N.D.	
96)	Benzo[a]pyrene	19.75	252	486	N.D.	
97)	Indeno[1,2,3-cd]pyrene	0.00	276	0	N.D.	
98)	Dibenz[a,h]anthracene	0.00	278	0	N.D.	
99)	Benzo[g,h,i]perylene	23.15	276	15	N.D.	

(#) = qualifier out of range (m) = manual integration

1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-10

Lab Name: Laucks Testing Laboratories,

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013532

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-020

Sample wt/vol: 1040.0 (g/mL) mL

Lab File ID: Z1218005.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: Decanted: (Y/N) N

Date Extracted: 12/14/2006

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/18/2006

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ≤2

Extraction: (Type) CONT

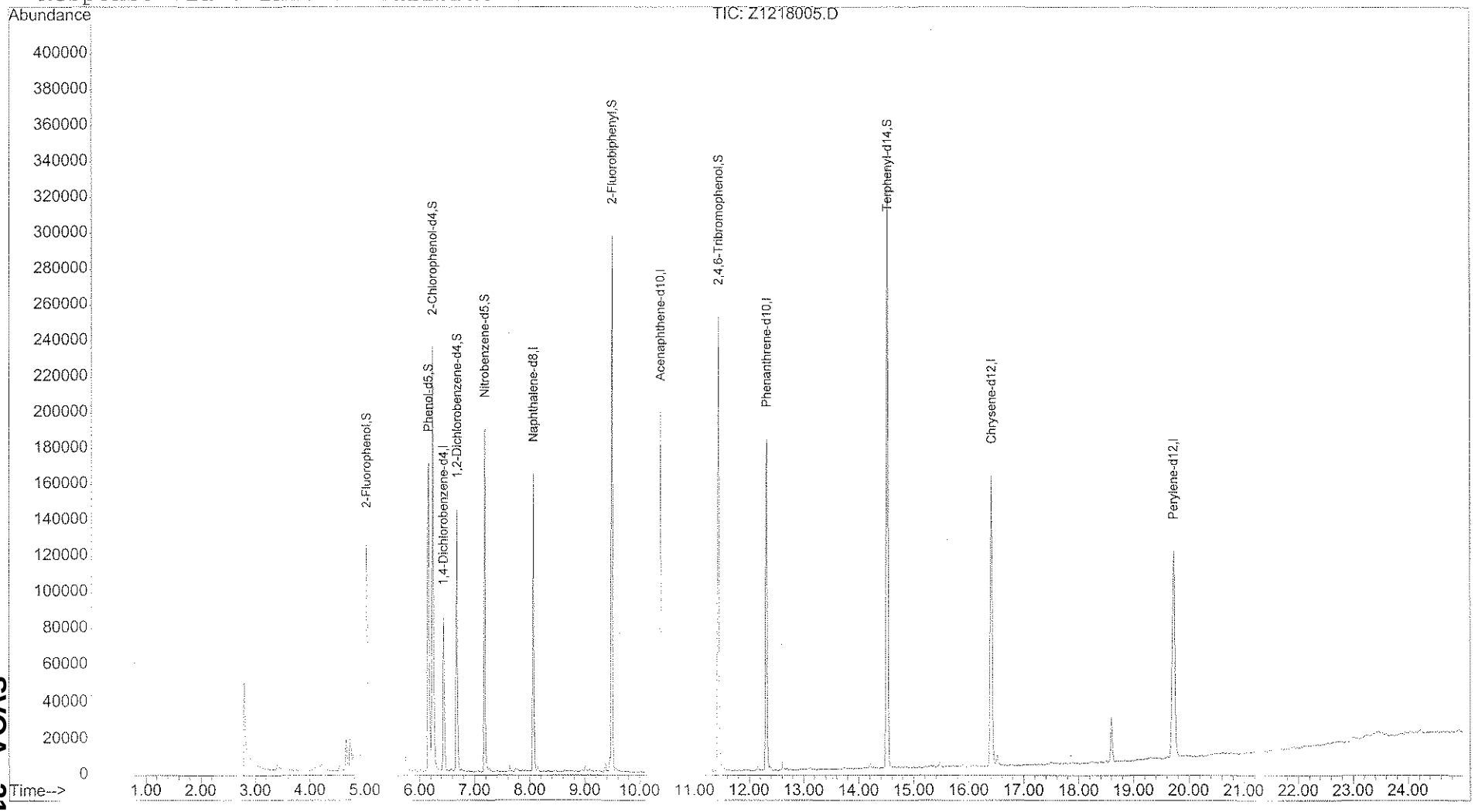
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
123-91-1	1,4-Dioxane	1.4	U

Comments:

Quantitation Report

Data File : X:\MSABN\ZOOEY\121806\Z1218005.D Vial: 3
Acq On : 18 Dec 2006 12:33 Operator: AP
Sample : JPL26-020 MW-10 Inst : Zooey
Misc : 5970Z 1040ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 19 9:34 2006 Quant Results File: Z8270M.RES

Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Tue Dec 19 08:51:53 2006
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\ZOOEY\121806\Z1218005.D Vial: 3
Acq On : 18 Dec 2006 12:33 Operator: AP
Sample : JPL26-020 MW-10 Inst : Zooey
Misc : 5970Z 1040ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 19 9:34 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Tue Dec 19 08:51:53 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	6.44	152	22182	20.00	ng/ul	-0.01 NA%
24) Naphthalene-d8	8.06	136	93066	20.00	ng/ul	-0.02 NA%
40) Acenaphthene-d10	10.38	164	61695	20.00	ng/ul	-0.02 NA%
68) Phenanthrene-d10	12.32	188	126113	20.00	ng/ul	0.00 NA%
82) Chrysene-d12	16.42	240	120632	20.00	ng/ul	-0.02 NA%
92) Perylene-d12	19.73	264	110497	20.00	ng/ul	-0.02 NA%

System Monitoring Compounds

5) 2-Fluorophenol	5.03	112	75526	57.73	ng/ul	-0.01
Spiked Amount 75.000	Range 20 - 110		Recovery = 76.97%			
7) Phenol-d5	6.17	99	113848	64.18	ng/ul	0.00
Spiked Amount 75.000	Range 10 - 115		Recovery = 85.57%			
11) 2-Chlorophenol-d4	6.24	132	96708	61.88	ng/ul	-0.01
Spiked Amount 75.000	Range 48 - 117		Recovery = 82.51%			
15) 1,2-Dichlorobenzene-d4	6.68	152	29929	31.70	ng/ul	0.00
Spiked Amount 50.000	Range 38 - 82		Recovery = 63.40%			
25) Nitrobenzene-d5	7.18	82	73705	43.26	ng/ul	0.00
Spiked Amount 50.000	Range 40 - 110		Recovery = 86.52%			
46) 2-Fluorobiphenyl	9.50	172	144170	37.75	ng/ul	0.00
Spiked Amount 50.000	Range 50 - 100		Recovery = 75.50%			
72) 2,4,6-Tribromophenol	11.44	330	48527	52.12	ng/ul	-0.02
Spiked Amount 75.000	Range 40 - 125		Recovery = 69.49%			
85) Terphenyl-d14	14.52	244	218190	37.99	ng/ul	0.00
Spiked Amount 50.000	Range 50 - 135		Recovery = 75.98%			

Target Compounds					Qvalue
2) 1,4-Dioxane	0.00	88	0	N.D.	d
3) N-nitrosodimethylamine	3.42	74	42	N.D.	
4) Pyridine	3.44	79	49	N.D.	
6) Benzaldehyde	5.94	77	130	N.D.	
8) Phenol	6.17	94	153	N.D.	
9) Aniline	6.12	93	21	N.D.	
10) Bis(2-Chloroethyl)ether	6.17	93	28	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\ZOOEY\121806\Z1218005.D Vial: 3
Acq On : 18 Dec 2006 12:33 Operator: AP
Sample : JPL26-020 MW-10 Inst : Zooey
Misc : 5970Z 1040ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 19 9:34 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Tue Dec 19 08:51:53 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
12)	2-Chlorophenol	6.41	128	31	N.D.	
13)	1,3-Dichlorobenzene	6.38	146	35	N.D.	
14)	1,4-Dichlorobenzene	6.47	146	27	N.D.	
16)	Benzyl alcohol	6.68	108	238	N.D.	
17)	1,2-Dichlorobenzene	6.70	146	50	N.D.	
18)	2-Methylphenol	6.83	108	13	N.D.	
19)	Bis(2-chloroisopropyl)ethe	6.76	45	1143	N.D.	
20)	3 & 4-Methylphenol	7.15	108	35	N.D.	
21)	Acetophenone	7.00	105	23	N.D.	
22)	n-Nitroso-di-n-propylamine	0.00	70	0	N.D.	
23)	Hexachloroethane	6.99	117	14	N.D.	
26)	Nitrobenzene	7.00	77	17	N.D.	
27)	Isophorone	7.58	82	71	N.D.	
28)	2-Nitrophenol	7.53	139	17	N.D.	
29)	2,4-Dimethylphenol	7.74	107	55	N.D.	
30)	bis(2-Chloroethoxy)methane	7.80	93	53	N.D.	
31)	Benzoic acid	7.97	105	441	Below Cal #	64
32)	2,4-Dichlorophenol	7.97	162	11	N.D.	
33)	1,2,4-Trichlorobenzene	8.02	180	37	N.D.	
34)	Naphthalene	7.94	128	19	N.D.	
35)	4-Chloroaniline	8.20	127	12	N.D.	
36)	Hexachlorobutadiene	8.26	225	15	N.D.	
37)	Caprolactam	8.77	113	25	N.D.	
38)	4-Chloro-3-methylphenol	8.90	107	18	N.D.	
39)	2-Methylnaphthalene	9.00	142	126	N.D.	
41)	1-Methylnaphthalene	9.12	142	25	N.D.	
42)	Hexachlorocyclopentadiene	0.00	237	0	N.D. d	
43)	1,2,4,5-Tetrachlorobenzene	9.26	216	15	N.D.	
44)	2,4,6-Trichlorophenol	9.34	196	16	N.D.	
45)	2,4,5-Trichlorophenol	0.00	196	0	N.D.	
47)	1,1'-Biphenyl	9.61	154	510	N.D.	
48)	2-Chloronaphthalene	9.64	162	13	N.D.	
49)	2-Nitroaniline	9.87	65	53	N.D.	
50)	Dimethylphthalate	10.09	163	18	N.D.	
51)	1,4-Dinitrobenzene	0.00	168	0	N.D.	
52)	1,3-Dinitrobenzene	10.14	168	15	N.D.	
53)	2,6-Dinitrotoluene	0.00	165	0	N.D.	
54)	Acenaphthylene	10.21	152	16	N.D.	
55)	1,2-Dinitrobenzene	10.18	168	15	N.D.	
56)	3-Nitroaniline	10.35	138	15	N.D.	
57)	Acenaphthene	10.44	153	16	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\ZOOEY\121806\Z1218005.D Vial: 3
Acq On : 18 Dec 2006 12:33 Operator: AP
Sample : JPL26-020 MW-10 Inst : Zooey
Misc : 5970Z 1040ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 19 9:34 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Tue Dec 19 08:51:53 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
58)	2,4-Dinitrophenol	0.00	184	0	N.D. d	
59)	4-Nitrophenol	0.00	109	0	N.D. d	
60)	Dibenzofuran	10.65	168	17	N.D.	
61)	2,4-Dinitrotoluene	10.75	165	62	N.D.	
62)	2,3,5,6-tetrachlorophenol	0.00	232	0	N.D.	
63)	2,3,4,6-tetrachlorophenol	0.00	232	0	N.D.	
64)	Diethylphthalate	11.00	149	1380	N.D.	
65)	Fluorene	10.97	166	19	N.D.	
66)	4-Chlorophenyl-phenylether	11.17	204	15	N.D.	
67)	4-Nitroaniline	11.20	138	18	N.D.	
69)	4,6-Dinitro-2-methylphenol	11.23	198	32	N.D.	
70)	N-nitrosodiphenylamine	11.14	169	28	N.D.	
71)	1,2-Diphenylhydrazine	11.25	77	106	N.D.	
73)	4-Bromophenyl-phenylether	11.79	248	18	N.D.	
74)	Hexachlorobenzene	12.09	284	15	N.D.	
75)	Atrazine	12.00	200	54	N.D.	
76)	Pentachlorophenol	12.40	266	10	N.D.	
77)	Phenanthrene	12.40	178	15	N.D.	
78)	Anthracene	12.40	178	15	N.D.	
79)	Carbazole	12.61	167	98	N.D.	
80)	Di-n-butylphthalate	13.13	149	880	N.D.	
81)	Fluoranthene	13.95	202	74	N.D.	
83)	Benzidine	0.00	184	0	N.D. d	
84)	Pyrene	14.34	202	15	N.D.	
86)	Butylbenzylphthalate	15.36	149	192	N.D.	
87)	Bis(2-ethylhexyl)adipate	15.48	129	1000	N.D.	
88)	3,3'-Dichlorobenzidine	16.31	252	14	N.D.	
89)	Benzo[a]anthracene	16.42	228	387	N.D.	
90)	bis(2-Ethylhexyl)phthalate	16.52	149	2735	N.D.	
91)	Chrysene	16.49	228	13	N.D.	
93)	Di-n-octylphthalate	17.84	149	108	N.D.	
94)	Benzo[b]fluoranthene	18.82	252	15	N.D.	
95)	Benzo[k]fluoranthene	18.91	252	60	N.D.	
96)	Benzo[a]pyrene	19.57	252	36	N.D.	
97)	Indeno[1,2,3-cd]pyrene	22.44	276	54	N.D.	
98)	Dibenz[a,h]anthracene	22.43	278	36	N.D.	
99)	Benzo[g,h,i]perylene	23.04	276	44	N.D.	

(#) = qualifier out of range (m) = manual integration

1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-8-4Q06

Lab Name: Laucks Testing Laboratories,

Contract: JPL Groundwater Monitorin

SDG No.: JPL26

Run Sequence: R013532

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-021

Sample wt/vol: 1020.0 (g/mL) mL

Lab File ID: Z1218008.D

Level: (LOW/MED)

Date Collected: 12/07/2006

% Moisture: Decanted: (Y/N) N

Date Extracted: 12/14/2006

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 12/18/2006

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: <2

Extraction: (Type) CONT

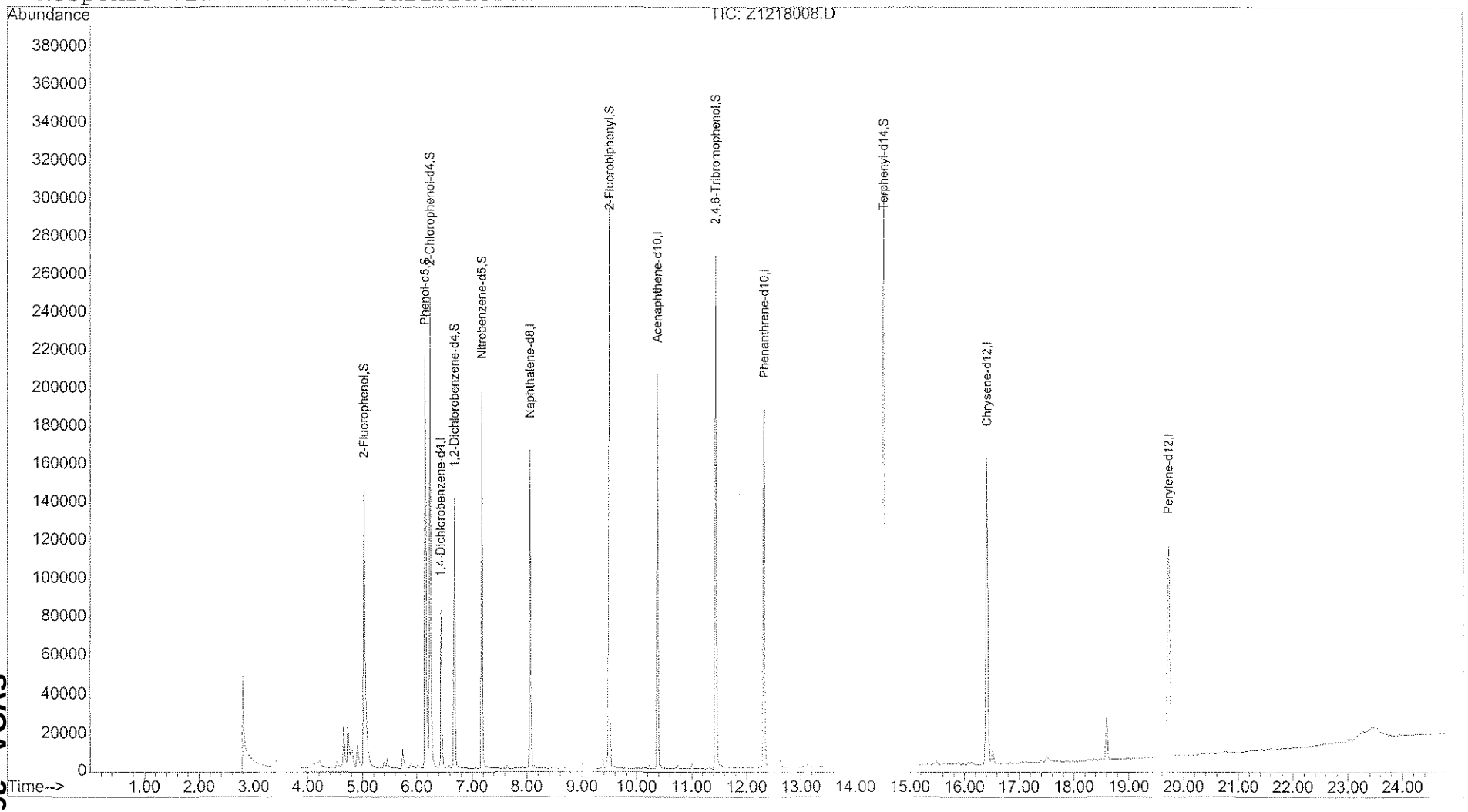
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
123-91-1	1,4-Dioxane	1.5	U

Comments:

Quantitation Report

Data File : X:\MSABN\ZOOEY\121806\Z1218008.D Vial: 6
Acq On : 18 Dec 2006 14:18 Operator: AP
Sample : JPL26-021 DUPE-8-4Q06 Inst : Zooey
Misc : 5970Z 1020ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 19 9:35 2006 Quant Results File: Z8270M.RES

Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Tue Dec 19 08:51:53 2006
Response via : Initial Calibration



Quantitation Report

Data File : X:\MSABN\ZOOEY\121806\Z1218008.D Vial: 6
Acq On : 18 Dec 2006 14:18 Operator: AP
Sample : JPL26-021 DUPE-8-4Q06 Inst : Zooey
Misc : 5970Z 1020ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 19 9:35 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Tue Dec 19 08:51:53 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M
IS QA File : 50 level for IS QA unknown. No recoveries calculated.

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min) Rcv(Ar)
1) 1,4-Dichlorobenzene-d4	6.44	152	22438	20.00	ng/ul	-0.01 NA%
24) Naphthalene-d8	8.06	136	96264	20.00	ng/ul	-0.02 NA%
40) Acenaphthene-d10	10.38	164	62550	20.00	ng/ul	-0.02 NA%
68) Phenanthrene-d10	12.32	188	124911	20.00	ng/ul	0.00 NA%
82) Chrysene-d12	16.42	240	117210	20.00	ng/ul	-0.02 NA%
92) Perylene-d12	19.73	264	104191	20.00	ng/ul	-0.02 NA%

System Monitoring Compounds

5) 2-Fluorophenol	5.03	112	80384	60.74	ng/ul	-0.01
Spiked Amount 75.000	Range 20 - 110		Recovery = 80.99%			
7) Phenol-d5	6.15	99	120526	67.17	ng/ul	-0.01
Spiked Amount 75.000	Range 10 - 115		Recovery = 89.56%			
11) 2-Chlorophenol-d4	6.24	132	99398	62.88	ng/ul	-0.01
Spiked Amount 75.000	Range 48 - 117		Recovery = 83.84%			
15) 1,2-Dichlorobenzene-d4	6.68	152	28962	30.33	ng/ul	0.00
Spiked Amount 50.000	Range 38 - 82		Recovery = 60.66%			
25) Nitrobenzene-d5	7.18	82	76333	43.31	ng/ul	0.00
Spiked Amount 50.000	Range 40 - 110		Recovery = 86.62%			
46) 2-Fluorobiphenyl	9.50	172	143943	37.18	ng/ul	0.00
Spiked Amount 50.000	Range 50 - 100		Recovery = 74.36%			
72) 2,4,6-Tribromophenol	11.44	330	50692	54.97	ng/ul	-0.02
Spiked Amount 75.000	Range 40 - 125		Recovery = 73.29%			
85) Terphenyl-d14	14.52	244	196726	35.26	ng/ul	0.00
Spiked Amount 50.000	Range 50 - 135		Recovery = 70.52%			

Target Compounds

					Qvalue
2) 1,4-Dioxane	0.00	88	0	N.D.	d
3) N-nitrosodimethylamine	3.45	74	24	N.D.	
4) Pyridine	3.41	79	127	N.D.	
6) Benzaldehyde	5.94	77	80	N.D.	
8) Phenol	6.17	94	123	N.D.	
9) Aniline	6.08	93	76	N.D.	
10) Bis(2-Chloroethyl)ether	6.15	93	42	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\ZOOEY\121806\Z1218008.D Vial: 6
Acq On : 18 Dec 2006 14:18 Operator: AP
Sample : JPL26-021 DUPE-8-4Q06 Inst : Zooey
Misc : 5970Z 1020ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 19 9:35 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Tue Dec 19 08:51:53 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
12)	2-Chlorophenol	6.26	128	76	N.D.	
13)	1,3-Dichlorobenzene	6.45	146	62	N.D.	
14)	1,4-Dichlorobenzene	6.45	146	62	N.D.	
16)	Benzyl alcohol	6.68	108	295	N.D.	
17)	1,2-Dichlorobenzene	6.70	146	56	N.D.	
18)	2-Methylphenol	6.80	108	18	N.D.	
19)	Bis(2-chloroisopropyl)ethe	6.76	45	1109	N.D.	
20)	3 & 4-Methylphenol	7.14	108	18	N.D.	
21)	Acetophenone	6.99	105	71	N.D.	
22)	n-Nitroso-di-n-propylamine	0.00	70	0	N.D.	
23)	Hexachloroethane	7.03	117	50	N.D.	
26)	Nitrobenzene	7.18	77	501	N.D.	
27)	Isophorone	7.59	82	63	N.D.	
28)	2-Nitrophenol	7.59	139	12	N.D.	
29)	2,4-Dimethylphenol	7.74	107	14	N.D.	
30)	bis(2-Chloroethoxy)methane	7.74	93	51	N.D.	
31)	Benzoic acid	7.94	105	293	Below Cal #	86
32)	2,4-Dichlorophenol	7.85	162	35	N.D.	
33)	1,2,4-Trichlorobenzene	8.03	180	29	N.D.	
34)	Naphthalene	8.09	128	200	N.D.	
35)	4-Chloroaniline	0.00	127	0	N.D.	
36)	Hexachlorobutadiene	8.38	225	12	N.D.	
37)	Caprolactam	8.68	113	19	N.D.	
38)	4-Chloro-3-methylphenol	8.87	107	39	N.D.	
39)	2-Methylnaphthalene	9.00	142	79	N.D.	
41)	1-Methylnaphthalene	9.14	142	77	N.D.	
42)	Hexachlorocyclopentadiene	0.00	237	0	N.D.	
43)	1,2,4,5-Tetrachlorobenzene	0.00	216	0	N.D.	
44)	2,4,6-Trichlorophenol	9.40	196	36	N.D.	
45)	2,4,5-Trichlorophenol	9.40	196	36	N.D.	
47)	1,1'-Biphenyl	9.61	154	553	N.D.	
48)	2-Chloronaphthalene	9.67	162	14	N.D.	
49)	2-Nitroaniline	9.85	65	24	N.D.	
50)	Dimethylphthalate	10.08	163	36	N.D.	
51)	1,4-Dinitrobenzene	9.97	168	17	N.D.	
52)	1,3-Dinitrobenzene	10.14	168	14	N.D.	
53)	2,6-Dinitrotoluene	0.00	165	0	N.D.	
54)	Acenaphthylene	10.24	152	56	N.D.	
55)	1,2-Dinitrobenzene	10.29	168	23	N.D.	
56)	3-Nitroaniline	10.40	138	19	N.D.	
57)	Acenaphthene	10.43	153	11	N.D.	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : X:\MSABN\ZOOEY\121806\Z1218008.D Vial: 6
Acq On : 18 Dec 2006 14:18 Operator: AP
Sample : JPL26-021 DUPE-8-4Q06 Inst : Zooey
Misc : 5970Z 1020ML->1ML+IS Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Dec 19 9:35 2006 Quant Results File: Z8270M.RES

Quant Method : X:\MSABN\ZOOEY\QUANT\Z8270M.M (RTE Integrator)
Title : 8270 SW846 BNA Calibration 5970Z
Last Update : Tue Dec 19 08:51:53 2006
Response via : Initial Calibration
DataAcq Meth : METHOD.M

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
58)	2,4-Dinitrophenol	0.00	184	0	N.D. d	
59)	4-Nitrophenol	0.00	109	0	N.D. d	
60)	Dibenzofuran	10.64	168	15	N.D.	
61)	2,4-Dinitrotoluene	10.65	165	20	N.D.	
62)	2,3,5,6-tetrachlorophenol	10.73	232	14	N.D.	
63)	2,3,4,6-tetrachlorophenol	0.00	232	0	N.D.	
64)	Diethylphthalate	11.00	149	1332	N.D.	
65)	Fluorene	11.17	166	15	N.D.	
66)	4-Chlorophenyl-phenylether	0.00	204	0	N.D.	
67)	4-Nitroaniline	11.05	138	25	N.D.	
69)	4,6-Dinitro-2-methylphenol	11.37	198	11	N.D.	
70)	N-nitrosodiphenylamine	0.00	169	0	N.D.	
71)	1,2-Diphenylhydrazine	11.34	77	323	N.D.	
73)	4-Bromophenyl-phenylether	11.66	248	29	N.D.	
74)	Hexachlorobenzene	11.99	284	11	N.D.	
75)	Atrazine	11.99	200	14	N.D.	
76)	Pentachlorophenol	12.17	266	13	N.D.	
77)	Phenanthrene	12.43	178	49	N.D.	
78)	Anthracene	12.43	178	49	N.D.	
79)	Carbazole	12.61	167	119	N.D.	
80)	Di-n-butylphthalate	13.13	149	862	N.D.	
81)	Fluoranthene	14.02	202	13	N.D.	
83)	Benzidine	0.00	184	0	N.D. d	
84)	Pyrene	14.29	202	53	N.D.	
86)	Butylbenzylphthalate	15.36	149	341	N.D.	
87)	Bis(2-ethylhexyl)adipate	15.48	129	701	N.D.	
88)	3,3'-Dichlorobenzidine	0.00	252	0	N.D.	
89)	Benzo[a]anthracene	16.42	228	369	N.D.	
90)	bis(2-Ethylhexyl)phthalate	16.52	149	2974	N.D.	
91)	Chrysene	16.42	228	369	N.D.	
93)	Di-n-octylphthalate	17.90	149	879	N.D.	
94)	Benzo[b]fluoranthene	18.81	252	32	N.D.	
95)	Benzo[k]fluoranthene	18.88	252	62	N.D.	
96)	Benzo[a]pyrene	19.59	252	17	N.D.	
97)	Indeno[1,2,3-cd]pyrene	22.44	276	18	N.D.	
98)	Dibenz[a,h]anthracene	22.37	278	11	N.D.	
99)	Benzo[g,h,i]perylene	23.02	276	15	N.D.	

(#) = qualifier out of range (m) = manual integration

Sample Results

JPL26

Ordnance by Method 8330

1
ORDNANCE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-5

Lab Name: Laucks Testing Laboratories,

Contract: JPL Groundwater Monitor

SDG No.: JPL26

Run Sequence: R013534

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-006

Sample wt/vol: 1030.0 (g/mL) mL

Lab File ID: OC080613.D

% Moisture: _____ Decanted: (Y/N) N

Date Collected: 12/01/2006

Extraction: (Type) SPE

Date Extracted: 12/07/2006

Concentrated Extract Volume: 5000.0 (uL)

Date Analyzed: 12/08/2006

Injection Volume: 50.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 0

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
2691-41-0	HMX	0.49	U
121-82-4	RDX	0.49	U
99-35-4	1,3,5-Trinitrobenzene	0.49	U
99-65-0	1,3-Dinitrobenzene	0.49	U
98-95-3	Nitrobenzene	0.49	U
479-45-8	Tetryl	0.49	U
118-96-7	2,4,6-Trinitrotoluene	0.49	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.49	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.49	U
606-20-2	2,6-Dinitrotoluene	0.49	U
121-14-2	2,4-Dinitrotoluene	0.49	U
88-72-2	2-Nitrotoluene	0.49	U
99-99-0	4-Nitrotoluene	0.49	U
99-08-1	3-Nitrotoluene	0.49	U

Comments:

Data File: \\ceres\labdata\hplc\oscar\Oscar.i\OC0806.b\OC080613.D

Date : 08-DEC-2006 18:26

Client ID: MW-5

Instrument: Oscar.i

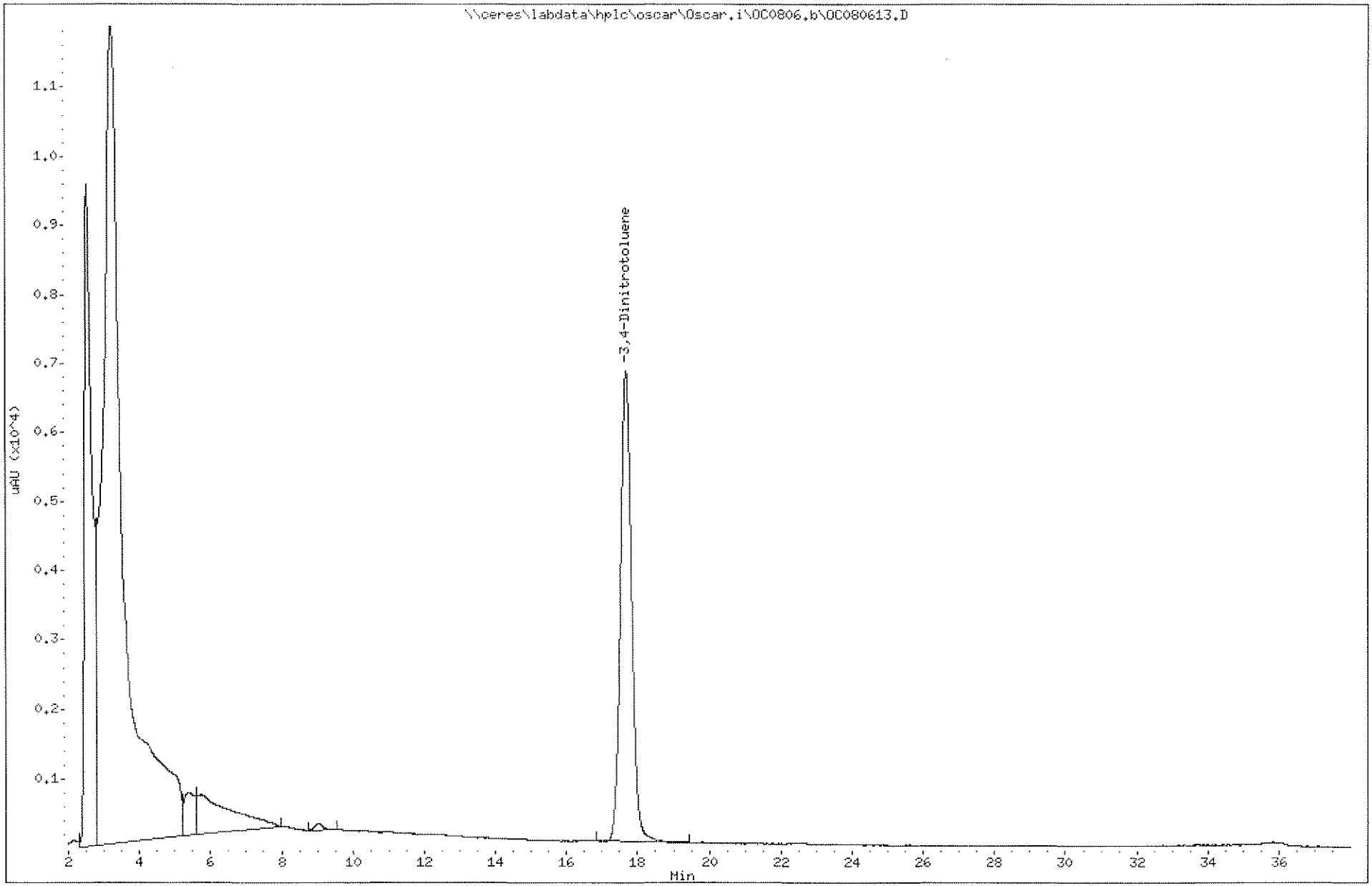
Sample Info: JPL26-006 METHOD 8330

Volume Injected (uL): 50.0

Operator: MY

Column phase: C18

Column diameter: 4.60



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Laucks Testing Labs
Quantitation Report

Data File : //ceres/labdata/hplc/oscar/Oscar.i/OC0806.b/OC080613.D
Injection Date : 08-DEC-2006 18:26
Sample Info : JPL26-006 METHOD 8330
Misc. Info : Method 8330
Laboratory ID : JPL26-006
Instrument ID : Oscar.i
Method : 8330DEC01.m
Quantitation : ESTD
Dilution Factor : 2.00
Column : C18

Client ID : MW-5
Operator : MY
Sublist : 8330
Integrator : HP Genie
Sample Type: SAMPLE
Column Size: 0.25m L- 4.60mm ID

UnitFactor : 1.000
FinalVolume : 5000 ul
SampleVolume: 1030 ml
InjectionVol: 50.00 ul

Compound	RT	RT Window	Response	Concentrations Soln ng/mL	Concentrations Final ug/L
	2.17		103		
	2.54		9554		
	3.21		11783		
	5.38		618		
	5.74		571		
	9.02		92		
3,4-Dinitrotoluene	17.68	17.37 - 17.87	6791	990.51	9.62

Response is in height units.
M - The peak was manually integrated.
E - The quantitated amount exceeds the calibration range.

1

ORDNANCE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

MW-10

Lab Name: Laucks Testing Laboratories,

Contract: JPL Groundwater Monitor

SDG No.: JPL26

Run Sequence: R013534

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-020

Sample wt/vol: 1030.0 (g/mL) mL

Lab File ID: OC150605.D

% Moisture: _____ Decanted: (Y/N) N

Date Collected: 12/07/2006

Extraction: (Type) SPE

Date Extracted: 12/14/2006

Concentrated Extract Volume: 5000.0 (uL)

Date Analyzed: 12/15/2006

Injection Volume: 50.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 0

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
2691-41-0	HMX	0.49	U
121-82-4	RDX	0.49	U
99-35-4	1,3,5-Trinitrobenzene	0.49	U
99-65-0	1,3-Dinitrobenzene	0.49	U
98-95-3	Nitrobenzene	0.49	U
479-45-8	Tetryl	0.49	U
118-96-7	2,4,6-Trinitrotoluene	0.49	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.49	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.49	U
606-20-2	2,6-Dinitrotoluene	0.49	U
121-14-2	2,4-Dinitrotoluene	0.49	U
88-72-2	2-Nitrotoluene	0.49	U
99-99-0	4-Nitrotoluene	0.49	U
99-08-1	3-Nitrotoluene	0.49	U

Comments:

Data File: \\ceres\labdata\hplc\oscar\Oscar.i\OC1506.b\OC150605.D

Date : 15-DEC-2006 16:22

Client ID: MW-10

Instrument: Oscar.i

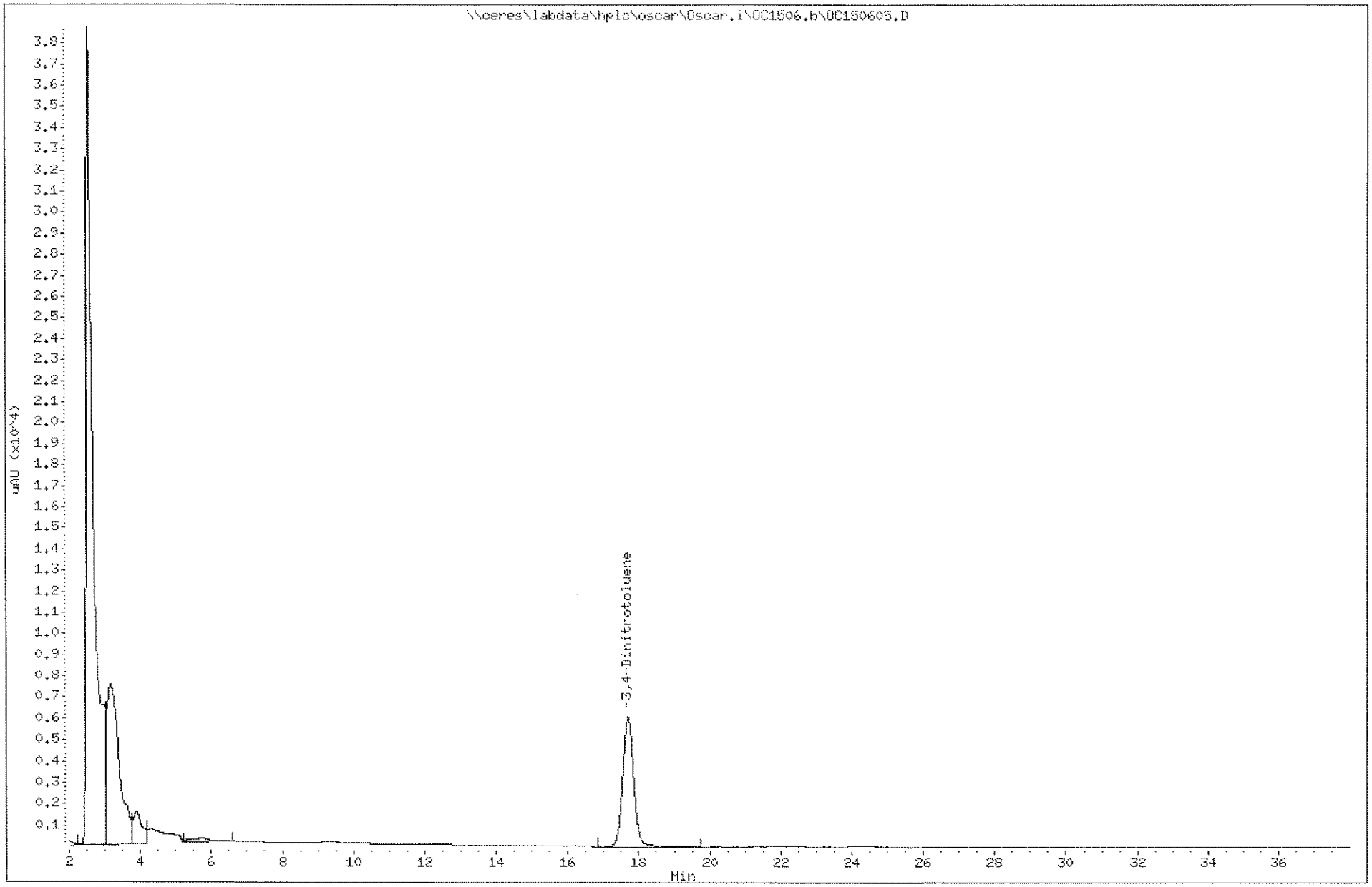
Sample Info: JPL26-020 METHOD 8330

Volume Injected (uL): 50.0

Operator: MY

Column phase: C18

Column diameter: 4.60



ORD - 14

Laucks Testing Labs
Quantitation Report

Data File : //ceres/labdata/hplc/oscar/Oscar.i/OC1506.b/OC150605.D
Injection Date : 15-DEC-2006 16:22
Sample Info : JPL26-020 METHOD 8330
Misc. Info : Method 8330
Laboratory ID : JPL26-020
Instrument ID : Oscar.i
Method : 8330DEC01.m
Quantitation : ESTD
Dilution Factor : 2.00
Column : C18

Client ID : MW-10
Operator : MY
Sublist : 8330
Integrator : HP Genie
Sample Type: SAMPLE
Column Size: 0.25m L- 4.60mm ID

UnitFactor : 1.000
FinalVolume : 5000 ul
SampleVolume: 1030 ml
InjectionVol: 50.00 ul

Compound	RT	RT Window	Response	Concentrations Soln ng/mL	Concentrations Final ug/L
	1.98		264		
	2.55		38120		
	3.17		7484		
	3.89		1518		
	5.76		180		
3,4-Dinitrotoluene	17.69	17.41 - 17.91	6046	881.84	8.56

Response is in height units.
M - The peak was manually integrated.
E - The quantitated amount exceeds the calibration range.

1

ORDNANCE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

DUPE-8-4Q06

Lab Name: Laucks Testing Laboratories,

Contract: JPL Groundwater Monitor

SDG No.: JPL26

Run Sequence: R013534

Matrix: (SOIL/WATER) Water

Lab Sample ID: JPL26-021

Sample wt/vol: 1040.0 (g/mL) mL

Lab File ID: OC150608.D

% Moisture: _____ Decanted: (Y/N) N

Date Collected: 12/07/2006

Extraction: (Type) SPE

Date Extracted: 12/14/2006

Concentrated Extract Volume: 5000.0 (uL)

Date Analyzed: 12/15/2006

Injection Volume: 50.0 (uL)

Dilution Factor: 2.0

GPC Cleanup: (Y/N) N pH: 0

Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
2691-41-0	HMX	0.48	U
121-82-4	RDX	0.48	U
99-35-4	1,3,5-Trinitrobenzene	0.48	U
99-65-0	1,3-Dinitrobenzene	0.48	U
98-95-3	Nitrobenzene	0.48	U
479-45-8	Tetryl	0.48	U
118-96-7	2,4,6-Trinitrotoluene	0.48	U
1946-51-0	4-Amino-2,6-dinitrotoluene	0.48	U
35572-78-2	2-Amino-4,6-dinitrotoluene	0.48	U
606-20-2	2,6-Dinitrotoluene	0.48	U
121-14-2	2,4-Dinitrotoluene	0.48	U
88-72-2	2-Nitrotoluene	0.48	U
99-99-0	4-Nitrotoluene	0.48	U
99-08-1	3-Nitrotoluene	0.48	U

Comments:

Data File: \\ceres\labdata\hplc\oscar\Oscar.i\OC1506.b\OC150608.D

Date : 15-DEC-2006 18:22

Client ID: DUPE-8-4Q06

Instrument: Oscar.i

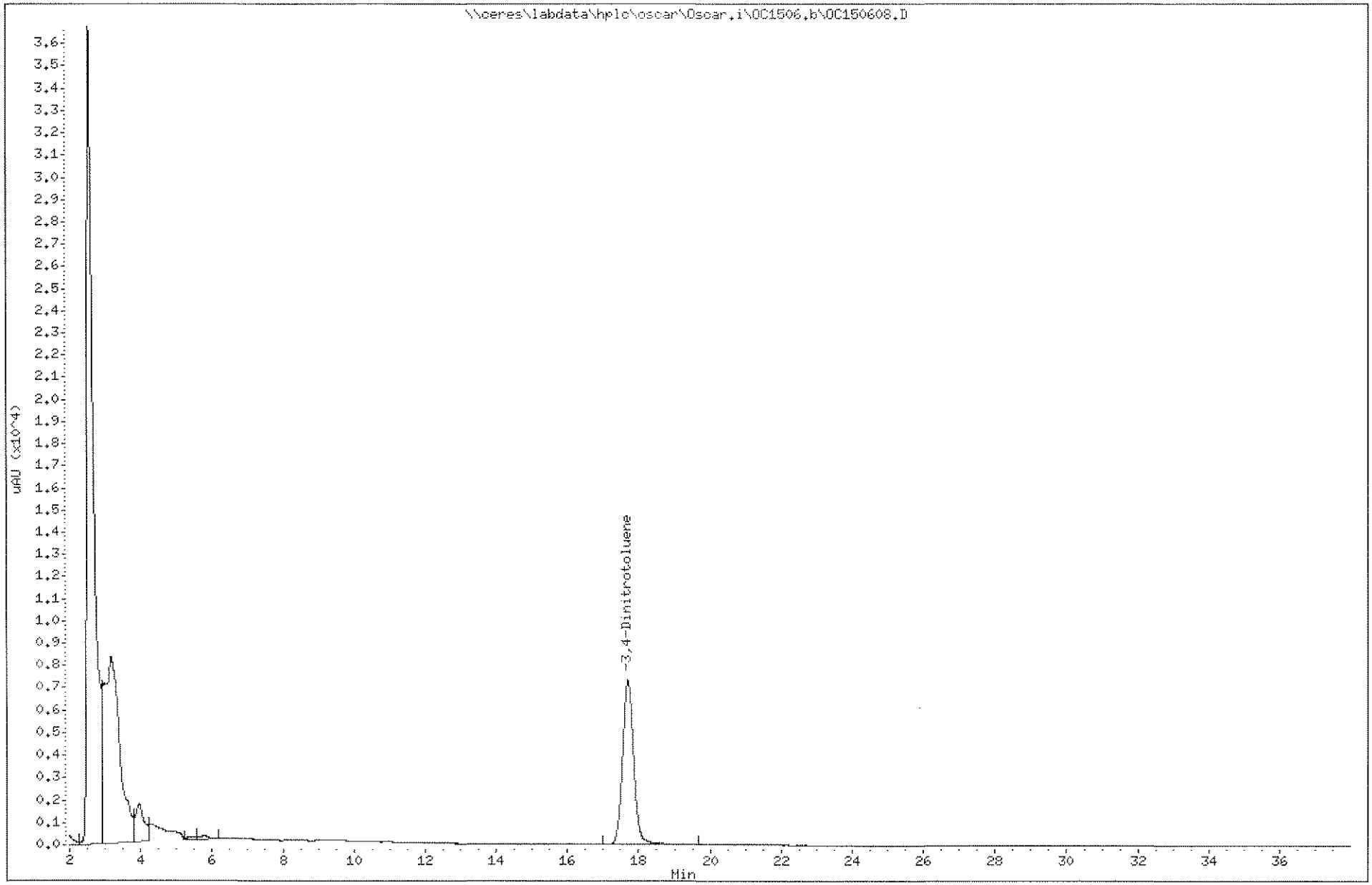
Sample Info: JPL26-021 METHOD 8330

Volume Injected (uL): 50.0

Operator: MY

Column phase: C18

Column diameter: 4.60



ORD - 17

Laucks Testing Labs
Quantitation Report

Data File : //ceres/labdata/hplc/oscar/Oscar.i/OC1506.b/OC150608.D
Injection Date : 15-DEC-2006 18:22
Sample Info : JPL26-021 METHOD 8330
Misc. Info : Method 8330
Laboratory ID : JPL26-021 Client ID : DUPE-8-4Q06
Instrument ID : Oscar.i Operator : MY
Method : 8330DEC01.m Sublist : 8330
Quantitation : ESTD Integrator : HP Genie
Dilution Factor : 2.00 Sample Type: SAMPLE
Column : C18 Column Size: 0.25m L- 4.60mm ID

UnitFactor : 1.000
FinalVolume : 5000 ul
SampleVolume: 1040 ml
InjectionVol: 50.00 ul

Compound	RT	RT Window	Response	Concentrations Soln ng/mL	Concentrations Final ug/L
	1.99		414		
	2.56		36675		
	3.18		8290		
	3.95		1685		
	5.38		146		
	5.77		146		
3,4-Dinitrotoluene	17.70	17.41 - 17.91	7320	1067.7	10.3

Response is in height units.
M - The peak was manually integrated.
E - The quantitated amount exceeds the calibration range.

Metals Data

JPL26

SW-846

COVER PAGE-INORGANIC ANALYSES DATA PACKAGE

Lab Name: Laucks Laboratories Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS SDG No.: JPL26

SOW No.:

Sample No.	Lab Sample ID
MW-26-2	JPL26-001
MW-26-1	JPL26-002
EB-21-11/30/06	JPL26-003
MW-5	JPL26-006
MW-5MS	JPL26-006MS
MW-5MSD	JPL26-006MSD
MW-6	JPL26-007
MW-1	JPL26-009
MW-9	JPL26-010
MW-15	JPL26-011
DUPE-7-4Q06	JPL26-012
MW-7	JPL26-014
MW-7MS	JPL26-014MS
MW-7MSD	JPL26-014MSD
MW-16	JPL26-015
MW-13	JPL26-017
MW-8	JPL26-018
MW-10	JPL26-020
MW-10MS	JPL26-020MS
MW-10MSD	JPL26-020MSD
DUPE-8-4Q06	JPL26-021

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No NO

If yes-was raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is technically complete, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: Cheronne Oeiro

Date: 1/2/2007 Title: Metals Lead

Metals Analysis Data Sheets

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-26-2

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-001

Level (low/med): LOW

Date Received: 12/02/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	4.57			M	R013839

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-26-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-002

Level (low/med): LOW

Date Received: 12/02/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	3.30			M	R013839

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

EB-21-11/30/06

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-003

Level (low/med): LOW

Date Received: 12/02/2006

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	1.00	U		M	R013839

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: No

Comment _____

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-5

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-006

Level (low/med): LOW

Date Received: 12/02/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	3.14			M	R013839
7440-31-5	Tin	10.0	U		M	R013742

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-6

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-007

Level (low/med): LOW

Date Received: 12/02/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	5.81			M	R013839

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-1

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-009

Level (low/med): LOW

Date Received: 12/05/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	2.19			M	R013839

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-9

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-010

Level (low/med): LOW

Date Received: 12/05/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	3.60			M	R013839

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-15

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-011

Level (low/med): LOW

Date Received: 12/05/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	3.29			M	R013839

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-7-4Q06

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-012

Level (low/med): LOW

Date Received: 12/05/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	3.90			M	R013839

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-7

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-014

Level (low/med): LOW

Date Received: 12/06/2006

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	2.82			M	R013839

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: No

Comment _____

SW-846

-1-

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-16

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-015

Level (low/med): LOW

Date Received: 12/06/2006

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	73.7			M	R013726

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: No

Comment _____

SW-846

-1-

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-13

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-017

Level (low/med): LOW

Date Received: 12/06/2006

% Solids: _____

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	131			M	R013726

Color Before: Colorless Clarity Before: Clear Texture: _____

Color After: Colorless Clarity After: Clear Artifacts: No

Comment _____

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-8

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-018

Level (low/med): LOW

Date Received: 12/06/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	11.7			M	R013726

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

SW-846
-1-
INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

MW-10

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-020

Level (low/med): LOW

Date Received: 12/08/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	14.6			M	R013726
7440-31-5	Tin	10.0	U		M	R013742

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

INORGANIC ANALYSES DATA SHEET

SAMPLE NO.

DUPE-8-4Q06

Lab Name: Laucks Laboratories

Contract: JPL Groundwater Monitorin

Lab Code: LAUCKS

SDG No.: JPL26

Matrix (soil/water): Water

Lab Sample ID: JPL26-021

Level (low/med): LOW

Date Received: 12/08/2006

% Solids:

Concentration Units : ug/L

CAS No.	Analyte	Concentration	C	Q	M	Run Seq.
7440-47-3	Chromium	14.0			M	R013726
7440-31-5	Tin	10.0	U		M	R013742

Color Before: Colorless Clarity Before: Clear Texture:

Color After: Colorless Clarity After: Clear Artifacts: No

Comment

Miscellaneous Inorganic Data

JPL26

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: LAUCKS TESTING LABS, INC.

Lab Code: LAUCKS SDG No.: JPL26

Client Identification	Lab Sample Work Order Number
MW-26-2	JPL26-001
MW-26-1	JPL26-002
EB-21-11/30/06	JPL26-003
EB-21-11/30/06MS	JPL26-003MS
EB-21-11/30/06MSD	JPL26-003MSD
MW-5	JPL26-006
MW-5MS	JPL26-006MS
MW-5MSD	JPL26-006MSD
MW-6	JPL26-007
MW-1	JPL26-009
MW-9	JPL26-010
MW-15	JPL26-011
DUPE-7-4Q06	JPL26-012
MW-7	JPL26-014
MW-7MS	JPL26-014MS
MW-7MSD	JPL26-014MSD
MW-16	JPL26-015
MW-13	JPL26-017
MW-13MS	JPL26-017MS
MW-13MSD	JPL26-017MSD
MW-8	JPL26-018

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: Jennifer Penner

Date: 12-28-06 Title: Inorganics Lead

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: LAUCKS TESTING LABS, INC.

Lab Code: LAUCKS SDG No.: JPL26

Client Identification	Lab Sample Work Order Number
MW-8MS	JPL26-018MS
MW-8MSD	JPL26-018MSD
MW-10	JPL26-020DL
MW-10MS	JPL26-020MS
MW-10MSD	JPL26-020MSD
DUPE-8-4Q06	JPL26-021

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name: Jennifer Penner

Date: 12-28-06 Title: Inorganics Lead

Inorganic Analysis Data Sheets

Laucks Testing Laboratories, Inc.

Final Results

Client:	Battelle	**Project:**	JPL Groundwater Monitoring
SDG Number:	JPL26		
Sample Number:	MW-26-2	**Date/Time Collected:**	11/30/2006 08:53
Lab Sample ID:	JPL26-001	**Date/Time Received:**	12/02/2006 10:30
Method:	E314.0	**Unit:**	ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	2.2	12/07/2006	12/08/2006	R013250

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client:	Battelle	**Project:**	JPL Groundwater Monitoring
SDG Number:	JPL26		
Sample Number:	MW-26-1	**Date/Time Collected:**	11/30/2006 09:25
Lab Sample ID:	JPL26-002	**Date/Time Received:**	12/02/2006 10:30
Method:	E314.0	**Unit:**	ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	2.2	12/07/2006	12/08/2006	R013250

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client:	Battelle	**Project:**	JPL Groundwater Monitoring
SDG Number:	JPL26		
Sample Number:	EB-21-11/30/06	**Date/Time Collected:**	11/30/2006 07:27
Lab Sample ID:	JPL26-003	**Date/Time Received:**	12/02/2006 10:30
Method:	E314.0	**Unit:**	ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	1	1.0	U	1.0	0.54	12/07/2006	12/08/2006	R013250

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle **Project:** JPL Groundwater Monitoring

SDG Number: JPL26

Sample Number: MW-5 **Date/Time Collected:** 12/01/2006 09:46

Lab Sample ID: JPL26-006 **Date/Time Received:** 12/02/2006 10:30

Method: E314.0 **Unit:** ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	3.9		2.0	1.1	12/07/2006	12/08/2006	R013250

Method: E370.1 **Unit:** mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Silica, Dissolved (as SiO2)	7631-86-9	10	23		0.20	0.080	12/26/2006	12/26/2006	R013764

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client:	Battelle	**Project:**	JPL Groundwater Monitoring
SDG Number:	JPL26		
Sample Number:	MW-6	**Date/Time Collected:**	12/01/2006 12:45
Lab Sample ID:	JPL26-007	**Date/Time Received:**	12/02/2006 10:30
Method:	E314.0	**Unit:**	ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	2.2	12/07/2006	12/08/2006	R013250

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client:	Battelle	**Project:**	JPL Groundwater Monitoring
SDG Number:	JPL26		
Sample Number:	MW-1	**Date/Time Collected:**	12/04/2006 08:40
Lab Sample ID:	JPL26-009	**Date/Time Received:**	12/05/2006 09:30
Method:	E314.0	**Unit:**	ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	2.2	12/07/2006	12/08/2006	R013250

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client:	Battelle	**Project:**	JPL Groundwater Monitoring
SDG Number:	JPL26		
Sample Number:	MW-9	**Date/Time Collected:**	12/04/2006 10:05
Lab Sample ID:	JPL26-010	**Date/Time Received:**	12/05/2006 09:30
Method:	E314.0	**Unit:**	ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	2.2	12/07/2006	12/08/2006	R013250

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client:	Battelle	**Project:**	JPL Groundwater Monitoring
SDG Number:	JPL26		
Sample Number:	MW-15	**Date/Time Collected:**	12/04/2006 11:45
Lab Sample ID:	JPL26-011	**Date/Time Received:**	12/05/2006 09:30
Method:	E314.0	**Unit:**	ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	2.2	12/07/2006	12/08/2006	R013250

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client:	Battelle	**Project:**	JPL Groundwater Monitoring
SDG Number:	JPL26		
Sample Number:	DUPE-7-4Q06	**Date/Time Collected:**	12/04/2006 00:00
Lab Sample ID:	JPL26-012	**Date/Time Received:**	12/05/2006 09:30
Method:	E314.0	**Unit:**	ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	2.2	12/07/2006	12/08/2006	R013250

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle
Project: JPL Groundwater Monitoring
SDG Number: JPL26
Sample Number: MW-7
Date/Time Collected: 12/05/2006 09:28
Lab Sample ID: JPL26-014
Date/Time Received: 12/06/2006 16:10
Method: E300.0
Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	1	0.78		0.040	0.017	12/07/2006	12/08/2006	R013204
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.021	12/07/2006	12/08/2006	R013204
Sulfate as SO4	14808-79-8	10	45		10	0.88	12/07/2006	12/08/2006	R013204
Chloride	16887-00-6	10	37		2.0	0.70	12/07/2006	12/08/2006	R013204
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.092	12/07/2006	12/08/2006	R013204

Method: E314.0
Unit: ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	2	3.1		2.0	1.1	12/11/2006	12/11/2006	R013386

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle
Project: JPL Groundwater Monitoring
SDG Number: JPL26
Sample Number: MW-16
Date/Time Collected: 12/05/2006 11:58
Lab Sample ID: JPL26-015
Date/Time Received: 12/06/2006 16:10
Method: E300.0
Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	4.7		0.40	0.17	12/07/2006	12/08/2006	R013204
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.021	12/07/2006	12/08/2006	R013204
Sulfate as SO4	14808-79-8	10	26		10	0.88	12/07/2006	12/08/2006	R013204
Chloride	16887-00-6	10	33		2.0	0.70	12/07/2006	12/08/2006	R013204
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.092	12/07/2006	12/08/2006	R013204

Method: E314.0
Unit: ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	100	1400		100	54	12/13/2006	12/14/2006	R013439

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle
Project: JPL Groundwater Monitoring
SDG Number: JPL26
Sample Number: MW-13
Date/Time Collected: 12/06/2006 09:22
Lab Sample ID: JPL26-017
Date/Time Received: 12/06/2006 09:00
Method: E300.0
Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	6.6		0.40	0.17	12/08/2006	12/09/2006	R013262
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.021	12/08/2006	12/09/2006	R013262
Sulfate as SO4	14808-79-8	10	68		10	0.88	12/08/2006	12/09/2006	R013262
Chloride	16887-00-6	10	60		2.0	0.70	12/08/2006	12/09/2006	R013262
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.092	12/08/2006	12/09/2006	R013262

Method: E314.0
Unit: ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	150		4.0	2.2	12/13/2006	12/14/2006	R013439

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle
Project: JPL Groundwater Monitoring
SDG Number: JPL26
Sample Number: MW-8
Date/Time Collected: 12/06/2006 11:32
Lab Sample ID: JPL26-018
Date/Time Received: 12/06/2006 09:00
Method: E300.0
Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Nitrate - N	14797-55-8	10	3.9		0.40	0.17	12/07/2006	12/08/2006	R013204
Nitrite - N	14797-65-0	1	0.050	U	0.050	0.021	12/07/2006	12/08/2006	R013204
Sulfate as SO4	14808-79-8	10	47		10	0.88	12/07/2006	12/08/2006	R013204
Chloride	16887-00-6	10	24		2.0	0.70	12/07/2006	12/08/2006	R013204
Orthophosphate	7723-14-0	1	0.10	U	0.10	0.092	12/07/2006	12/08/2006	R013204

Method: E314.0
Unit: ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	60		4.0	2.2	12/13/2006	12/14/2006	R013439

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle
Project: JPL Groundwater Monitoring
SDG Number: JPL26
Sample Number: MW-10
Date/Time Collected: 12/07/2006 09:30
Lab Sample ID: JPL26-020
Date/Time Received: 12/08/2006 09:45
Method: E314.0
Unit: ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	4.0	U	4.0	2.2	12/13/2006	12/14/2006	R013439

Method: E370.1
Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Silica, Dissolved (as SiO2)	7631-86-9	10	45		0.20	0.080	12/26/2006	12/26/2006	R013764

FORM LTL-RSR-27.0

Laucks Testing Laboratories, Inc.

Final Results

Client: Battelle
Project: JPL Groundwater Monitoring
SDG Number: JPL26
Sample Number: DUPE-8-4Q06
Date/Time Collected: 12/07/2006 09:30
Lab Sample ID: JPL26-021
Date/Time Received: 12/08/2006 09:45
Method: E314.0
Unit: ug/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Perchlorate	14797-73-0	4	5.6		4.0	2.2	12/13/2006	12/14/2006	R013439

Method: E370.1
Unit: mg/L

Analyte	CAS	DF	Result	Q	PQL	MDL	Prepared	Analyzed	Run Seq.
Silica, Dissolved (as SiO2)	7631-86-9	10	49		0.20	0.080	12/26/2006	12/26/2006	R013764

FORM LTL-RSR-27.0

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600159
Date Collected : 10/26,27/06
Date Received : 10/26,27/06

Chromium, Hexavalent

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

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-21-5	P0600159-001	0.01	0.004	1	NA	10/26/06	ND	
MW-21-4	P0600159-002	0.01	0.004	1	NA	10/26/06	0.006	J
MW-21-3	P0600159-003	0.01	0.004	1	NA	10/26/06	ND	
MW-21-2	P0600159-004	0.01	0.004	1	NA	10/26/06	0.004	J
MW-21-1	P0600159-005	0.01	0.004	1	NA	10/26/06	0.004	J
EB-1-10/26/06	P0600159-006	0.01	0.004	1	NA	10/26/06	ND	
MW-20-5	P0600159-007	0.01	0.004	1	NA	10/27/06	ND	
MW-20-4	P0600159-008	0.01	0.004	1	NA	10/27/06	ND	
MW-20-3	P0600159-009	0.01	0.004	1	NA	10/27/06	ND	
MW-20-2	P0600159-010	0.01	0.004	1	NA	10/27/06	ND	
MW-20-1	P0600159-011	0.01	0.004	1	NA	10/27/06	ND	
EB-2-10/27/06	P0600159-012	0.01	0.004	1	NA	10/27/06	ND	
Method Blank	P0600159-MB	0.01	0.004	1	NA	10/26/06	ND	
Method Blank	P0600159-MB	0.01	0.004	1	NA	10/27/06	ND	

J Estimated concentration. The result is less than the PQL but greater than the MDL.

Approved By Sue Anderson Date : 11/3/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600159
Date Collected : 10/26/06
Date Received : 10/26/06
Date Extracted : NA
Date Analyzed : 10/26/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-21-1
Lab Code : P0600159-005MS P0600159-005DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	0.00405	0.0563	0.0489	105	90	85-115	14	

Approved By Sue Anderson Date : 11/3/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600159
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	10/27/06
Project Number :	G486090/204142	**Date Received :**	10/27/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	10/27/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-20-5 Units : mg/L (ppm)
Lab Code : P0600159-007MS P0600159-007DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0240	0.0240	48	48	85-115	<1	E1

E1 See case narrative.

Approved By _____ Date : 11/3/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600177
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	10/30/06
Project Number :	G486090/204142	**Date Received :**	10/30/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	10/30/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-19-5 Units : mg/L (ppm)
Lab Code : P0600177-001MS P0600177-001DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0477	0.0457	95	91	85-115	4	

Approved By Sue Quiles Date : 11/8/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	10/31/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Anderson Date: 11/8/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	10/31/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0383	99
CCV1	0.0387	0.0383	99

Approved By: Sue Anderson Date: 11/8/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600177
Date Collected : 10/31/06
Date Received : 10/31/06
Date Extracted : NA
Date Analyzed : 10/31/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-17-5
Lab Code : P0600177-005MS P0600177-005DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0459	0.0440	92	88	85-115	4	

Approved By Sue Quelerts Date : 11/8/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/01/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Anderson Date: 11/8/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/01/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0386	100
CCV1	0.0387	0.0386	100

Approved By: Sue Anderson Date: 11/8/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600177
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/01/06
Project Number :	G486090/204142	**Date Received :**	11/01/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/01/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-17-4 Units : mg/L (ppm)
Lab Code : P0600177-009MS P0600177-009DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0510	0.0519	102	104	85-115	2	

Approved By Sue Ouderkirk Date : 11/8/06

Report By:RWONG

Organic Analysis:
EPA Method 504.1

Summary Package

Sample and QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600177

Cover Page - Organic Analysis Data Package
EPA Method 504.1

Sample Name	Lab Code	Date Collected	Date Received
MW-17-4	P0600177-009	11/01/2006	11/01/2006
MW-17-5	P0600177-010	11/01/2006	11/01/2006
MW-17-3	P0600177-011	11/01/2006	11/01/2006
MW-19-5	P0600177-012	11/01/2006	11/01/2006
MW-19-4	P0600177-013	11/01/2006	11/01/2006
MW-19-3	P0600177-014	11/01/2006	11/01/2006
MW-19-2	P0600177-015	11/01/2006	11/01/2006
MW-19-1	P0600177-016	11/01/2006	11/01/2006
EB-5-11/1/06	P0600177-017	11/01/2006	11/01/2006
TB-5-11/1/06	P0600177-018	11/01/2006	11/01/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: G.M. Smith

Date: 11/18/06 Title: Ow Manager

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	MW-17-4	**Units:**	ug/L
Lab Code:	P0600177-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0098	0.00170	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0098	0.00180	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	MW-17-5	**Units:**	ug/L
Lab Code:	P0600177-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.022	0.0037	2.1	11/13/06	11/15/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.022	0.0039	2.1	11/13/06	11/15/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	MW-17-3	**Units:**	ug/L
Lab Code:	P0600177-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	MW-19-5	**Units:**	ug/L
Lab Code:	P0600177-012	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	MW-19-4	**Units:**	ug/L
Lab Code:	P0600177-013	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	MW-19-3	**Units:**	ug/L
Lab Code:	P0600177-014	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0098	0.00170	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0098	0.00180	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	MW-19-2	**Units:**	ug/L
Lab Code:	P0600177-015	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0099	0.00170	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0099	0.00180	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	MW-19-1	**Units:**	ug/L
Lab Code:	P0600177-016	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	EB-5-11/1/06	**Units:**	ug/L
Lab Code:	P0600177-017	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

EPA Method 504.1

Sample Name:	TB-5-11/1/06	**Units:**	ug/L
Lab Code:	P0600177-018	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Organic Analysis:
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

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Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600177

Cover Page - Organic Analysis Data Package
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
MW-19-5	P0600177-001	10/30/2006	10/30/2006
MW-19-4	P0600177-002	10/30/2006	10/30/2006
MW-19-3	P0600177-003	10/30/2006	10/30/2006
EB-3-10/30/06	P0600177-004	10/30/2006	10/30/2006
MW-17-5	P0600177-005	10/31/2006	10/31/2006
MW-19-2	P0600177-006	10/31/2006	10/31/2006
MW-19-1	P0600177-007	10/31/2006	10/31/2006
EB-4-10/31/06	P0600177-008	10/31/2006	10/31/2006
MW-17-4	P0600177-009	11/01/2006	11/01/2006
MW-17-3	P0600177-011	11/01/2006	11/01/2006
EB-5-11/1/06	P0600177-017	11/01/2006	11/01/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Tom Sa

Date: 12/8/06 Title: Dw Manager

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/30/2006
Sample Matrix:	Water	**Date Received:**	10/30/2006

Nitrosamines by EPA 521

Sample Name:	MW-19-5	**Units:**	ng/L
Lab Code:	P0600177-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	4.0	2.8	2	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	4.0	1.3	2	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	**4.6**	D	4.0	1.8	2	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	4.0	1.7	2	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	4.0	1.9	2	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	4.0	1.6	2	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	4.0	1.9	2	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	4.0	2.2	2	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	101	70-130	12/05/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/30/2006
Sample Matrix:	Water	**Date Received:**	10/30/2006

Nitrosamines by EPA 521

Sample Name:	MW-19-4	**Units:**	ng/L
Lab Code:	P0600177-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	71	70-130	12/05/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/30/2006
Sample Matrix:	Water	**Date Received:**	10/30/2006

Nitrosamines by EPA 521

Sample Name:	MW-19-3	**Units:**	ng/L
Lab Code:	P0600177-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/04/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/04/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	82	70-130	12/04/06	Acceptable

Comments:

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/30/2006
Sample Matrix:	Water	**Date Received:**	10/30/2006

Nitrosamines by EPA 521

Sample Name:	EB-3-10/30/06	**Units:**	ng/L
Lab Code:	P0600177-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	78	70-130	12/05/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/31/2006
Sample Matrix:	Water	**Date Received:**	10/31/2006

Nitrosamines by EPA 521

Sample Name:	MW-17-5	**Units:**	ng/L
Lab Code:	P0600177-005	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/04/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/04/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	86	70-130	12/04/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/31/2006
Sample Matrix:	Water	**Date Received:**	10/31/2006

Nitrosamines by EPA 521

Sample Name:	MW-19-2	**Units:**	ng/L
Lab Code:	P0600177-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	80	70-130	12/05/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600177
Date Collected: 10/31/2006
Date Received: 10/31/2006

Nitrosamines by EPA 521

Sample Name: MW-19-1
Lab Code: P0600177-007

Units: ng/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 521

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/04/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/04/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	75	70-130	12/04/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/31/2006
Sample Matrix:	Water	**Date Received:**	10/31/2006

Nitrosamines by EPA 521

Sample Name:	EB-4-10/31/06	**Units:**	ng/L
Lab Code:	P0600177-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/04/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/04/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	72	70-130	12/04/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

Nitrosamines by EPA 521

Sample Name:	MW-17-4	**Units:**	ng/L
Lab Code:	P0600177-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/04/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodi-n-butylamine	**5.2**		2.0	0.93	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiphenylamine	**32**		2.0	1.1	1	11/09/06	12/04/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	87	70-130	12/04/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

Nitrosamines by EPA 521

Sample Name:	MW-17-3	**Units:**	ng/L
Lab Code:	P0600177-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/04/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/04/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	81	70-130	12/04/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

Nitrosamines by EPA 521

Sample Name:	EB-5-11/1/06	**Units:**	ng/L
Lab Code:	P0600177-017	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	95	70-130	12/05/06	Acceptable

Comments:

Semi-Volatile Organic Compounds
EPA Method 8270C

603

Organic Analysis:
Semivolatile Organic Compounds by GC/MS SIM

Summary Package

Sample and QC Results

604

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Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600177

Cover Page - Organic Analysis Data Package
Semivolatile Organic Compounds by GC/MS SIM

Sample Name	Lab Code	Date Collected	Date Received
MW-19-5	P0600177-001	10/30/2006	10/30/2006
MW-19-4	P0600177-002	10/30/2006	10/30/2006
MW-19-3	P0600177-003	10/30/2006	10/30/2006
EB-3-10/30/06	P0600177-004	10/30/2006	10/30/2006
MW-17-5	P0600177-005	10/31/2006	10/31/2006
MW-19-2	P0600177-006	10/31/2006	10/31/2006
MW-19-1	P0600177-007	10/31/2006	10/31/2006
EB-4-10/31/06	P0600177-008	10/31/2006	10/31/2006
MW-17-4	P0600177-009	11/01/2006	11/01/2006
MW-17-3	P0600177-011	11/01/2006	11/01/2006
EB-5-11/1/06	P0600177-017	11/01/2006	11/01/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: Carl Degner

Date: 12/1/06 Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/30/2006
Sample Matrix:	Water	**Date Received:**	10/30/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-19-5	**Units:**	ng/L
Lab Code:	P0600177-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	74	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/30/2006
Sample Matrix:	Water	**Date Received:**	10/30/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-19-4	**Units:**	ng/L
Lab Code:	P0600177-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	68	70-130	11/28/06	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/30/2006
Sample Matrix:	Water	**Date Received:**	10/30/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-19-3	**Units:**	ng/L
Lab Code:	P0600177-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	67	70-130	11/28/06	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600177
Date Collected: 10/30/2006
Date Received: 10/30/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: EB-3-10/30/06
Lab Code: P0600177-004

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	77	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	10/31/2006
Sample Matrix:	Water	**Date Received:**	10/31/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-17-5	**Units:**	ng/L
Lab Code:	P0600177-005	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	65	70-130	11/28/06	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600177
Date Collected: 10/31/2006
Date Received: 10/31/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: MW-19-2
Lab Code: P0600177-006

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	75	70-130	11/28/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600177
Date Collected: 10/31/2006
Date Received: 10/31/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: MW-19-1
Lab Code: P0600177-007

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	73	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600177
Date Collected: 10/31/2006
Date Received: 10/31/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: EB-4-10/31/06
Lab Code: P0600177-008

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	82	70-130	11/28/06	Acceptable

Comments:

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600177
Date Collected: 11/01/2006
Date Received: 11/01/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: MW-17-4
Lab Code: P0600177-009

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	89	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-17-3	**Units:**	ng/L
Lab Code:	P0600177-011	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	77	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/01/2006
Sample Matrix:	Water	**Date Received:**	11/01/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	EB-5-11/1/06	**Units:**	ng/L
Lab Code:	P0600177-017	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	84	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600177
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0618851-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	74	70-130	11/28/06	Acceptable

Comments:

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600187
Date Collected : 11/02,03/06
Date Received : 11/02,03/06

Chromium, Hexavalent

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

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-17-2	P0600187-001	0.01	0.004	1	NA	11/02/06	ND	
MW-17-1	P0600187-002	0.01	0.004	1	NA	11/02/06	ND	
DUPE-1-4Q06	P0600187-003	0.01	0.004	1	NA	11/02/06	ND	
EB-6-11/2/06	P0600187-004	0.01	0.004	1	NA	11/02/06	ND	
MW-14-5	P0600187-006	0.01	0.004	1	NA	11/03/06	ND	
MW-14-4	P0600187-007	0.01	0.004	1	NA	11/03/06	ND	
MW-14-3	P0600187-008	0.01	0.004	1	NA	11/03/06	ND	
MW-14-2	P0600187-009	0.01	0.004	1	NA	11/03/06	ND	
MW-14-1	P0600187-010	0.01	0.004	1	NA	11/03/06	ND	
EB-7-11/3/06	P0600187-011	0.01	0.004	1	NA	11/03/06	ND	
Method Blank	P0600187-MB	0.01	0.004	1	NA	11/02/06	ND	
Method Blank	P0600187-MB	0.01	0.004	1	NA	11/03/06	ND	

Approved By Sue Anderson Date : 11/8/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/02/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Underhill Date: 11/8/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/02/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0374	97
CCV1	0.0387	0.0393	102

Approved By: Sue Anderson Date: 11/8/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600187
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/02/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	P0600187-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	None	7196A	0.0400	0.0393	98	90-110	
Chromium, Hexavalent	None	7196A	0.0400	0.0398	100	90-110	

Approved By Sue Anderson Date : 11/8/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600187
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/02/06
Project Number :	G486090/204142	**Date Received :**	11/02/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/02/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-17-2 Units : mg/L (ppm)
Lab Code : P0600187-001MS P0600187-001DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0450	0.0469	90	94	85-115	4	

Approved By _____ Date : 11/8/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/03/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: _____ Date: 11/8/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/03/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0362	94
CCV1	0.0387	0.0398	103

Approved By: Sue Quilerson Date: 11/8/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600187
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/03/06
Project Number :	G486090/204142	**Date Received :**	11/03/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/03/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-14-2 Units : mg/L (ppm)
Lab Code : P0600187-009MS P0600187-009DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0523	0.0496	105	99	85-115	5	

Approved By Sue Quilerbs Date : 11/8/06

Report By:RWONG

DIVIDER SHEET

RAW DATA FOR

Hexavalent Chromium

ANALYSIS

Organic Analysis:
EPA Method 504.1

Summary Package

Sample and QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600187

Cover Page - Organic Analysis Data Package
EPA Method 504.1

Sample Name	Lab Code	Date Collected	Date Received
MW-17-2MS	KWG0619417-1	11/02/2006	11/02/2006
MW-17-2DMS	KWG0619417-2	11/02/2006	11/02/2006
MW-17-2	P0600187-001	11/02/2006	11/02/2006
MW-17-1	P0600187-002	11/02/2006	11/02/2006
DUPE-1-4Q06	P0600187-003	11/02/2006	11/02/2006
EB-6-11/2/06	P0600187-004	11/02/2006	11/02/2006
TB-6-11/2/06	P0600187-005	11/02/2006	11/02/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Tim Smith

Date: 11/28/06 Title: Dir Manager

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Collected: 11/02/2006
Date Received: 11/02/2006

EPA Method 504.1

Sample Name: MW-17-2
Lab Code: P0600187-001

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Collected: 11/02/2006
Date Received: 11/02/2006

EPA Method 504.1

Sample Name: MW-17-1
Lab Code: P0600187-002

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Collected: 11/02/2006
Date Received: 11/02/2006

EPA Method 504.1

Sample Name: DUPE-1-4Q06
Lab Code: P0600187-003

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Collected: 11/02/2006
Date Received: 11/02/2006

EPA Method 504.1

Sample Name: EB-6-11/2/06
Lab Code: P0600187-004

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Collected: 11/02/2006
Date Received: 11/02/2006

EPA Method 504.1

Sample Name: TB-6-11/2/06
Lab Code: P0600187-005

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

EPA Method 504.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0619417-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0017	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Extracted: 11/13/2006
Date Analyzed: 11/14/2006

Matrix Spike/Duplicate Matrix Spike Summary
EPA Method 504.1

Sample Name: MW-17-2
Lab Code: P0600187-001

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low
Extraction Lot: KWG0619417

Analyte Name	Sample Result	MW-17-2MS KWG0619417-1 Matrix Spike			MW-17-2DMS KWG0619417-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	ND	0.0774	0.0698	111	0.0741	0.0707	105	65-135	4	30
1,2-Dibromo-3-chloropropane (DBCP	ND	0.0753	0.0698	108	0.0746	0.0707	106	65-135	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Organic Analysis:
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600187

Cover Page - Organic Analysis Data Package
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
MW-17-2MS	KWG0619258-1	11/02/2006	11/02/2006
MW-17-2DMS	KWG0619258-2	11/02/2006	11/02/2006
MW-17-2	P0600187-001	11/02/2006	11/02/2006
MW-17-1	P0600187-002	11/02/2006	11/02/2006
DUPE-1-4Q06	P0600187-003	11/02/2006	11/02/2006
EB-6-11/2/06	P0600187-004	11/02/2006	11/02/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Gm Sh

Date: 12/8/06 Title: Pm manager

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/02/2006
Sample Matrix:	Water	**Date Received:**	11/02/2006

Nitrosamines by EPA 521

Sample Name:	MW-17-2	**Units:**	ng/L
Lab Code:	P0600187-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	72	70-130	12/05/06	Acceptable

Comments:

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Collected: 11/02/2006
Date Received: 11/02/2006

Nitrosamines by EPA 521

Sample Name: MW-17-1
Lab Code: P0600187-002

Units: ng/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 521

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	**4.1**		2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	80	70-130	12/05/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/02/2006
Sample Matrix:	Water	**Date Received:**	11/02/2006

Nitrosamines by EPA 521

Sample Name:	DUPE-1-4Q06	**Units:**	ng/L
Lab Code:	P0600187-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	88	70-130	12/05/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/02/2006
Sample Matrix:	Water	**Date Received:**	11/02/2006

Nitrosamines by EPA 521

Sample Name:	EB-6-11/2/06	**Units:**	ng/L
Lab Code:	P0600187-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	87	70-130	12/05/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0619258-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiethylamine	**1.3**	J	2.0	0.89	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/04/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/04/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	85	70-130	12/04/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187

Surrogate Recovery Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Level: Low

Sample Name	Lab Code	Sur1
MW-17-2	P0600187-001	72
MW-17-1	P0600187-002	80
DUPE-1-4Q06	P0600187-003	88
EB-6-11/2/06	P0600187-004	87
Method Blank	KWG0619258-4	85
MW-17-2MS	KWG0619258-1	94
MW-17-2DMS	KWG0619258-2	91
Lab Control Sample	KWG0619258-3	98

Surrogate Recovery Control Limits (%)

Sur1 = N-Nitrosodimethylamine-d6 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/09/2006
Sample Matrix:	Water	**Date Analyzed:**	12/05/2006 - 12/07/2006

Matrix Spike/Duplicate Matrix Spike Summary
Nitrosamines by EPA 521

Sample Name:	MW-17-2	**Units:**	ng/L
Lab Code:	P0600187-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619258

Analyte Name	Sample Result	MW-17-2MS KWG0619258-1 Matrix Spike			MW-17-2DMS KWG0619258-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
N-Nitrosodimethylamine	ND	25.1	40.0	63 *	29.8	40.0	74	70-130	17	30
N-Nitrosomethylethylamine	ND	29.6	40.0	74	30.9	40.0	77	70-130	4	30
N-Nitrosodiethylamine	ND	34.7	40.0	87	35.5	40.0	89	70-130	2	30
N-Nitrosopyrrolidine	ND	36.7	40.0	92	46.0	40.0	115	70-130	23	30
N-Nitrosodi-n-propylamine	ND	40.1	40.0	100	43.0	40.0	108	70-130	7	30
N-Nitrosopiperidine	ND	32.1	40.0	80	34.9	40.0	87	70-130	8	30
N-Nitrosodi-n-butylamine	ND	42.3	40.0	106	41.9	40.0	105	70-130	1	30
N-Nitrosodiphenylamine	ND	10.3	40.0	26 *	10.0	40.0	25 *	70-130	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/09/2006
Sample Matrix:	Water	**Date Analyzed:**	12/04/2006

Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method:	METHOD	**Units:**	ng/L
Analysis Method:	521	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0619258

	Lab Control Sample KWG0619258-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
N-Nitrosodimethylamine	29.5	40.0	74	70-130
N-Nitrosomethylethylamine	31.1	40.0	78	70-130
N-Nitrosodiethylamine	39.6	40.0	99	70-130
N-Nitrosopyrrolidine	58.6	40.0	147 *	70-130
N-Nitrosodi-n-propylamine	42.1	40.0	105	70-130
N-Nitrosopiperidine	39.8	40.0	99	70-130
N-Nitrosodi-n-butylamine	41.8	40.0	104	70-130
N-Nitrosodiphenylamine	12.5	40.0	31 *	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/09/2006
Sample Matrix:	Water	**Date Analyzed:**	12/04/2006
		Time Analyzed:	16:47

Method Blank Summary
Nitrosamines by EPA 521

Sample Name:	Method Blank	**File ID:**	J:\MS16\DATA\120406A\1204013.D
Lab Code:	KWG0619258-4	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619258

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0619258-3	J:\MS16\DATA\120406A\1204008.D	12/04/06	13:15
MW-17-2	P0600187-001	J:\MS16\DATA\120406A\1204027.D	12/05/06	01:52
MW-17-2MS	KWG0619258-1	J:\MS16\DATA\120506\1205007.D	12/05/06	13:18
MW-17-2DMS	KWG0619258-2	J:\MS16\DATA\120506\1205008.D	12/05/06	13:56
MW-17-1	P0600187-002	J:\MS16\DATA\120506\1205009.D	12/05/06	14:35
DUPE-1-4Q06	P0600187-003	J:\MS16\DATA\120506\1205010.D	12/05/06	15:14
EB-6-11/2/06	P0600187-004	J:\MS16\DATA\120506\1205011.D	12/05/06	15:53
MW-17-2DMS	KWG0619258-2	J:\MS16\DATA\120606\1206009.D	12/06/06	13:44
MW-17-2MS	KWG0619258-1	J:\MS16\DATA\120606\1206037.D	12/07/06	07:53

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/09/2006
Sample Matrix:	Water	**Date Analyzed:**	12/04/2006
		Time Analyzed:	13:15

Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**File ID:**	J:\MS16\DATA\120406A\1204008.D
Lab Code:	KWG0619258-3	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619258

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0619258-4	J:\MS16\DATA\120406A\1204013.D	12/04/06	16:47
MW-17-2	P0600187-001	J:\MS16\DATA\120406A\1204027.D	12/05/06	01:52
MW-17-2MS	KWG0619258-1	J:\MS16\DATA\120506\1205007.D	12/05/06	13:18
MW-17-2DMS	KWG0619258-2	J:\MS16\DATA\120506\1205008.D	12/05/06	13:56
MW-17-1	P0600187-002	J:\MS16\DATA\120506\1205009.D	12/05/06	14:35
DUPE-1-4Q06	P0600187-003	J:\MS16\DATA\120506\1205010.D	12/05/06	15:14
EB-6-11/2/06	P0600187-004	J:\MS16\DATA\120506\1205011.D	12/05/06	15:53
MW-17-2DMS	KWG0619258-2	J:\MS16\DATA\120606\1206009.D	12/06/06	13:44
MW-17-2MS	KWG0619258-1	J:\MS16\DATA\120606\1206037.D	12/07/06	07:53

Organic Analysis:
Semivolatile Organic Compounds by GC/MS SIM

Summary Package

Sample and QC Results

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600187

Cover Page - Organic Analysis Data Package
Semivolatile Organic Compounds by GC/MS SIM

Sample Name	Lab Code	Date Collected	Date Received
MW-17-2	P0600187-001	11/02/2006	11/02/2006
MW-17-1	P0600187-002	11/02/2006	11/02/2006
DUPE-1-4Q06	P0600187-003	11/02/2006	11/02/2006
EB-6-11/2/06	P0600187-004	11/02/2006	11/02/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Dagner

Name: Carl Dagner

Date: 12/1/06

Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/02/2006
Sample Matrix:	Water	**Date Received:**	11/02/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-17-2	**Units:**	ng/L
Lab Code:	P0600187-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	87	70-130	11/28/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Collected: 11/02/2006
Date Received: 11/02/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: MW-17-1
Lab Code: P0600187-002

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	77	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/02/2006
Sample Matrix:	Water	**Date Received:**	11/02/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	DUPE-1-4Q06	**Units:**	ng/L
Lab Code:	P0600187-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	84	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/02/2006
Sample Matrix:	Water	**Date Received:**	11/02/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	EB-6-11/2/06	**Units:**	ng/L
Lab Code:	P0600187-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	76	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0618851-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	11/06/06	11/28/06	KWG0618851	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	74	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187

Surrogate Recovery Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
MW-17-2	P0600187-001	87
MW-17-1	P0600187-002	77
DUPE-1-4Q06	P0600187-003	84
EB-6-11/2/06	P0600187-004	76
Method Blank	KWG0618851-3	74
Lab Control Sample	KWG0618851-1	80
Duplicate Lab Control Sample	KWG0618851-2	74

Surrogate Recovery Control Limits (%)

Sur1 = 1,2,3-Trichloropropane-d5 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/28/2006
		Time Analyzed:	06:55

Internal Standard Area and RT Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID:	J:\MS14\DATA\112806\1128F002.D	**Lab Code:**	KWG0620351-2
Instrument ID:	MS14	**Analysis Lot:**	KWG0620351
Analysis Method:	8270C SIM		

		1,4-Dichlorobenzene-d4	
		Area	**RT**
	Results ==>	53,374	6.52
	Upper Limit ==>	106,748	7.02
	Lower Limit ==>	26,687	6.02
	ICAL Result ==>	49,805	6.54
Associated Analyses			
Method Blank	KWG0618851-3	60,457	6.52
Lab Control Sample	KWG0618851-1	58,200	6.52
Duplicate Lab Control Sample	KWG0618851-2	65,698	6.52
MW-17-2	P0600187-001	85,429	6.51
MW-17-1	P0600187-002	54,204	6.51
DUPE-1-4Q06	P0600187-003	57,574	6.51
EB-6-11/2/06	P0600187-004	54,632	6.51

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/06/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006

Lab Control Spike/Duplicate Lab Control Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method:	EPA 3520C	**Units:**	ng/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0618851

	Lab Control Sample KWG0618851-1 Lab Control Spike			Duplicate Lab Control Sample KWG0618851-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2,3-Trichloropropane	142	200	71	135	200	68 *	70-130	4	<30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600187
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/06/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006
		Time Analyzed:	07:36

Method Blank Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**File ID:**	J:\MS14\DATA\112806\1128F003.D
Lab Code:	KWG0618851-3	**Instrument ID:**	MS14
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0618851

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0618851-1	J:\MS14\DATA\112806\1128F004.D	11/28/06	07:56
Duplicate Lab Control Sample	KWG0618851-2	J:\MS14\DATA\112806\1128F005.D	11/28/06	08:16
MW-17-2	P0600187-001	J:\MS14\DATA\112806\1128F017.D	11/28/06	12:36
MW-17-1	P0600187-002	J:\MS14\DATA\112806\1128F018.D	11/28/06	12:56
DUPE-1-4Q06	P0600187-003	J:\MS14\DATA\112806\1128F019.D	11/28/06	13:16
EB-6-11/2/06	P0600187-004	J:\MS14\DATA\112806\1128F020.D	11/28/06	13:36

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187

Lab Control Sample/Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0618851-1	**Lab Code:**	KWG0618851-2
File ID:	J:\MS14\DATA\112806\1128F004.D	**File ID:**	J:\MS14\DATA\112806\1128F005.D
Instrument ID:	MS14	**Instrument ID:**	MS14
Date Extracted:	11/06/2006	**Date Extracted:**	11/06/2006
Date Analyzed:	11/28/2006	**Date Analyzed:**	11/28/2006
Time Analyzed:	07:56	**Time Analyzed:**	08:16

Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0618851

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0618851-3	J:\MS14\DATA\112806\1128F003.D	11/28/06	07:36
MW-17-2	P0600187-001	J:\MS14\DATA\112806\1128F017.D	11/28/06	12:36
MW-17-1	P0600187-002	J:\MS14\DATA\112806\1128F018.D	11/28/06	12:56
DUPE-1-4Q06	P0600187-003	J:\MS14\DATA\112806\1128F019.D	11/28/06	13:16
EB-6-11/2/06	P0600187-004	J:\MS14\DATA\112806\1128F020.D	11/28/06	13:36

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600187
Date Analyzed: 11/28/2006
Time Analyzed: 06:35

Tune Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID: J:\MS14\DATA\112806\1128F001.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0620351

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	23.0	404838	PASS
68	69	0	2	1.6	8054	PASS
69	198	0	100	27.9	489720	PASS
70	69	0	2	0.4	1931	PASS
127	198	10	80	40.6	713088	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	47.5	1757184	PASS
199	198	5	9	6.8	119880	PASS
275	198	10	60	32.7	574656	PASS
365	442	1	50	1.9	70128	PASS
441	443	0	100	71.3	518272	PASS
442	442	100	100	100.0	3696640	PASS
443	442	15	24	19.7	726784	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0620351-2	J:\MS14\DATA\112806\1128F002.D	11/28/2006	06:55	
Method Blank	KWG0618851-3	J:\MS14\DATA\112806\1128F003.D	11/28/2006	07:36	
Lab Control Sample	KWG0618851-1	J:\MS14\DATA\112806\1128F004.D	11/28/2006	07:56	
Duplicate Lab Control Sample	KWG0618851-2	J:\MS14\DATA\112806\1128F005.D	11/28/2006	08:16	
MW-17-2	P0600187-001	J:\MS14\DATA\112806\1128F017.D	11/28/2006	12:36	
MW-17-1	P0600187-002	J:\MS14\DATA\112806\1128F018.D	11/28/2006	12:56	
DUPE-1-4Q06	P0600187-003	J:\MS14\DATA\112806\1128F019.D	11/28/2006	13:16	
EB-6-11/2/06	P0600187-004	J:\MS14\DATA\112806\1128F020.D	11/28/2006	13:36	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600187
Calibration Date: 11/27/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5825
Instrument ID: MS14

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS14\DATA\112706A\1127A003.D	E	J:\MS14\DATA\112706A\1127A007.D
B	J:\MS14\DATA\112706A\1127A004.D	F	J:\MS14\DATA\112706A\1127A008.D
C	J:\MS14\DATA\112706A\1127A005.D	G	J:\MS14\DATA\112706A\1127A009.D
D	J:\MS14\DATA\112706A\1127A006.D	H	J:\MS14\DATA\112706A\1127A010.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2,3-Trichloropropane-d5	A	2.0	0.810	B	5.0	0.758	C	10	0.783	D	20	0.745	E	50	0.756
	F	100	0.783	G	500	0.771	H	1000	0.773						
1,2,3-Trichloropropane	A	2.0	1.01	B	5.0	0.899	C	10	0.859	D	20	0.816	E	50	0.804
	F	100	0.829	G	500	0.820	H	1000	0.821						

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600187
Calibration Date: 11/27/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5825
Instrument ID: MS14

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
1,2,3-Trichloropropane-d5	SURR	AverageRF	% RSD	2.6		≤ 30	0.773		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	8.0		≤ 30	0.857		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600187
Calibration Date: 11/27/2006
Date Analyzed: 11/27/2006

Second Source Calibration Verification
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL5825
Units: ng/ml

File ID: J:\MS14\DATA\112706A\1127A011.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane	100	91	0.857	0.777	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600187
Date Analyzed: 11/28/2006

Continuing Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/27/2006
Calibration ID: CAL5825
Analysis Lot: KWG0620351
Units: ng/ml

File ID: J:\MS14\DATA\112806\1128F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane-d5	100	100	0.01	0.773	0.777	1	NA	± 20 %	AverageRF
1,2,3-Trichloropropane	100	96	0.01	0.857	0.823	-4	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle **Service Request:** P0600187
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Analysis Run Log
Semivolatile Organic Compounds by GC/MS SIM

Analysis Method: 8270C SIM **Analysis Lot:** KWG0620351
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1128F001.D	GC/MS Tuning - Decafluorotripheny	KWG0620351-1	11/28/2006	06:35		11/28/2006	06:49
1128F002.D	Continuing Calibration Verification	KWG0620351-2	11/28/2006	06:55		11/28/2006	07:09
1128F003.D	Method Blank	KWG0618851-3	11/28/2006	07:36		11/28/2006	07:50
1128F004.D	Lab Control Sample	KWG0618851-1	11/28/2006	07:56		11/28/2006	08:10
1128F005.D	Duplicate Lab Control Sample	KWG0618851-2	11/28/2006	08:16		11/28/2006	08:30
1128F006.D	ZZZZZZ	ZZZZZZ	11/28/2006	08:36		11/28/2006	08:50
1128F007.D	ZZZZZZ	ZZZZZZ	11/28/2006	08:56		11/28/2006	09:10
1128F008.D	ZZZZZZ	ZZZZZZ	11/28/2006	09:16		11/28/2006	09:30
1128F009.D	ZZZZZZ	ZZZZZZ	11/28/2006	09:36		11/28/2006	09:50
1128F011.D	ZZZZZZ	ZZZZZZ	11/28/2006	10:16		11/28/2006	10:30
1128F012.D	ZZZZZZ	ZZZZZZ	11/28/2006	10:36		11/28/2006	10:50
1128F010.D	ZZZZZZ	ZZZZZZ	11/28/2006	10:56		11/28/2006	11:10
1128F013.D	ZZZZZZ	ZZZZZZ	11/28/2006	11:16		11/28/2006	11:30
1128F014.D	ZZZZZZ	ZZZZZZ	11/28/2006	11:36		11/28/2006	11:50
1128F015.D	ZZZZZZ	ZZZZZZ	11/28/2006	11:56		11/28/2006	12:10
1128F016.D	ZZZZZZ	ZZZZZZ	11/28/2006	12:16		11/28/2006	12:30
1128F017.D	MW-17-2	P0600187-001	11/28/2006	12:36		11/28/2006	12:50
1128F018.D	MW-17-1	P0600187-002	11/28/2006	12:56		11/28/2006	13:10
1128F019.D	DUPE-1-4Q06	P0600187-003	11/28/2006	13:16		11/28/2006	13:30
1128F020.D	EB-6-11/2/06	P0600187-004	11/28/2006	13:36		11/28/2006	13:50

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600187
Date Extracted: 11/06/2006

Extraction Prep Log
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0618851
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-17-2	P0600187-001	11/02/06	11/02/06	1020ml	2ml	NA	
MW-17-1	P0600187-002	11/02/06	11/02/06	1020ml	2ml	NA	
DUPE-1-4Q06	P0600187-003	11/02/06	11/02/06	1020ml	2ml	NA	
EB-6-11/2/06	P0600187-004	11/02/06	11/02/06	1020ml	2ml	NA	
Method Blank	KWG0618851-3	NA	NA	1030ml	2ml	NA	
Lab Control Sample	KWG0618851-1	NA	NA	1000ml	2ml	NA	
Duplicate Lab Control Sample	KWG0618851-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600200
Date Collected : 11/06-10/06
Date Received : 11/06-10/06

Chromium, Hexavalent

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

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-3-5	P0600200-001	0.01	0.004	1	NA	11/06/06	ND	
MW-3-4	P0600200-002	0.01	0.004	1	NA	11/06/06	ND	
EB-8-11/6/06	P0600200-003	0.01	0.004	1	NA	11/06/06	ND	
MW-3-3	P0600200-005	0.01	0.004	1	NA	11/07/06	ND	
MW-3-2	P0600200-006	0.01	0.004	1	NA	11/07/06	ND	
DUPE-2-4Q06	P0600200-007	0.01	0.004	1	NA	11/07/06	ND	
EB-9-11/7/06	P0600200-008	0.01	0.004	1	NA	11/07/06	ND	
MW-4-5	P0600200-010	0.01	0.004	1	NA	11/08/06	ND	
MW-3-1	P0600200-011	0.01	0.004	1	NA	11/08/06	ND	
EB-10-11/8/06	P0600200-012	0.01	0.004	1	NA	11/08/06	ND	
SB-1-11/8/06	P0600200-014	0.01	0.004	1	NA	11/08/06	ND	
MW-4-4	P0600200-015	0.01	0.004	1	NA	11/09/06	ND	
MW-4-3	P0600200-016	0.01	0.004	1	NA	11/09/06	ND	
EB-11-11/9/06	P0600200-017	0.01	0.004	1	NA	11/09/06	ND	
MW-4-2	P0600200-019	0.01	0.004	1	NA	11/10/06	ND	
MW-4-1	P0600200-020	0.01	0.004	1	NA	11/10/06	ND	
DUP3-3-4Q06	P0600200-021	0.01	0.004	1	NA	11/10/06	ND	
EB-12-11/10/06	P0600200-022	0.01	0.004	1	NA	11/10/06	ND	
Method Blank	P0600200-MB	0.01	0.004	1	NA	11/06/06	ND	
Method Blank	P0600200-MB	0.01	0.004	1	NA	11/07/06	ND	
Method Blank	P0600200-MB	0.01	0.004	1	NA	11/08/06	ND	
Method Blank	P0600200-MB	0.01	0.004	1	NA	11/09/06	ND	
Method Blank	P0600200-MB	0.01	0.004	1	NA	11/10/06	ND	

Approved By Sue Anderson Date : 11/13/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/06/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Ouellette Date: 11/13/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/06/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0379	98
CCV1	0.0387	0.0379	98

Approved By: Sue Anderson Date: 11/13/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600200
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/06/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	P0600200-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	None	7196A	0.0400	0.0379	95	90-110	
Chromium, Hexavalent	None	7196A	0.0400	0.0387	97	90-110	
Chromium, Hexavalent	None	7196A	0.0400	0.0405	101	90-110	
Chromium, Hexavalent	None	7196A	0.0400	0.0382	96	90-110	
Chromium, Hexavalent	None	7196A	0.0400	0.0391	98	90-110	

Approved By Sue Anderson Date : 11/13/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600200
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/06/06
Project Number :	G486090/204142	**Date Received :**	11/06/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/06/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : EB-8-11/6/06 Units : mg/L (ppm)
Lab Code : P0600200-003MS P0600200-003DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0482	0.0482	96	96	85-115	<1	

Approved By Sue Anderson Date : 11/13/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/07/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: _____ Date: 11/13/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/07/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0370	96
CCV1	0.0387	0.0379	98

Approved By: Sue Anderson Date: 11/13/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600200
Date Collected : 11/07/06
Date Received : 11/07/06
Date Extracted : NA
Date Analyzed : 11/07/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : EB-9-11/7/06
Lab Code : P0600200-008MS P0600200-008DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0490	0.0482	98	96	85-115	2	

Approved By _____ Date : 11/13/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/08/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: _____ Date: 11/13/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/08/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0375	97
CCV1	0.0387	0.0375	97

Approved By: _____ Date: 11/13/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600200
Date Collected : 11/08/06
Date Received : 11/08/06
Date Extracted : NA
Date Analyzed : 11/08/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-3-1
Lab Code : P0600200-011MS P0600200-011DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0523	0.0513	105	103	85-115	2	

Approved By _____ Date : 11/13/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/09/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: _____ Date: 11/13/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/09/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0364	94
CCV1	0.0387	0.0364	94

Approved By: _____ Date: 11/13/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600200
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/09/06
Project Number :	G486090/204142	**Date Received :**	11/09/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/09/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-4-4
Lab Code : P0600200-015MS P0600200-015DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0578	0.0516	116	103	85-115	11	E1

E1 See case narrative.

Approved By _____ Date : 11/13/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/10/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Cullen Date: 11/13/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/10/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0382	99
CCV1	0.0387	0.0382	99

Approved By: Sue Anderson Date: 11/13/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600200
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/10/06
Project Number :	G486090/204142	**Date Received :**	11/10/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/10/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-4-2 Units : mg/L (ppm)
Lab Code : P0600200-019MS P0600200-019DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0427	0.0462	85	92	85-115	8	

Approved By Sue Anderson Date : 11/13/06

Report By:RWONG

Organic Analysis:
EPA Method 504.1

Summary Package

Sample and QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Cover Page - Organic Analysis Data Package
EPA Method 504.1

Sample Name	Lab Code	Date Collected	Date Received
MW-3-1MS	KWG0619418-1	11/08/2006	11/08/2006
MW-3-1DMS	KWG0619418-2	11/08/2006	11/08/2006
MW-3-5	P0600200-001	11/06/2006	11/06/2006
MW-3-4	P0600200-002	11/06/2006	11/06/2006
EB-8-11/6/06	P0600200-003	11/06/2006	11/06/2006
TB-8-11/6/06	P0600200-004	11/06/2006	11/06/2006
MW-3-3	P0600200-005	11/07/2006	11/07/2006
MW-3-2	P0600200-006	11/07/2006	11/07/2006
DUPE-2-4Q06	P0600200-007	11/07/2006	11/07/2006
EB-9-11/7/06	P0600200-008	11/07/2006	11/07/2006
TB-9-11/7/06	P0600200-009	11/07/2006	11/07/2006
MW-4-5	P0600200-010	11/08/2006	11/08/2006
MW-3-1	P0600200-011	11/08/2006	11/08/2006
EB-10-11/8/06	P0600200-012	11/08/2006	11/08/2006
TB-10-11/8/06	P0600200-013	11/08/2006	11/08/2006
MW-4-4	P0600200-015	11/09/2006	11/09/2006
MW-4-3	P0600200-016	11/09/2006	11/09/2006
EB-11-11/9/06	P0600200-017	11/09/2006	11/09/2006
TB-11-11/0/06	P0600200-018	11/09/2006	11/09/2006
MW-4-2	P0600200-019	11/10/2006	11/10/2006
MW-4-1	P0600200-020	11/10/2006	11/10/2006
DUP3-3-4Q06	P0600200-021	11/10/2006	11/10/2006
EB-12-11/10/06	P0600200-022	11/10/2006	11/10/2006
TB-12-11/10/06	P0600200-023	11/10/2006	11/10/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Tim Sato

Date: 11/18/06 Title: Mr Manager

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/06/2006
Date Received: 11/06/2006

EPA Method 504.1

Sample Name: MW-3-5
Lab Code: P0600200-001

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0099	0.00170	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0099	0.00180	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/06/2006
Sample Matrix:	Water	**Date Received:**	11/06/2006

EPA Method 504.1

Sample Name:	MW-3-4	**Units:**	ug/L
Lab Code:	P0600200-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/06/2006
Sample Matrix:	Water	**Date Received:**	11/06/2006

EPA Method 504.1

Sample Name:	EB-8-11/6/06	**Units:**	ug/L
Lab Code:	P0600200-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0099	0.00170	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0099	0.00180	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/06/2006
Sample Matrix:	Water	**Date Received:**	11/06/2006

EPA Method 504.1

Sample Name:	TB-8-11/6/06	**Units:**	ug/L
Lab Code:	P0600200-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0099	0.00170	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0099	0.00180	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/07/2006
Sample Matrix:	Water	**Date Received:**	11/07/2006

EPA Method 504.1

Sample Name:	MW-3-3	**Units:**	ug/L
Lab Code:	P0600200-005	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/07/2006
Date Received: 11/07/2006

EPA Method 504.1

Sample Name: MW-3-2
Lab Code: P0600200-006

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/14/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/07/2006
Sample Matrix:	Water	**Date Received:**	11/07/2006

EPA Method 504.1

Sample Name:	DUPE-2-4Q06	**Units:**	ug/L
Lab Code:	P0600200-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0099	0.00170	1	11/13/06	11/14/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0099	0.00180	1	11/13/06	11/14/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/07/2006
Sample Matrix:	Water	**Date Received:**	11/07/2006

EPA Method 504.1

Sample Name:	EB-9-11/7/06	**Units:**	ug/L
Lab Code:	P0600200-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0097	0.00170	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0097	0.00180	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/07/2006
Date Received: 11/07/2006

EPA Method 504.1

Sample Name: TB-9-11/7/06
Lab Code: P0600200-009

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/08/2006
Sample Matrix:	Water	**Date Received:**	11/08/2006

EPA Method 504.1

Sample Name:	MW-4-5	**Units:**	ug/L
Lab Code:	P0600200-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/08/2006
Sample Matrix:	Water	**Date Received:**	11/08/2006

EPA Method 504.1

Sample Name:	MW-3-1	**Units:**	ug/L
Lab Code:	P0600200-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0099	0.00170	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0099	0.00180	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/08/2006
Sample Matrix:	Water	**Date Received:**	11/08/2006

EPA Method 504.1

Sample Name:	EB-10-11/8/06	**Units:**	ug/L
Lab Code:	P0600200-012	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/08/2006
Sample Matrix:	Water	**Date Received:**	11/08/2006

EPA Method 504.1

Sample Name:	TB-10-11/8/06	**Units:**	ug/L
Lab Code:	P0600200-013	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

EPA Method 504.1

Sample Name:	MW-4-4	**Units:**	ug/L
Lab Code:	P0600200-015	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

EPA Method 504.1

Sample Name:	MW-4-3	**Units:**	ug/L
Lab Code:	P0600200-016	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.010	0.0017	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.010	0.0018	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

EPA Method 504.1

Sample Name:	EB-11-11/9/06	**Units:**	ug/L
Lab Code:	P0600200-017	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

EPA Method 504.1

Sample Name:	TB-11-11/0/06	**Units:**	ug/L
Lab Code:	P0600200-018	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

EPA Method 504.1

Sample Name:	MW-4-2	**Units:**	ug/L
Lab Code:	P0600200-019	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

EPA Method 504.1

Sample Name:	MW-4-1	**Units:**	ug/L
Lab Code:	P0600200-020	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

EPA Method 504.1

Sample Name:	DUP3-3-4Q06	**Units:**	ug/L
Lab Code:	P0600200-021	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

EPA Method 504.1

Sample Name:	EB-12-11/10/06	**Units:**	ug/L
Lab Code:	P0600200-022	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

EPA Method 504.1

Sample Name:	TB-12-11/10/06	**Units:**	ug/L
Lab Code:	P0600200-023	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

EPA Method 504.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0619417-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0017	1	11/13/06	11/14/06	KWG0619417	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0018	1	11/13/06	11/14/06	KWG0619417	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: NA
Date Received: NA

EPA Method 504.1

Sample Name: Method Blank
Lab Code: KWG0619418-4

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0017	1	11/13/06	11/15/06	KWG0619418	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0018	1	11/13/06	11/15/06	KWG0619418	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/14/2006

Matrix Spike/Duplicate Matrix Spike Summary
EPA Method 504.1

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	P0600187-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0619417

		Batch QCMS KWG0619417-1 Matrix Spike			Batch QCDMS KWG0619417-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2-Dibromoethane (EDB)	ND	0.0774	0.0698	111	0.0741	0.0707	105	65-135	4	30
1,2-Dibromo-3-chloropropane (DBCP	ND	0.0753	0.0698	108	0.0746	0.0707	106	65-135	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/15/2006

Matrix Spike/Duplicate Matrix Spike Summary
EPA Method 504.1

Sample Name:	MW-3-1	**Units:**	ug/L
Lab Code:	P0600200-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0619418

		MW-3-1MS KWG0619418-1 Matrix Spike			MW-3-1DMS KWG0619418-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2-Dibromoethane (EDB)	ND	0.0830	0.0719	115	0.0788	0.0721	109	65-135	5	30
1,2-Dibromo-3-chloropropane (DBCP	ND	0.0828	0.0719	115	0.0742	0.0721	103	65-135	11	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/14/2006

Lab Control Spike Summary
EPA Method 504.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	504.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0619417

	Lab Control Sample KWG0619417-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.0780	0.0714	109	70-130
1,2-Dibromo-3-chloropropane (DBCP	0.0714	0.0714	100	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/14/2006

Lab Control Spike Summary
EPA Method 504.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	504.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0619417

	Lab Control Sample KWG0619417-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.0763	0.0714	107	70-130
1,2-Dibromo-3-chloropropane (DBCP	0.0668	0.0714	94	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/15/2006

Lab Control Spike Summary
EPA Method 504.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	504.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0619418

	Lab Control Sample KWG0619418-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.0805	0.0714	113	70-130
1,2-Dibromo-3-chloropropane (DBCP	0.0784	0.0714	110	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/13/2006
Date Analyzed: 11/15/2006

Lab Control Spike Summary
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0619418

	Lab Control Sample KWG0619418-5 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.0803	0.0714	112	70-130
1,2-Dibromo-3-chloropropane (DBCP	0.0826	0.0714	116	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/14/2006
		Time Analyzed:	13:11

Method Blank Summary
EPA Method 504.1

Sample Name:	Method Blank	**File ID:**	J:\GC24\DATA\111406A\1114A005.D
Lab Code:	KWG0619417-4	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0619417

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0619417-3	J:\GC24\DATA\111406A\1114A004.D	11/14/06	12:47
Batch QC	P0600187-001	J:\GC24\DATA\111406A\1114A016.D	11/14/06	17:38
Batch QCMS	KWG0619417-1	J:\GC24\DATA\111406A\1114A017.D	11/14/06	18:02
Batch QCDMS	KWG0619417-2	J:\GC24\DATA\111406A\1114A018.D	11/14/06	18:26
MW-3-5	P0600200-001	J:\GC24\DATA\111406A\1114A023.D	11/14/06	20:27
Lab Control Sample	KWG0619417-5	J:\GC24\DATA\111406A\1114A025.D	11/14/06	21:15
MW-3-4	P0600200-002	J:\GC24\DATA\111406A\1114A026.D	11/14/06	21:39
EB-8-11/6/06	P0600200-003	J:\GC24\DATA\111406A\1114A027.D	11/14/06	22:03
TB-8-11/6/06	P0600200-004	J:\GC24\DATA\111406A\1114A028.D	11/14/06	22:27
MW-3-3	P0600200-005	J:\GC24\DATA\111406A\1114A029.D	11/14/06	22:51

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/13/2006
Date Analyzed: 11/15/2006
Time Analyzed: 06:31

Method Blank Summary
EPA Method 504.1

Sample Name: Method Blank
Lab Code: KWG0619418-4

File ID: J:\GC24\DATA\111406A\1114A048.D
Instrument ID: GC24

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low
Extraction Lot: KWG0619418

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
MW-3-2	P0600200-006	J:\GC24\DATA\111406A\1114A030.D	11/14/06	23:16
DUPE-2-4Q06	P0600200-007	J:\GC24\DATA\111406A\1114A031.D	11/14/06	23:40
EB-9-11/7/06	P0600200-008	J:\GC24\DATA\111406A\1114A032.D	11/15/06	00:04
TB-9-11/7/06	P0600200-009	J:\GC24\DATA\111406A\1114A033.D	11/15/06	00:28
MW-4-5	P0600200-010	J:\GC24\DATA\111406A\1114A034.D	11/15/06	00:52
MW-3-1	P0600200-011	J:\GC24\DATA\111406A\1114A036.D	11/15/06	01:41
MW-3-1MS	KWG0619418-1	J:\GC24\DATA\111406A\1114A037.D	11/15/06	02:05
MW-3-1DMS	KWG0619418-2	J:\GC24\DATA\111406A\1114A038.D	11/15/06	02:29
EB-10-11/8/06	P0600200-012	J:\GC24\DATA\111406A\1114A039.D	11/15/06	02:53
TB-10-11/8/06	P0600200-013	J:\GC24\DATA\111406A\1114A040.D	11/15/06	03:17
MW-4-4	P0600200-015	J:\GC24\DATA\111406A\1114A041.D	11/15/06	03:42
MW-4-3	P0600200-016	J:\GC24\DATA\111406A\1114A042.D	11/15/06	04:06
EB-11-11/9/06	P0600200-017	J:\GC24\DATA\111406A\1114A043.D	11/15/06	04:30
TB-11-11/0/06	P0600200-018	J:\GC24\DATA\111406A\1114A044.D	11/15/06	04:54
MW-4-2	P0600200-019	J:\GC24\DATA\111406A\1114A045.D	11/15/06	05:18
Lab Control Sample	KWG0619418-3	J:\GC24\DATA\111406A\1114A047.D	11/15/06	06:07
MW-4-1	P0600200-020	J:\GC24\DATA\111406A\1114A049.D	11/15/06	06:56
DUP3-3-4Q06	P0600200-021	J:\GC24\DATA\111406A\1114A050.D	11/15/06	07:20
EB-12-11/10/06	P0600200-022	J:\GC24\DATA\111406A\1114A051.D	11/15/06	07:44
TB-12-11/10/06	P0600200-023	J:\GC24\DATA\111406A\1114A052.D	11/15/06	08:08
Lab Control Sample	KWG0619418-5	J:\GC24\DATA\111406A\1114A053.D	11/15/06	08:32

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/14/2006
		Time Analyzed:	12:47

Lab Control Sample Summary
EPA Method 504.1

Sample Name:	Lab Control Sample	**File ID:**	J:\GC24\DATA\111406A\1114A004.D
Lab Code:	KWG0619417-3	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0619417

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0619417-4	J:\GC24\DATA\111406A\1114A005.D	11/14/06	13:11
Batch QCMS	KWG0619417-1	J:\GC24\DATA\111406A\1114A017.D	11/14/06	18:02
Batch QCDMS	KWG0619417-2	J:\GC24\DATA\111406A\1114A018.D	11/14/06	18:26

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/14/2006
		Time Analyzed:	21:15

Lab Control Sample Summary
EPA Method 504.1

Sample Name:	Lab Control Sample	**File ID:**	J:\GC24\DATA\111406A\1114A025.D
Lab Code:	KWG0619417-5	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0619417

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QC	P0600187-001	J:\GC24\DATA\111406A\1114A016.D	11/14/06	17:38
MW-3-5	P0600200-001	J:\GC24\DATA\111406A\1114A023.D	11/14/06	20:27
MW-3-4	P0600200-002	J:\GC24\DATA\111406A\1114A026.D	11/14/06	21:39
EB-8-11/6/06	P0600200-003	J:\GC24\DATA\111406A\1114A027.D	11/14/06	22:03
TB-8-11/6/06	P0600200-004	J:\GC24\DATA\111406A\1114A028.D	11/14/06	22:27
MW-3-3	P0600200-005	J:\GC24\DATA\111406A\1114A029.D	11/14/06	22:51

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/15/2006
		Time Analyzed:	06:07

Lab Control Sample Summary
EPA Method 504.1

Sample Name:	Lab Control Sample	**File ID:**	J:\GC24\DATA\111406A\1114A047.D
Lab Code:	KWG0619418-3	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0619418

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
MW-3-2	P0600200-006	J:\GC24\DATA\111406A\1114A030.D	11/14/06	23:16
DUPE-2-4Q06	P0600200-007	J:\GC24\DATA\111406A\1114A031.D	11/14/06	23:40
EB-9-11/7/06	P0600200-008	J:\GC24\DATA\111406A\1114A032.D	11/15/06	00:04
TB-9-11/7/06	P0600200-009	J:\GC24\DATA\111406A\1114A033.D	11/15/06	00:28
MW-4-5	P0600200-010	J:\GC24\DATA\111406A\1114A034.D	11/15/06	00:52
MW-3-1	P0600200-011	J:\GC24\DATA\111406A\1114A036.D	11/15/06	01:41
MW-3-1MS	KWG0619418-1	J:\GC24\DATA\111406A\1114A037.D	11/15/06	02:05
MW-3-1DMS	KWG0619418-2	J:\GC24\DATA\111406A\1114A038.D	11/15/06	02:29
EB-10-11/8/06	P0600200-012	J:\GC24\DATA\111406A\1114A039.D	11/15/06	02:53
TB-10-11/8/06	P0600200-013	J:\GC24\DATA\111406A\1114A040.D	11/15/06	03:17
MW-4-4	P0600200-015	J:\GC24\DATA\111406A\1114A041.D	11/15/06	03:42
MW-4-3	P0600200-016	J:\GC24\DATA\111406A\1114A042.D	11/15/06	04:06

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/13/2006
Date Analyzed: 11/15/2006
Time Analyzed: 08:32

Lab Control Sample Summary
EPA Method 504.1

Sample Name: Lab Control Sample
Lab Code: KWG0619418-5
Extraction Method: METHOD
Analysis Method: 504.1

File ID: J:\GC24\DATA\111406A\1114A053.D
Instrument ID: GC24
Level: Low
Extraction Lot: KWG0619418

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
EB-11-11/9/06	P0600200-017	J:\GC24\DATA\111406A\1114A043.D	11/15/06	04:30
TB-11-11/0/06	P0600200-018	J:\GC24\DATA\111406A\1114A044.D	11/15/06	04:54
MW-4-2	P0600200-019	J:\GC24\DATA\111406A\1114A045.D	11/15/06	05:18
Method Blank	KWG0619418-4	J:\GC24\DATA\111406A\1114A048.D	11/15/06	06:31
MW-4-1	P0600200-020	J:\GC24\DATA\111406A\1114A049.D	11/15/06	06:56
DUP3-3-4Q06	P0600200-021	J:\GC24\DATA\111406A\1114A050.D	11/15/06	07:20
EB-12-11/10/06	P0600200-022	J:\GC24\DATA\111406A\1114A051.D	11/15/06	07:44
TB-12-11/10/06	P0600200-023	J:\GC24\DATA\111406A\1114A052.D	11/15/06	08:08

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/07/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5779
Instrument ID: GC24

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC24\DATA\110706\11070002.D	E	J:\GC24\DATA\110706\11070006.D
B	J:\GC24\DATA\110706\11070003.D	F	J:\GC24\DATA\110706\11070007.D
C	J:\GC24\DATA\110706\11070004.D	G	J:\GC24\DATA\110706\11070008.D
D	J:\GC24\DATA\110706\11070005.D	H	J:\GC24\DATA\110706\11070009.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
1,2-Dibromoethane (EDB)	A	0.075	2.03E+6	B	0.13	1.85E+6	C	0.25	1.91E+6	D	0.63	2.22E+6	E	1.3	2.09E+6
	F	3.8	2.01E+6	G	5.0	2.00E+6	H	10	1.82E+6						
1,2-Dibromo-3-chloropropane (DBCP	A	0.075	3.36E+6	B	0.13	3.18E+6	C	0.25	3.07E+6	D	0.63	3.28E+6	E	1.3	3.17E+6
	F	3.8	3.13E+6	G	5.0	3.15E+6	H	10	3.00E+6						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/07/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5779
Instrument ID: GC24

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	6.5		≤ 20
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	3.5		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/07/2006
Date Analyzed: 11/07/2006

Second Source Calibration Verification
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration ID: CAL5779
Units: ppb

File ID: J:\GC24\DATA\110706\11070010.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.3	1990000	2090000	5	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.3	3170000	3170000	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/07/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5779
Instrument ID: GC24

Column: DB-XLB

Level ID	File ID	Level ID	File ID
A	J:\GC24\DATA\110706\11070002.D\11070002c.d	E	J:\GC24\DATA\110706\11070006.D\11070006c.d
B	J:\GC24\DATA\110706\11070003.D\11070003c.d	F	J:\GC24\DATA\110706\11070007.D\11070007c.d
C	J:\GC24\DATA\110706\11070004.D\11070004c.d	G	J:\GC24\DATA\110706\11070008.D\11070008c.d
D	J:\GC24\DATA\110706\11070005.D\11070005c.d	H	J:\GC24\DATA\110706\11070009.D\11070009c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
1,2-Dibromoethane (EDB)	A	0.075	1.98E+6	B	0.13	1.91E+6	C	0.25	2.08E+6	D	0.63	2.20E+6	E	1.3	2.04E+6
	F	3.8	1.91E+6	G	5.0	1.90E+6	H	10	1.73E+6						
1,2-Dibromo-3-chloropropane (DBCP	A	0.075	2.74E+6	B	0.13	2.59E+6	C	0.25	2.55E+6	D	0.63	2.74E+6	E	1.3	2.59E+6
	F	3.8	2.61E+6	G	5.0	2.62E+6	H	10	2.52E+6						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/07/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5779
Instrument ID: GC24

Column: DB-XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	7.2		≤ 20
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	3.1		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/07/2006
Date Analyzed: 11/07/2006

Second Source Calibration Verification
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration ID: CAL5779
Units: ppb

File ID: J:\GC24\DATA\110706\11070010.D\11070010c.d

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.3	1970000	2090000	6	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.3	2620000	2740000	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A003.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	0.97	1990000	1550000	-22	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	0.88	3170000	2240000	-29	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A003.D\1114A003C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.4	1970000	2190000	11	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.3	2620000	2630000	0	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A013.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	0.93	1990000	1490000	-25	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	0.90	3170000	2270000	-28	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A013.D\1114A013C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.4	1970000	2270000	15	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.4	2620000	2840000	8	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A024.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	0.88	1990000	1400000	-29		NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	0.84	3170000	2130000	-33	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A024.D\1114A024C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.4	1970000	2230000	13	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.3	2620000	2790000	7	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/15/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A035.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	3.2	1990000	1270000	-36	*	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	3.0	3170000	1890000	-40	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/15/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A035.D\1114A035C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	5.2	1970000	2040000	4	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	5.2	2620000	2730000	4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/15/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A046.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	0.87	1990000	1390000	-30	*	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	0.86	3170000	2190000	-31	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/15/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A046.D\1114A046C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.4	1970000	2270000	15	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.4	2620000	2970000	13	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/15/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A054.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	3.2	1990000	1290000	-35	*	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	3.2	3170000	2060000	-35	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/15/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A054.D\1114A054C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	5.1	1970000	2020000	2	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	5.4	2620000	2830000	8	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/15/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A056.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	3.2	1990000	1260000	-37	*	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	3.1	3170000	1980000	-38	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/15/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/07/2006
Calibration ID: CAL5779
Analysis Lot: KWG0619574
Units: ppb

File ID: J:\GC24\DATA\111406A\1114A056.D\1114A056C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	5.3	1970000	2070000	5	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	5.5	2620000	2890000	10	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Analysis Run Log
EPA Method 504.1

Analysis Method: 504.1

Analysis Lot: KWG0619574
Instrument ID: GC24
Column: DB-35MS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1114A003.D	Continuing Calibration Verification	KWG0619574-1	11/14/06	12:23		11/14/06	12:40
1114A004.D	Lab Control Sample	KWG0619417-3	11/14/06	12:47		11/14/06	13:04
1114A005.D	Method Blank	KWG0619417-4	11/14/06	13:11		11/14/06	13:28
1114A006.D	ZZZZZZ	ZZZZZZ	11/14/06	13:35		11/14/06	13:52
1114A007.D	ZZZZZZ	ZZZZZZ	11/14/06	14:00		11/14/06	14:17
1114A008.D	ZZZZZZ	ZZZZZZ	11/14/06	14:24		11/14/06	14:41
1114A009.D	ZZZZZZ	ZZZZZZ	11/14/06	14:48		11/14/06	15:05
1114A010.D	ZZZZZZ	ZZZZZZ	11/14/06	15:12		11/14/06	15:29
1114A011.D	ZZZZZZ	ZZZZZZ	11/14/06	15:36		11/14/06	15:53
1114A012.D	ZZZZZZ	ZZZZZZ	11/14/06	16:01		11/14/06	16:18
1114A013.D	Continuing Calibration Verification	KWG0619574-2	11/14/06	16:25		11/14/06	16:42
1114A014.D	ZZZZZZ	ZZZZZZ	11/14/06	16:49		11/14/06	17:06
1114A015.D	ZZZZZZ	ZZZZZZ	11/14/06	17:13		11/14/06	17:30
1114A016.D	Batch QC	P0600187-001	11/14/06	17:38		11/14/06	17:55
1114A017.D	Batch QCMS	KWG0619417-1	11/14/06	18:02		11/14/06	18:19
1114A018.D	Batch QCDMS	KWG0619417-2	11/14/06	18:26		11/14/06	18:43
1114A019.D	ZZZZZZ	ZZZZZZ	11/14/06	18:50		11/14/06	19:07
1114A020.D	ZZZZZZ	ZZZZZZ	11/14/06	19:14		11/14/06	19:31
1114A021.D	ZZZZZZ	ZZZZZZ	11/14/06	19:38		11/14/06	19:55
1114A022.D	ZZZZZZ	ZZZZZZ	11/14/06	20:02		11/14/06	20:19
1114A023.D	MW-3-5	P0600200-001	11/14/06	20:27		11/14/06	20:44
1114A024.D	Continuing Calibration Verification	KWG0619574-3	11/14/06	20:51		11/14/06	21:08
1114A025.D	Lab Control Sample	KWG0619417-5	11/14/06	21:15		11/14/06	21:32
1114A026.D	MW-3-4	P0600200-002	11/14/06	21:39		11/14/06	21:56
1114A027.D	EB-8-11/6/06	P0600200-003	11/14/06	22:03		11/14/06	22:20
1114A028.D	TB-8-11/6/06	P0600200-004	11/14/06	22:27		11/14/06	22:44
1114A029.D	MW-3-3	P0600200-005	11/14/06	22:51		11/14/06	23:08
1114A030.D	MW-3-2	P0600200-006	11/14/06	23:16		11/14/06	23:33
1114A031.D	DUPE-2-4Q06	P0600200-007	11/14/06	23:40		11/14/06	23:57
1114A032.D	EB-9-11/7/06	P0600200-008	11/15/06	00:04		11/15/06	00:21
1114A033.D	TB-9-11/7/06	P0600200-009	11/15/06	00:28		11/15/06	00:45
1114A034.D	MW-4-5	P0600200-010	11/15/06	00:52		11/15/06	01:09
1114A035.D	Continuing Calibration Verification	KWG0619574-4	11/15/06	01:16		11/15/06	01:33
1114A036.D	MW-3-1	P0600200-011	11/15/06	01:41		11/15/06	01:58

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Analysis Run Log
EPA Method 504.1

Analysis Method: 504.1

Analysis Lot: KWG0619574
Instrument ID: GC24
Column: DB-35MS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1114A037.D	MW-3-1MS	KWG0619418-1	11/15/06	02:05		11/15/06	02:22
1114A038.D	MW-3-1DMS	KWG0619418-2	11/15/06	02:29		11/15/06	02:46
1114A039.D	EB-10-11/8/06	P0600200-012	11/15/06	02:53		11/15/06	03:10
1114A040.D	TB-10-11/8/06	P0600200-013	11/15/06	03:17		11/15/06	03:34
1114A041.D	MW-4-4	P0600200-015	11/15/06	03:42		11/15/06	03:59
1114A042.D	MW-4-3	P0600200-016	11/15/06	04:06		11/15/06	04:23
1114A043.D	EB-11-11/9/06	P0600200-017	11/15/06	04:30		11/15/06	04:47
1114A044.D	TB-11-11/0/06	P0600200-018	11/15/06	04:54		11/15/06	05:11
1114A045.D	MW-4-2	P0600200-019	11/15/06	05:18		11/15/06	05:35
1114A046.D	Continuing Calibration Verification	KWG0619574-5	11/15/06	05:43		11/15/06	06:00
1114A047.D	Lab Control Sample	KWG0619418-3	11/15/06	06:07		11/15/06	06:24
1114A048.D	Method Blank	KWG0619418-4	11/15/06	06:31		11/15/06	06:48
1114A049.D	MW-4-1	P0600200-020	11/15/06	06:56		11/15/06	07:13
1114A050.D	DUP3-3-4Q06	P0600200-021	11/15/06	07:20		11/15/06	07:37
1114A051.D	EB-12-11/10/06	P0600200-022	11/15/06	07:44		11/15/06	08:01
1114A052.D	TB-12-11/10/06	P0600200-023	11/15/06	08:08		11/15/06	08:25
1114A053.D	Lab Control Sample	KWG0619418-5	11/15/06	08:32		11/15/06	08:49
1114A054.D	Continuing Calibration Verification	KWG0619574-6	11/15/06	08:57		11/15/06	09:14
1114A055.D	ZZZZZZ	ZZZZZZ	11/15/06	09:21		11/15/06	09:38
1114A056.D	Continuing Calibration Verification	KWG0619574-7	11/15/06	09:45		11/15/06	10:02

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/13/2006

Extraction Prep Log
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Extraction Lot: KWG0619417
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-3-5	P0600200-001	11/06/06	11/06/06	35.55ml	2ml	NA	
MW-3-4	P0600200-002	11/06/06	11/06/06	34.73ml	2ml	NA	
EB-8-11/6/06	P0600200-003	11/06/06	11/06/06	35.37ml	2ml	NA	
TB-8-11/6/06	P0600200-004	11/06/06	11/06/06	35.45ml	2ml	NA	
MW-3-3	P0600200-005	11/07/06	11/07/06	34.78ml	2ml	NA	
Method Blank	KWG0619417-4	NA	NA	35ml	2ml	NA	
Batch QCMS	KWG0619417-1	NA	NA	35.80ml	2ml	NA	
Batch QCDMS	KWG0619417-2	NA	NA	35.37ml	2ml	NA	
Batch QC	P0600187-001	NA	NA	35.24ml	2ml	NA	
Lab Control Sample	KWG0619417-3	NA	NA	35ml	2ml	NA	
Lab Control Sample	KWG0619417-5	NA	NA	35ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/13/2006

Extraction Prep Log
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Extraction Lot: KWG0619418
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-3-2	P0600200-006	11/07/06	11/07/06	33.69ml	2ml	NA	
DUPE-2-4Q06	P0600200-007	11/07/06	11/07/06	35.71ml	2ml	NA	
EB-9-11/7/06	P0600200-008	11/07/06	11/07/06	36.30ml	2ml	NA	
TB-9-11/7/06	P0600200-009	11/07/06	11/07/06	34.94ml	2ml	NA	
MW-4-5	P0600200-010	11/08/06	11/08/06	35.18ml	2ml	NA	
MW-3-1	P0600200-011	11/08/06	11/08/06	35.63ml	2ml	NA	
EB-10-11/8/06	P0600200-012	11/08/06	11/08/06	35.06ml	2ml	NA	
TB-10-11/8/06	P0600200-013	11/08/06	11/08/06	35.08ml	2ml	NA	
MW-4-4	P0600200-015	11/09/06	11/09/06	34.77ml	2ml	NA	
MW-4-3	P0600200-016	11/09/06	11/09/06	35.24ml	2ml	NA	
EB-11-11/9/06	P0600200-017	11/09/06	11/09/06	34.64ml	2ml	NA	
TB-11-11/0/06	P0600200-018	11/09/06	11/09/06	34.60ml	2ml	NA	
MW-4-2	P0600200-019	11/10/06	11/10/06	34.26ml	2ml	NA	
MW-4-1	P0600200-020	11/10/06	11/10/06	34.44ml	2ml	NA	
DUP3-3-4Q06	P0600200-021	11/10/06	11/10/06	34.92ml	2ml	NA	
EB-12-11/10/06	P0600200-022	11/10/06	11/10/06	34.54ml	2ml	NA	
TB-12-11/10/06	P0600200-023	11/10/06	11/10/06	34.29ml	2ml	NA	
Method Blank	KWG0619418-4	NA	NA	35ml	2ml	NA	
MW-3-1MS	KWG0619418-1	11/08/06	11/08/06	34.76ml	2ml	NA	
MW-3-1DMS	KWG0619418-2	11/08/06	11/08/06	34.67ml	2ml	NA	
Lab Control Sample	KWG0619418-3	NA	NA	35ml	2ml	NA	
Lab Control Sample	KWG0619418-5	NA	NA	35ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

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Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Cover Page - Organic Analysis Data Package
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
MW-3-1MS	KWG0619857-1	11/08/2006	11/08/2006
MW-3-1DMS	KWG0619857-2	11/08/2006	11/08/2006
MW-3-5	P0600200-001	11/06/2006	11/06/2006
MW-3-4	P0600200-002	11/06/2006	11/06/2006
EB-8-11/6/06	P0600200-003	11/06/2006	11/06/2006
MW-3-3	P0600200-005	11/07/2006	11/07/2006
MW-3-2	P0600200-006	11/07/2006	11/07/2006
DUPE-2-4Q06	P0600200-007	11/07/2006	11/07/2006
EB-9-11/7/06	P0600200-008	11/07/2006	11/07/2006
MW-4-5	P0600200-010	11/08/2006	11/08/2006
MW-3-1	P0600200-011	11/08/2006	11/08/2006
EB-10-11/8/06	P0600200-012	11/08/2006	11/08/2006
MW-4-4	P0600200-015	11/09/2006	11/09/2006
MW-4-3	P0600200-016	11/09/2006	11/09/2006
EB-11-11/9/06	P0600200-017	11/09/2006	11/09/2006
MW-4-2	P0600200-019	11/10/2006	11/10/2006
MW-4-1	P0600200-020	11/10/2006	11/10/2006
DUP3-3-4Q06	P0600200-021	11/10/2006	11/10/2006
EB-12-11/10/06	P0600200-022	11/10/2006	11/10/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Jim Smith

Date: 12/8/06 Title: PM Manager

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/06/2006
Sample Matrix:	Water	**Date Received:**	11/06/2006

Nitrosamines by EPA 521

Sample Name:	MW-3-5	**Units:**	ng/L
Lab Code:	P0600200-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/07/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/07/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/07/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/07/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/07/06	KWG0619258	
N-Nitrosopiperidine	**1.1**	J	2.0	0.79	1	11/09/06	12/07/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/07/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/07/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	96	70-130	12/07/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/06/2006
Sample Matrix:	Water	**Date Received:**	11/06/2006

Nitrosamines by EPA 521

Sample Name:	MW-3-4	**Units:**	ng/L
Lab Code:	P0600200-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	92	70-130	12/05/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/06/2006
Sample Matrix:	Water	**Date Received:**	11/06/2006

Nitrosamines by EPA 521

Sample Name:	EB-8-11/6/06	**Units:**	ng/L
Lab Code:	P0600200-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/05/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/05/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/05/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	91	70-130	12/05/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/07/2006
Sample Matrix:	Water	**Date Received:**	11/07/2006

Nitrosamines by EPA 521

Sample Name:	MW-3-3	**Units:**	ng/L
Lab Code:	P0600200-005	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	**2.0**	J	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	103	70-130	12/06/06	Acceptable

Comments:

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/07/2006
Date Received: 11/07/2006

Nitrosamines by EPA 521

Sample Name: MW-3-2
Lab Code: P0600200-006

Units: ng/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 521

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	88	70-130	12/06/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/07/2006
Sample Matrix:	Water	**Date Received:**	11/07/2006

Nitrosamines by EPA 521

Sample Name:	DUPE-2-4Q06	**Units:**	ng/L
Lab Code:	P0600200-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	97	70-130	12/06/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/07/2006
Sample Matrix:	Water	**Date Received:**	11/07/2006

Nitrosamines by EPA 521

Sample Name:	EB-9-11/7/06	**Units:**	ng/L
Lab Code:	P0600200-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	92	70-130	12/06/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/08/2006
Date Received: 11/08/2006

Nitrosamines by EPA 521

Sample Name: MW-4-5
Lab Code: P0600200-010

Units: ng/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 521

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	108	70-130	12/06/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/08/2006
Sample Matrix:	Water	**Date Received:**	11/08/2006

Nitrosamines by EPA 521

Sample Name:	MW-3-1	**Units:**	ng/L
Lab Code:	P0600200-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	79	70-130	12/06/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/08/2006
Sample Matrix:	Water	**Date Received:**	11/08/2006

Nitrosamines by EPA 521

Sample Name:	EB-10-11/8/06	**Units:**	ng/L
Lab Code:	P0600200-012	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	97	70-130	12/06/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

Nitrosamines by EPA 521

Sample Name:	MW-4-4	**Units:**	ng/L
Lab Code:	P0600200-015	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	**2.6**		2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	103	70-130	12/06/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

Nitrosamines by EPA 521

Sample Name:	MW-4-3	**Units:**	ng/L
Lab Code:	P0600200-016	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	**0.80**	J	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	96	70-130	12/06/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

Nitrosamines by EPA 521

Sample Name:	EB-11-11/9/06	**Units:**	ng/L
Lab Code:	P0600200-017	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/06/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/06/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/06/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	90	70-130	12/06/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

Nitrosamines by EPA 521

Sample Name:	MW-4-2	**Units:**	ng/L
Lab Code:	P0600200-019	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/07/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/07/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	74	70-130	12/07/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

Nitrosamines by EPA 521

Sample Name:	MW-4-1	**Units:**	ng/L
Lab Code:	P0600200-020	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/07/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/07/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	90	70-130	12/07/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

Nitrosamines by EPA 521

Sample Name:	DUP3-3-4Q06	**Units:**	ng/L
Lab Code:	P0600200-021	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/07/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/07/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	90	70-130	12/07/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

Nitrosamines by EPA 521

Sample Name:	EB-12-11/10/06	**Units:**	ng/L
Lab Code:	P0600200-022	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/07/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/07/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	88	70-130	12/07/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0619258-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiethylamine	**1.3**	J	2.0	0.89	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/09/06	12/04/06	KWG0619258	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/09/06	12/04/06	KWG0619258	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/09/06	12/04/06	KWG0619258	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	85	70-130	12/04/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0619857-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/04/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/04/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	81	70-130	12/04/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200

Surrogate Recovery Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Level: Low

Sample Name	Lab Code	Sur1
MW-3-5	P0600200-001	96
MW-3-4	P0600200-002	92
EB-8-11/6/06	P0600200-003	91
MW-3-3	P0600200-005	103
MW-3-2	P0600200-006	88
DUPE-2-4Q06	P0600200-007	97
EB-9-11/7/06	P0600200-008	92
MW-4-5	P0600200-010	108
MW-3-1	P0600200-011	79
EB-10-11/8/06	P0600200-012	97
MW-4-4	P0600200-015	103
MW-4-3	P0600200-016	96
EB-11-11/9/06	P0600200-017	90
MW-4-2	P0600200-019	74
MW-4-1	P0600200-020	90
DUP3-3-4Q06	P0600200-021	90
EB-12-11/10/06	P0600200-022	88
Method Blank	KWG0619258-4	85
Method Blank	KWG0619857-4	81
Batch QCMS	KWG0619258-1	94
Batch QCDMS	KWG0619258-2	91
MW-3-1MS	KWG0619857-1	94
MW-3-1DMS	KWG0619857-2	86
Batch QC	P0600187-001	72
Lab Control Sample	KWG0619258-3	98
Lab Control Sample	KWG0619857-3	81

Surrogate Recovery Control Limits (%)

Sur1 = N-Nitrosodimethylamine-d6 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/09/2006
Sample Matrix:	Water	**Date Analyzed:**	12/05/2006 - 12/07/2006

Matrix Spike/Duplicate Matrix Spike Summary
Nitrosamines by EPA 521

Sample Name:	Batch QC	**Units:**	ng/L
Lab Code:	P0600187-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619258

Analyte Name	Sample Result	Batch QCMS KWG0619258-1 Matrix Spike			Batch QCDMS KWG0619258-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
N-Nitrosodimethylamine	ND	25.1	40.0	63 *	29.8	40.0	74	70-130	17	30
N-Nitrosomethylethylamine	ND	29.6	40.0	74	30.9	40.0	77	70-130	4	30
N-Nitrosodiethylamine	ND	34.7	40.0	87	35.5	40.0	89	70-130	2	30
N-Nitrosopyrrolidine	ND	36.7	40.0	92	46.0	40.0	115	70-130	23	30
N-Nitrosodi-n-propylamine	ND	40.1	40.0	100	43.0	40.0	108	70-130	7	30
N-Nitrosopiperidine	ND	32.1	40.0	80	34.9	40.0	87	70-130	8	30
N-Nitrosodi-n-butylamine	ND	42.3	40.0	106	41.9	40.0	105	70-130	1	30
N-Nitrosodiphenylamine	ND	10.3	40.0	26 *	10.0	40.0	25 *	70-130	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/17/2006
Sample Matrix:	Water	**Date Analyzed:**	12/06/2006

Matrix Spike/Duplicate Matrix Spike Summary
Nitrosamines by EPA 521

Sample Name:	MW-3-1	**Units:**	ng/L
Lab Code:	P0600200-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619857

Analyte Name	Sample Result	MW-3-1MS KWG0619857-1 Matrix Spike			MW-3-1DMS KWG0619857-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
N-Nitrosodimethylamine	ND	31.3	40.0	78	32.0	40.0	80	70-130	2	30
N-Nitrosomethylethylamine	ND	31.4	40.0	79	29.4	40.0	74	70-130	7	30
N-Nitrosodiethylamine	ND	32.3	40.0	81	39.4	40.0	98	70-130	20	30
N-Nitrosopyrrolidine	ND	37.9	40.0	95	42.0	40.0	105	70-130	10	30
N-Nitrosodi-n-propylamine	ND	38.4	40.0	96	35.1	40.0	88	70-130	9	30
N-Nitrosopiperidine	ND	31.8	40.0	80	32.4	40.0	81	70-130	2	30
N-Nitrosodi-n-butylamine	ND	31.5	40.0	79	35.7	40.0	89	70-130	13	30
N-Nitrosodiphenylamine	ND	9.10	40.0	23 *	9.40	40.0	24 *	70-130	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/09/2006
Date Analyzed: 12/04/2006

Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Basis: NA
Level: Low
Extraction Lot: KWG0619258

Analyte Name	Lab Control Sample KWG0619258-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
N-Nitrosodimethylamine	29.5	40.0	74	70-130
N-Nitrosomethylethylamine	31.1	40.0	78	70-130
N-Nitrosodiethylamine	39.6	40.0	99	70-130
N-Nitrosopyrrolidine	58.6	40.0	147 *	70-130
N-Nitrosodi-n-propylamine	42.1	40.0	105	70-130
N-Nitrosopiperidine	39.8	40.0	99	70-130
N-Nitrosodi-n-butylamine	41.8	40.0	104	70-130
N-Nitrosodiphenylamine	12.5	40.0	31 *	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/17/2006
Date Analyzed: 12/04/2006

Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Basis: NA
Level: Low
Extraction Lot: KWG0619857

Analyte Name	Lab Control Sample KWG0619857-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
N-Nitrosopiperidine	40.2	40.0	100	70-130
N-Nitrosodimethylamine	28.3	40.0	71	70-130
N-Nitrosomethylethylamine	30.2	40.0	75	70-130
N-Nitrosodiethylamine	32.1	40.0	80	70-130
N-Nitrosopyrrolidine	52.4	40.0	131 *	70-130
N-Nitrosodi-n-propylamine	43.2	40.0	108	70-130
N-Nitrosodi-n-butylamine	45.0	40.0	113	70-130
N-Nitrosodiphenylamine	13.7	40.0	34 *	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/09/2006
Date Analyzed: 12/04/2006
Time Analyzed: 16:47

Method Blank Summary
Nitrosamines by EPA 521

Sample Name: Method Blank
Lab Code: KWG0619258-4

File ID: J:\MS16\DATA\120406A\1204013.D
Instrument ID: MS16

Extraction Method: METHOD
Analysis Method: 521

Level: Low
Extraction Lot: KWG0619258

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0619258-3	J:\MS16\DATA\120406A\1204008.D	12/04/06	13:15
Batch QC	P0600187-001	J:\MS16\DATA\120406A\1204027.D	12/05/06	01:52
Batch QCMS	KWG0619258-1	J:\MS16\DATA\120506\1205007.D	12/05/06	13:18
Batch QCDMS	KWG0619258-2	J:\MS16\DATA\120506\1205008.D	12/05/06	13:56
MW-3-5	P0600200-001	J:\MS16\DATA\120506\1205014.D	12/05/06	17:50
MW-3-4	P0600200-002	J:\MS16\DATA\120506\1205015.D	12/05/06	18:29
EB-8-11/6/06	P0600200-003	J:\MS16\DATA\120506\1205016.D	12/05/06	19:08
Batch QCDMS	KWG0619258-2	J:\MS16\DATA\120606\1206009.D	12/06/06	13:44
MW-3-5	P0600200-001	J:\MS16\DATA\120606\1206036.D	12/07/06	07:14
Batch QCMS	KWG0619258-1	J:\MS16\DATA\120606\1206037.D	12/07/06	07:53

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/17/2006
Sample Matrix:	Water	**Date Analyzed:**	12/04/2006
		Time Analyzed:	16:08

Method Blank Summary
Nitrosamines by EPA 521

Sample Name:	Method Blank	**File ID:**	J:\MS16\DATA\120406A\1204012.D
Lab Code:	KWG0619857-4	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619857

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0619857-3	J:\MS16\DATA\120406A\1204009.D	12/04/06	13:56
MW-3-3	P0600200-005	J:\MS16\DATA\120606\1206012.D	12/06/06	15:41
MW-3-2	P0600200-006	J:\MS16\DATA\120606\1206013.D	12/06/06	16:20
DUPE-2-4Q06	P0600200-007	J:\MS16\DATA\120606\1206014.D	12/06/06	16:59
EB-9-11/7/06	P0600200-008	J:\MS16\DATA\120606\1206015.D	12/06/06	17:38
MW-4-5	P0600200-010	J:\MS16\DATA\120606\1206016.D	12/06/06	18:16
MW-3-1	P0600200-011	J:\MS16\DATA\120606\1206017.D	12/06/06	18:55
MW-3-1MS	KWG0619857-1	J:\MS16\DATA\120606\1206018.D	12/06/06	19:34
MW-3-1DMS	KWG0619857-2	J:\MS16\DATA\120606\1206019.D	12/06/06	20:13
EB-10-11/8/06	P0600200-012	J:\MS16\DATA\120606\1206020.D	12/06/06	20:52
MW-4-4	P0600200-015	J:\MS16\DATA\120606\1206021.D	12/06/06	21:31
MW-4-3	P0600200-016	J:\MS16\DATA\120606\1206023.D	12/06/06	22:49
EB-11-11/9/06	P0600200-017	J:\MS16\DATA\120606\1206024.D	12/06/06	23:28
MW-4-2	P0600200-019	J:\MS16\DATA\120606\1206025.D	12/07/06	00:07
MW-4-1	P0600200-020	J:\MS16\DATA\120606\1206026.D	12/07/06	00:46
DUP3-3-4Q06	P0600200-021	J:\MS16\DATA\120606\1206027.D	12/07/06	01:24
EB-12-11/10/06	P0600200-022	J:\MS16\DATA\120606\1206028.D	12/07/06	02:03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/09/2006
Sample Matrix:	Water	**Date Analyzed:**	12/04/2006
		Time Analyzed:	13:15

Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**File ID:**	J:\MS16\DATA\120406A\1204008.D
Lab Code:	KWG0619258-3	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619258

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0619258-4	J:\MS16\DATA\120406A\1204013.D	12/04/06	16:47
Batch QC	P0600187-001	J:\MS16\DATA\120406A\1204027.D	12/05/06	01:52
Batch QCMS	KWG0619258-1	J:\MS16\DATA\120506\1205007.D	12/05/06	13:18
Batch QCDMS	KWG0619258-2	J:\MS16\DATA\120506\1205008.D	12/05/06	13:56
MW-3-5	P0600200-001	J:\MS16\DATA\120506\1205014.D	12/05/06	17:50
MW-3-4	P0600200-002	J:\MS16\DATA\120506\1205015.D	12/05/06	18:29
EB-8-11/6/06	P0600200-003	J:\MS16\DATA\120506\1205016.D	12/05/06	19:08
Batch QCDMS	KWG0619258-2	J:\MS16\DATA\120606\1206009.D	12/06/06	13:44
MW-3-5	P0600200-001	J:\MS16\DATA\120606\1206036.D	12/07/06	07:14
Batch QCMS	KWG0619258-1	J:\MS16\DATA\120606\1206037.D	12/07/06	07:53

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/17/2006
Date Analyzed: 12/04/2006
Time Analyzed: 13:56

Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name: Lab Control Sample
Lab Code: KWG0619857-3

File ID: J:\MS16\DATA\120406A\1204009.D
Instrument ID: MS16

Extraction Method: METHOD
Analysis Method: 521

Level: Low
Extraction Lot: KWG0619857

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0619857-4	J:\MS16\DATA\120406A\1204012.D	12/04/06	16:08
MW-3-3	P0600200-005	J:\MS16\DATA\120606\1206012.D	12/06/06	15:41
MW-3-2	P0600200-006	J:\MS16\DATA\120606\1206013.D	12/06/06	16:20
DUPE-2-4Q06	P0600200-007	J:\MS16\DATA\120606\1206014.D	12/06/06	16:59
EB-9-11/7/06	P0600200-008	J:\MS16\DATA\120606\1206015.D	12/06/06	17:38
MW-4-5	P0600200-010	J:\MS16\DATA\120606\1206016.D	12/06/06	18:16
MW-3-1	P0600200-011	J:\MS16\DATA\120606\1206017.D	12/06/06	18:55
MW-3-1MS	KWG0619857-1	J:\MS16\DATA\120606\1206018.D	12/06/06	19:34
MW-3-1DMS	KWG0619857-2	J:\MS16\DATA\120606\1206019.D	12/06/06	20:13
EB-10-11/8/06	P0600200-012	J:\MS16\DATA\120606\1206020.D	12/06/06	20:52
MW-4-4	P0600200-015	J:\MS16\DATA\120606\1206021.D	12/06/06	21:31
MW-4-3	P0600200-016	J:\MS16\DATA\120606\1206023.D	12/06/06	22:49
EB-11-11/9/06	P0600200-017	J:\MS16\DATA\120606\1206024.D	12/06/06	23:28
MW-4-2	P0600200-019	J:\MS16\DATA\120606\1206025.D	12/07/06	00:07
MW-4-1	P0600200-020	J:\MS16\DATA\120606\1206026.D	12/07/06	00:46
DUP3-3-4Q06	P0600200-021	J:\MS16\DATA\120606\1206027.D	12/07/06	01:24
EB-12-11/10/06	P0600200-022	J:\MS16\DATA\120606\1206028.D	12/07/06	02:03

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 12/04/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5837
Instrument ID: MS16

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS16\DATA\120406A\1204001.D	D	J:\MS16\DATA\120406A\1204004.D
B	J:\MS16\DATA\120406A\1204002.D	E	J:\MS16\DATA\120406A\1204005.D
C	J:\MS16\DATA\120406A\1204003.D	F	J:\MS16\DATA\120406A\1204006.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosopiperidine	A	1.0	7.06	B	2.0	7.07	C	5.0	8.20	D	10	9.15	E	20	10.0
	F	50	9.98												
N-Nitrosomethylethylamine	A	1.0	5.00	B	2.0	5.19	C	5.0	6.22	D	10	6.64	E	20	7.17
	F	50	6.83												
N-Nitrosodimethylamine-d6	A	20	1.03	B	20	1.05	C	20	0.988	D	20	1.07	E	20	1.06
	F	20	1.25												
N-Nitrosodiethylamine	A	1.0	1.23	B	2.0	1.29	C	5.0	1.37	D	10	1.60	E	20	1.55
	F	50	1.55												
N-Nitrosodimethylamine	A	1.0	0.779	B	2.0	0.839	C	5.0	0.878	D	10	1.06	E	20	1.23
	F	50	1.06												
N-Nitrosodi-n-propylamine	A	1.0	0.466	B	2.0	0.585	C	5.0	0.650	D	10	0.753	E	20	0.696
	F	50	0.760												
N-Nitrosodiphenylamine	A	1.0	4.31	B	2.0	4.47	C	5.0	4.40	D	10	4.04	E	20	5.42
	F	50	5.07												
N-Nitrosodi-n-butylamine	A	1.0	2.73	B	2.0	3.20	C	5.0	3.35	D	10	3.72	E	20	3.85
	F	50	3.72												
N-Nitrosopyrrolidine	A	1.0	0.825	B	2.0	0.778	C	5.0	0.951	D	10	1.05	E	20	1.25
	F	50	1.26												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 12/04/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5837
Instrument ID: MS16

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosopiperidine	MS	AverageRF	% RSD	15.7		≤ 30	8.58		
N-Nitrosomethylethylamine	MS	AverageRF	% RSD	14.5		≤ 30	6.17		
N-Nitrosodimethylamine-d6	SURR	AverageRF	% RSD	8.5		≤ 30	1.08		
N-Nitrosodiethylamine	MS	AverageRF	% RSD	10.9		≤ 30	1.43		
N-Nitrosodimethylamine	MS	AverageRF	% RSD	17.6		≤ 30	0.975		
N-Nitrosodi-n-propylamine	MS	AverageRF	% RSD	17.2		≤ 30	0.652		
N-Nitrosodiphenylamine	MS	AverageRF	% RSD	11.2		≤ 30	4.62		
N-Nitrosodi-n-butylamine	MS	AverageRF	% RSD	12.4		≤ 30	3.43		
N-Nitrosopyrrolidine	MS	AverageRF	% RSD	20.2		≤ 30	1.02		

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 12/04/2006
Date Analyzed: 12/04/2006

Second Source Calibration Verification
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration ID: CAL5837
Units: ug/l

File ID: J:\MS16\DATA\120406A\1204007.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodi-n-butylamine	20	20	3.43	3.48	2	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	20	0.652	0.652	0	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	20	1.43	1.42	-1	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	25	0.975	1.23	26	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19	4.62	4.33	-6	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21	6.17	6.53	6	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	18	8.58	7.67	-11	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	20	1.02	1.03	1	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 12/06/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5850
Instrument ID: MS16

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS16\DATA\120606\1206001.D	D	J:\MS16\DATA\120606\1206004.D
B	J:\MS16\DATA\120606\1206002.D	E	J:\MS16\DATA\120606\1206005.D
C	J:\MS16\DATA\120606\1206003.D	F	J:\MS16\DATA\120606\1206006.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosopiperidine	A	1.0	9.63	B	2.0	10.3	C	5.0	9.76	D	10	10.1	E	20	10.1
	F	50	10.9												
N-Nitrosomethylethylamine	A	1.0	5.25	B	2.0	5.65	C	5.0	6.41	D	10	6.33	E	20	6.40
	F	50	6.63												
N-Nitrosodimethylamine-d6	A	20	1.06	B	20	1.13	C	20	1.16	D	20	1.09	E	20	1.32
	F	20	0.926												
N-Nitrosodiethylamine	A	1.0	1.32	B	2.0	1.33	C	5.0	1.57	D	10	1.49	E	20	1.42
	F	50	1.50												
N-Nitrosodimethylamine	A	1.0	0.766	B	2.0	0.699	C	5.0	0.958	D	10	1.02	E	20	0.812
	F	50	1.04												
N-Nitrosodi-n-propylamine	A	1.0	0.580	B	2.0	0.685	C	5.0	0.727	D	10	0.713	E	20	0.690
	F	50	0.719												
N-Nitrosodiphenylamine	A	1.0	4.75	B	2.0	5.37	C	5.0	5.77	D	10	5.04	E	20	6.27
	F	50	5.46												
N-Nitrosodi-n-butylamine	A	1.0	4.05	B	2.0	4.05	C	5.0	3.64	D	10	3.78	E	20	4.45
	F	50	4.28												
N-Nitrosopyrrolidine	A	1.0	1.20	B	2.0	1.44	C	5.0	1.38	D	10	1.38	E	20	1.34
	F	50	1.56												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 12/06/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5850
Instrument ID: MS16

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosopiperidine	MS	AverageRF	% RSD	4.3		≤ 30	10.1		
N-Nitrosomethylethylamine	MS	AverageRF	% RSD	8.8		≤ 30	6.11		
N-Nitrosodimethylamine-d6	SURR	AverageRF	% RSD	11.5		≤ 30	1.11		
N-Nitrosodiethylamine	MS	AverageRF	% RSD	7.0		≤ 30	1.44		
N-Nitrosodimethylamine	MS	AverageRF	% RSD	16.1		≤ 30	0.882		
N-Nitrosodi-n-propylamine	MS	AverageRF	% RSD	7.9		≤ 30	0.686		
N-Nitrosodiphenylamine	MS	AverageRF	% RSD	9.9		≤ 30	5.44		
N-Nitrosodi-n-butylamine	MS	AverageRF	% RSD	7.5		≤ 30	4.04		
N-Nitrosopyrrolidine	MS	AverageRF	% RSD	8.5		≤ 30	1.38		

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 12/06/2006
Date Analyzed: 12/06/2006

Second Source Calibration Verification
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration ID: CAL5850
Units: ug/l

File ID: J:\MS16\DATA\120606\1206007.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodi-n-butylamine	20	19	4.04	3.76	-7	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	23	0.686	0.802	17	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	18	1.44	1.29	-10	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	18	0.882	0.772	-12	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19	5.44	5.11	-6	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21	6.11	6.41	5	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	19	10.1	9.58	-5	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	22	1.38	1.50	9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/04/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620781
Units: ug/l

File ID: J:\MS16\DATA\120406A\1204007.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	18		1.08	0.972	-10	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	25		0.975	1.23	26	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21		6.17	6.53	6	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	20		1.43	1.42	-1	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	20		1.02	1.03	1	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	20		0.652	0.652	0	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	18		8.58	7.67	-11	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	20		3.43	3.48	2	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19		4.62	4.33	-6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/04/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620781
Units: ug/l

File ID: J:\MS16\DATA\120406A\1204015.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	20		1.08	1.07	-1	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	7.7		0.975	0.754	-23	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	9.5		6.17	5.88	-5	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	10		1.43	1.44	1	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	12		1.02	1.17	15	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	10		0.652	0.662	2	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	12		8.58	9.89	15	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	11		3.43	3.67	7	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	12		4.62	5.47	18	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/05/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620781
Units: ug/l

File ID: J:\MS16\DATA\120406A\1204026.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	16		1.08	0.870	-19	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	14		0.975	0.687	-30	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	20		6.17	6.15	0	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	17		1.43	1.22	-15	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	24		1.02	1.23	21	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	22		0.652	0.705	8	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	21		8.58	9.14	7	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	22		3.43	3.79	11	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	26		4.62	5.98	29	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/05/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620781
Units: ug/l

File ID: J:\MS16\DATA\120406A\1204036.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	21		1.08	1.13	5		NA	± 30 %	AverageRF
N-Nitrosodimethylamine	5.0	3.9		0.975	0.753	-23		NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	5.0	5.6		6.17	6.89	12		NA	± 30 %	AverageRF
N-Nitrosodiethylamine	5.0	6.3		1.43	1.79	25		NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	5.0	7.8		1.02	1.58	56	*	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	5.0	7.3		0.652	0.950	46	*	NA	± 30 %	AverageRF
N-Nitrosopiperidine	5.0	6.8		8.58	11.6	36	*	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	5.0	6.9		3.43	4.74	38	*	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	5.0	6.6		4.62	6.11	32	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/05/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620802
Units: ug/l

File ID: J:\MS16\DATA\120506\1205001.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	21		1.08	1.14	6	NA	± 50 %	AverageRF
N-Nitrosodimethylamine	1.0	0.81		0.975	0.794	-19	NA	± 50 %	AverageRF
N-Nitrosomethylethylamine	1.0	0.85		6.17	5.25	-15	NA	± 50 %	AverageRF
N-Nitrosodiethylamine	1.0	0.91		1.43	1.31	-9	NA	± 50 %	AverageRF
N-Nitrosopyrrolidine	1.0	1.3		1.02	1.36	34	NA	± 50 %	AverageRF
N-Nitrosodi-n-propylamine	1.0	1.1		0.652	0.744	14	NA	± 50 %	AverageRF
N-Nitrosopiperidine	1.0	1.0		8.58	8.76	2	NA	± 50 %	AverageRF
N-Nitrosodi-n-butylamine	1.0	1.2		3.43	3.96	15	NA	± 50 %	AverageRF
N-Nitrosodiphenylamine	1.0	1.3		4.62	5.91	28	NA	± 50 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/05/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620802
Units: ug/l

File ID: J:\MS16\DATA\120506\1205012.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	20		1.08	1.07	0		NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	16		0.975	0.787	-19		NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	24		6.17	7.47	21		NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	18		1.43	1.30	-9		NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	32		1.02	1.62	59	*	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	23		0.652	0.757	16		NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	26		8.58	11.1	30		NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	20		3.43	3.41	-1		NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	24		4.62	5.55	20		NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/05/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620802
Units: ug/l

File ID: J:\MS16\DATA\120506\1205017.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	20		1.08	1.08	0		NA	± 30 %	AverageRF
N-Nitrosodimethylamine	5.0	3.9		0.975	0.753	-23		NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	5.0	5.1		6.17	6.30	2		NA	± 30 %	AverageRF
N-Nitrosodiethylamine	5.0	5.2		1.43	1.48	3		NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	5.0	7.8		1.02	1.60	57	*	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	5.0	7.0		0.652	0.917	41	*	NA	± 30 %	AverageRF
N-Nitrosopiperidine	5.0	5.7		8.58	9.84	15		NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	5.0	5.4		3.43	3.68	7		NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	5.0	5.8		4.62	5.36	16		NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/06/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206007.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	23		1.11	1.30	17	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	18		0.882	0.772	-12	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21		6.11	6.41	5	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	18		1.44	1.29	-10	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	22		1.38	1.50	9	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	23		0.686	0.802	17	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	19		10.1	9.58	-5	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	19		4.04	3.76	-7	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19		5.44	5.11	-6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/06/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206011.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	22		1.11	1.25	12	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	16		0.882	0.725	-18	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	20		6.11	5.99	-2	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	16		1.44	1.15	-20	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	22		1.38	1.50	8	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	17		0.686	0.574	-16	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	19		10.1	9.59	-5	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	17		4.04	3.49	-14	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	15		5.44	4.09	-25	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/06/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206022.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	21		1.11	1.16	4	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	9.4		0.882	0.831	-6	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	11		6.11	6.49	6	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	11		1.44	1.54	7	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	10		1.38	1.45	5	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	11		0.686	0.763	11	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	11		10.1	10.7	6	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	11		4.04	4.61	14	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	10		5.44	5.55	2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/07/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206033.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	25		1.11	1.41	26	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	20		0.882	0.900	2	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	24		6.11	7.36	20	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	18		1.44	1.26	-12	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	23		1.38	1.58	14	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	23		0.686	0.780	14	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	23		10.1	11.4	13	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	24		4.04	4.76	18	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	24		5.44	6.58	21	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/07/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206035.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	25		1.11	1.38	24		NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	13		0.882	1.17	33	*	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	11		6.11	6.88	13		NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	11		1.44	1.53	6		NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	9.8		1.38	1.36	-2		NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	11		0.686	0.768	12		NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	10		10.1	10.4	2		NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	11		4.04	4.34	7		NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	11		5.44	6.07	11		NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 12/07/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206038.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	22		1.11	1.22	10	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	10		0.882	0.921	4	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	10		6.11	6.25	2	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	8.9		1.44	1.28	-11	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	11		1.38	1.54	12	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	11		0.686	0.726	6	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	9.8		10.1	9.94	-2	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	9.7		4.04	3.93	-3	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	9.9		5.44	5.36	-1	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0620781
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1204006.D	GC/MS Tuning - Decafluorotripheny	KWG0620781-1	12/4/06	11:57		12/4/06	12:30
\1204007.D	Continuing Calibration Verification	KWG0620781-2	12/4/06	12:36		12/4/06	13:09
\1204008.D	Lab Control Sample	KWG0619258-3	12/4/06	13:15		12/4/06	13:48
\1204009.D	Lab Control Sample	KWG0619857-3	12/4/06	13:56		12/4/06	14:29
\1204012.D	Method Blank	KWG0619857-4	12/4/06	16:08		12/4/06	16:41
\1204013.D	Method Blank	KWG0619258-4	12/4/06	16:47		12/4/06	17:20
\1204015.D	Continuing Calibration Verification	KWG0620781-3	12/4/06	18:05		12/4/06	18:38
\1204017.D	ZZZZZZ	ZZZZZZ	12/4/06	19:23		12/4/06	19:56
\1204019.D	ZZZZZZ	ZZZZZZ	12/4/06	20:41		12/4/06	21:14
\1204021.D	ZZZZZZ	ZZZZZZ	12/4/06	21:59		12/4/06	22:32
\1204022.D	ZZZZZZ	ZZZZZZ	12/4/06	22:38		12/4/06	23:11
\1204023.D	ZZZZZZ	ZZZZZZ	12/4/06	23:17		12/4/06	23:50
\1204024.D	ZZZZZZ	ZZZZZZ	12/4/06	23:56		12/5/06	00:29
\1204026.D	Continuing Calibration Verification	KWG0620781-4	12/5/06	01:13		12/5/06	01:46
\1204027.D	Batch QC	P0600187-001	12/5/06	01:52		12/5/06	02:25
\1204036.D	Continuing Calibration Verification	KWG0620781-5	12/5/06	07:43		12/5/06	08:16

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0620802
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
506\1205.D	GC/MS Tuning - Decafluorotripheny	KWG0620802-1	12/5/06	08:41		12/5/06	09:14
\1205001.D	Continuing Calibration Verification	KWG0620802-2	12/5/06	09:22		12/5/06	09:55
\1205003.D	ZZZZZZ	ZZZZZZ	12/5/06	10:42		12/5/06	11:15
\1205004.D	ZZZZZZ	ZZZZZZ	12/5/06	11:21		12/5/06	11:54
\1205005.D	ZZZZZZ	ZZZZZZ	12/5/06	12:00		12/5/06	12:33
\1205006.D	ZZZZZZ	ZZZZZZ	12/5/06	12:39		12/5/06	13:12
\1205007.D	Batch QCMS	KWG0619258-1	12/5/06	13:18		12/5/06	13:51
\1205008.D	Batch QCDMS	KWG0619258-2	12/5/06	13:56		12/5/06	14:29
\1205009.D	ZZZZZZ	ZZZZZZ	12/5/06	14:35		12/5/06	15:08
\1205010.D	ZZZZZZ	ZZZZZZ	12/5/06	15:14		12/5/06	15:47
\1205011.D	ZZZZZZ	ZZZZZZ	12/5/06	15:53		12/5/06	16:26
\1205012.D	Continuing Calibration Verification	KWG0620802-3	12/5/06	16:32		12/5/06	17:05
\1205013.D	ZZZZZZ	ZZZZZZ	12/5/06	17:11		12/5/06	17:44
\1205014.D	MW-3-5	P0600200-001	12/5/06	17:50		12/5/06	18:23
\1205015.D	MW-3-4	P0600200-002	12/5/06	18:29		12/5/06	19:02
\1205016.D	EB-8-11/6/06	P0600200-003	12/5/06	19:08		12/5/06	19:41
\1205017.D	Continuing Calibration Verification	KWG0620802-4	12/5/06	19:47		12/5/06	20:20

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0620857
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
606\1206.D	GC/MS Tuning - Decafluorotripheny	KWG0620857-1	12/6/06	07:49		12/6/06	08:22
\1206007.D	Continuing Calibration Verification	KWG0620857-2	12/6/06	12:26		12/6/06	12:59
\1206009.D	Batch QCDMS	KWG0619258-2	12/6/06	13:44		12/6/06	14:17
\1206011.D	Continuing Calibration Verification	KWG0620857-3	12/6/06	15:02		12/6/06	15:35
\1206012.D	MW-3-3	P0600200-005	12/6/06	15:41		12/6/06	16:14
\1206013.D	MW-3-2	P0600200-006	12/6/06	16:20		12/6/06	16:53
\1206014.D	DUPE-2-4Q06	P0600200-007	12/6/06	16:59		12/6/06	17:32
\1206015.D	EB-9-11/7/06	P0600200-008	12/6/06	17:38		12/6/06	18:11
\1206016.D	MW-4-5	P0600200-010	12/6/06	18:16		12/6/06	18:49
\1206017.D	MW-3-1	P0600200-011	12/6/06	18:55		12/6/06	19:28
\1206018.D	MW-3-1MS	KWG0619857-1	12/6/06	19:34		12/6/06	20:07
\1206019.D	MW-3-1DMS	KWG0619857-2	12/6/06	20:13		12/6/06	20:46
\1206020.D	EB-10-11/8/06	P0600200-012	12/6/06	20:52		12/6/06	21:25
\1206021.D	MW-4-4	P0600200-015	12/6/06	21:31		12/6/06	22:04
\1206022.D	Continuing Calibration Verification	KWG0620857-4	12/6/06	22:10		12/6/06	22:43
\1206023.D	MW-4-3	P0600200-016	12/6/06	22:49		12/6/06	23:22
\1206024.D	EB-11-11/9/06	P0600200-017	12/6/06	23:28		12/7/06	00:01
\1206025.D	MW-4-2	P0600200-019	12/7/06	00:07		12/7/06	00:40
\1206026.D	MW-4-1	P0600200-020	12/7/06	00:46		12/7/06	01:19
\1206027.D	DUP3-3-4Q06	P0600200-021	12/7/06	01:24		12/7/06	01:57
\1206028.D	EB-12-11/10/06	P0600200-022	12/7/06	02:03		12/7/06	02:36
\1206029.D	ZZZZZZ	ZZZZZZ	12/7/06	02:42		12/7/06	03:15
\1206030.D	ZZZZZZ	ZZZZZZ	12/7/06	03:21		12/7/06	03:54
\1206031.D	ZZZZZZ	ZZZZZZ	12/7/06	04:00		12/7/06	04:33
\1206032.D	ZZZZZZ	ZZZZZZ	12/7/06	04:38		12/7/06	05:11
\1206033.D	Continuing Calibration Verification	KWG0620857-5	12/7/06	05:17		12/7/06	05:50
\1206035.D	Continuing Calibration Verification	KWG0620857-6	12/7/06	06:35		12/7/06	07:08
\1206036.D	MW-3-5	P0600200-001	12/7/06	07:14		12/7/06	07:47
\1206037.D	Batch QCMS	KWG0619258-1	12/7/06	07:53		12/7/06	08:26
\1206038.D	Continuing Calibration Verification	KWG0620857-7	12/7/06	08:32		12/7/06	09:05

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/09/2006

Extraction Prep Log
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Extraction Lot: KWG0619258
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-3-5RE	P0600200-001	11/06/06	11/06/06	500ml	1ml	NA	
MW-3-5	P0600200-001	11/06/06	11/06/06	500ml	1ml	NA	
MW-3-4	P0600200-002	11/06/06	11/06/06	500ml	1ml	NA	
EB-8-11/6/06	P0600200-003	11/06/06	11/06/06	500ml	1ml	NA	
Method Blank	KWG0619258-4	NA	NA	500ml	1ml	NA	
Batch QCMS	KWG0619258-1	NA	NA	500ml	1ml	NA	
Batch QCDMS	KWG0619258-2	NA	NA	500ml	1ml	NA	
Batch QC	P0600187-001	NA	NA	500ml	1ml	NA	
Lab Control Sample	KWG0619258-3	NA	NA	500ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/17/2006

Extraction Prep Log
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Extraction Lot: KWG0619857
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-3-3	P0600200-005	11/07/06	11/07/06	500ml	1ml	NA	
MW-3-2	P0600200-006	11/07/06	11/07/06	500ml	1ml	NA	
DUPE-2-4Q06	P0600200-007	11/07/06	11/07/06	500ml	1ml	NA	
EB-9-11/7/06	P0600200-008	11/07/06	11/07/06	500ml	1ml	NA	
MW-4-5	P0600200-010	11/08/06	11/08/06	500ml	1ml	NA	
MW-3-1	P0600200-011	11/08/06	11/08/06	500ml	1ml	NA	
EB-10-11/8/06	P0600200-012	11/08/06	11/08/06	500ml	1ml	NA	
MW-4-4	P0600200-015	11/09/06	11/09/06	500ml	1ml	NA	
MW-4-3	P0600200-016	11/09/06	11/09/06	500ml	1ml	NA	
EB-11-11/9/06	P0600200-017	11/09/06	11/09/06	500ml	1ml	NA	
MW-4-2	P0600200-019	11/10/06	11/10/06	500ml	1ml	NA	
MW-4-1	P0600200-020	11/10/06	11/10/06	500ml	1ml	NA	
DUP3-3-4Q06	P0600200-021	11/10/06	11/10/06	500ml	1ml	NA	
EB-12-11/10/06	P0600200-022	11/10/06	11/10/06	500ml	1ml	NA	
Method Blank	KWG0619857-4	NA	NA	500ml	1ml	NA	
MW-3-1MS	KWG0619857-1	11/08/06	11/08/06	500ml	1ml	NA	
MW-3-1DMS	KWG0619857-2	11/08/06	11/08/06	500ml	1ml	NA	
Lab Control Sample	KWG0619857-3	NA	NA	500ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Semivolatile Organic Compounds by GC/MS SIM

Summary Package

Sample and QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Cover Page - Organic Analysis Data Package
Semivolatile Organic Compounds by GC/MS SIM

Sample Name	Lab Code	Date Collected	Date Received
MW-3-1MS	KWG0619366-1	11/08/2006	11/08/2006
MW-3-1DMS	KWG0619366-2	11/08/2006	11/08/2006
MW-3-5	P0600200-001	11/06/2006	11/06/2006
MW-3-4	P0600200-002	11/06/2006	11/06/2006
EB-8-11/6/06	P0600200-003	11/06/2006	11/06/2006
MW-3-3	P0600200-005	11/07/2006	11/07/2006
MW-3-2	P0600200-006	11/07/2006	11/07/2006
DUPE-2-4Q06	P0600200-007	11/07/2006	11/07/2006
EB-9-11/7/06	P0600200-008	11/07/2006	11/07/2006
MW-4-5	P0600200-010	11/08/2006	11/08/2006
MW-3-1	P0600200-011	11/08/2006	11/08/2006
EB-10-11/8/06	P0600200-012	11/08/2006	11/08/2006
MW-4-4	P0600200-015	11/09/2006	11/09/2006
MW-4-3	P0600200-016	11/09/2006	11/09/2006
EB-11-11/9/06	P0600200-017	11/09/2006	11/09/2006
MW-4-2	P0600200-019	11/10/2006	11/10/2006
MW-4-1	P0600200-020	11/10/2006	11/10/2006
DUP3-3-4Q06	P0600200-021	11/10/2006	11/10/2006
EB-12-11/10/06	P0600200-022	11/10/2006	11/10/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Dagner

Name: Carl Dagner

Date: 12/1/06

Title: SVM Organics

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/06/2006
Date Received: 11/06/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: MW-3-5
Lab Code: P0600200-001

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	70	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/06/2006
Sample Matrix:	Water	**Date Received:**	11/06/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-3-4	**Units:**	ng/L
Lab Code:	P0600200-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	66	70-130	11/28/06	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/06/2006
Sample Matrix:	Water	**Date Received:**	11/06/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	EB-8-11/6/06	**Units:**	ng/L
Lab Code:	P0600200-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	84	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/07/2006
Date Received: 11/07/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: MW-3-3
Lab Code: P0600200-005

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	76	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/07/2006
Sample Matrix:	Water	**Date Received:**	11/07/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-3-2	**Units:**	ng/L
Lab Code:	P0600200-006	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	77	70-130	11/28/06	Acceptable

Comments:

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/07/2006
Date Received: 11/07/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: DUPE-2-4Q06
Lab Code: P0600200-007

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	73	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/07/2006
Sample Matrix:	Water	**Date Received:**	11/07/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	EB-9-11/7/06	**Units:**	ng/L
Lab Code:	P0600200-008	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	83	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/08/2006
Sample Matrix:	Water	**Date Received:**	11/08/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-4-5	**Units:**	ng/L
Lab Code:	P0600200-010	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.8	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	66	70-130	11/28/06	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/08/2006
Date Received: 11/08/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: MW-3-1
Lab Code: P0600200-011

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	74	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/08/2006
Sample Matrix:	Water	**Date Received:**	11/08/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	EB-10-11/8/06	**Units:**	ng/L
Lab Code:	P0600200-012	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/28/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	75	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-4-4	**Units:**	ng/L
Lab Code:	P0600200-015	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/28/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	76	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-4-3	**Units:**	ng/L
Lab Code:	P0600200-016	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/29/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	62	70-130	11/29/06	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/09/2006
Sample Matrix:	Water	**Date Received:**	11/09/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	EB-11-11/9/06	**Units:**	ng/L
Lab Code:	P0600200-017	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/29/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	75	70-130	11/29/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-4-2	**Units:**	ng/L
Lab Code:	P0600200-019	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/29/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	72	70-130	11/29/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/10/2006
Sample Matrix:	Water	**Date Received:**	11/10/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-4-1	**Units:**	ng/L
Lab Code:	P0600200-020	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/29/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	67	70-130	11/29/06	Outside Control Limits

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/10/2006
Date Received: 11/10/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: DUP3-3-4Q06
Lab Code: P0600200-021

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/29/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	78	70-130	11/29/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Collected: 11/10/2006
Date Received: 11/10/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: EB-12-11/10/06
Lab Code: P0600200-022

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/29/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	74	70-130	11/29/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0619366-4	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.8	2.3	1	11/13/06	11/28/06	KWG0619366	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	81	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0619585-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/15/06	11/28/06	KWG0619585	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	79	70-130	11/28/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200

Surrogate Recovery Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	
MW-3-5	P0600200-001	70	
MW-3-4	P0600200-002	66	*
EB-8-11/6/06	P0600200-003	84	
MW-3-3	P0600200-005	76	
MW-3-2	P0600200-006	77	
DUPE-2-4Q06	P0600200-007	73	
EB-9-11/7/06	P0600200-008	83	
MW-4-5	P0600200-010	66	*
MW-3-1	P0600200-011	74	
EB-10-11/8/06	P0600200-012	75	
MW-4-4	P0600200-015	76	
MW-4-3	P0600200-016	62	*
EB-11-11/9/06	P0600200-017	75	
MW-4-2	P0600200-019	72	
MW-4-1	P0600200-020	67	*
DUP3-3-4Q06	P0600200-021	78	
EB-12-11/10/06	P0600200-022	74	
Method Blank	KWG0619366-4	81	
Method Blank	KWG0619585-3	79	
MW-3-1MS	KWG0619366-1	81	
MW-3-1DMS	KWG0619366-2	77	
Lab Control Sample	KWG0619366-3	82	
Lab Control Sample	KWG0619585-1	67	*
Duplicate Lab Control Sample	KWG0619585-2	79	

Surrogate Recovery Control Limits (%)

Sur1 = 1,2,3-Trichloropropane-d5 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/28/2006
		Time Analyzed:	14:16

Internal Standard Area and RT Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID:	J:\MS14\DATA\112806\1128G002.D	**Lab Code:**	KWG0620352-2
Instrument ID:	MS14	**Analysis Lot:**	KWG0620352
Analysis Method:	8270C SIM		

		1,4-Dichlorobenzene-d4	
		Area	**RT**
	Results ==>	58,540	6.50
	Upper Limit ==>	117,080	7.00
	Lower Limit ==>	29,270	6.00
	ICAL Result ==>	49,805	6.54
Associated Analyses			
Method Blank	KWG0619366-4	57,031	6.50
Lab Control Sample	KWG0619366-3	54,178	6.50
MW-3-1MS	KWG0619366-1	53,889	6.50
MW-3-1DMS	KWG0619366-2	55,994	6.50
MW-3-5	P0600200-001	54,247	6.50
MW-3-4	P0600200-002	57,669	6.50
EB-8-11/6/06	P0600200-003	55,746	6.50
MW-3-3	P0600200-005	57,113	6.50
MW-3-2	P0600200-006	56,168	6.50
DUPE-2-4Q06	P0600200-007	54,965	6.50
EB-9-11/7/06	P0600200-008	50,340	6.50
MW-4-5	P0600200-010	56,001	6.50
MW-3-1	P0600200-011	57,616	6.50
Method Blank	KWG0619585-3	57,619	6.50
Lab Control Sample	KWG0619585-1	56,632	6.50
Duplicate Lab Control Sample	KWG0619585-2	58,936	6.50
EB-10-11/8/06	P0600200-012	57,523	6.50
MW-4-4	P0600200-015	57,382	6.50
MW-4-3	P0600200-016	56,782	6.50
EB-11-11/9/06	P0600200-017	58,039	6.49
MW-4-2	P0600200-019	58,065	6.50
MW-4-1	P0600200-020	59,382	6.50
DUP3-3-4Q06	P0600200-021	54,725	6.50
EB-12-11/10/06	P0600200-022	57,240	6.50

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006

Matrix Spike/Duplicate Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-3-1	**Units:**	ng/L
Lab Code:	P0600200-011	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0619366

		MW-3-1MS KWG0619366-1 Matrix Spike			MW-3-1DMS KWG0619366-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2,3-Trichloropropane	ND	145	198	73	140	200	70	70-130	4	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006

Lab Control Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method:	EPA 3520C	**Units:**	ng/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0619366

	Lab Control Sample KWG0619366-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2,3-Trichloropropane	155	200	78	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/15/2006
Date Analyzed: 11/28/2006

Lab Control Spike/Duplicate Lab Control Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: ng/L
Basis: NA
Level: Low
Extraction Lot: KWG0619585

	Lab Control Sample KWG0619585-1 Lab Control Spike			Duplicate Lab Control Sample KWG0619585-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2,3-Trichloropropane	128	200	64 *	155	200	77	70-130	19	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006
		Time Analyzed:	18:16

Method Blank Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**File ID:**	J:\MS14\DATA\112806\1128F032.D
Lab Code:	KWG0619366-4	**Instrument ID:**	MS14
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0619366

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0619366-3	J:\MS14\DATA\112806\1128F033.D	11/28/06	18:35
MW-3-1MS	KWG0619366-1	J:\MS14\DATA\112806\1128F034.D	11/28/06	18:55
MW-3-1DMS	KWG0619366-2	J:\MS14\DATA\112806\1128F035.D	11/28/06	19:15
MW-3-5	P0600200-001	J:\MS14\DATA\112806\1128F036.D	11/28/06	19:35
MW-3-4	P0600200-002	J:\MS14\DATA\112806\1128F037.D	11/28/06	19:55
EB-8-11/6/06	P0600200-003	J:\MS14\DATA\112806\1128F038.D	11/28/06	20:15
MW-3-3	P0600200-005	J:\MS14\DATA\112806\1128F039.D	11/28/06	20:35
MW-3-2	P0600200-006	J:\MS14\DATA\112806\1128F040.D	11/28/06	20:54
DUPE-2-4Q06	P0600200-007	J:\MS14\DATA\112806\1128F041.D	11/28/06	21:14
EB-9-11/7/06	P0600200-008	J:\MS14\DATA\112806\1128F042.D	11/28/06	21:34
MW-4-5	P0600200-010	J:\MS14\DATA\112806\1128F043.D	11/28/06	21:54
MW-3-1	P0600200-011	J:\MS14\DATA\112806\1128F044.D	11/28/06	22:14

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/15/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006
		Time Analyzed:	22:34

Method Blank Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**File ID:**	J:\MS14\DATA\112806\1128F045.D
Lab Code:	KWG0619585-3	**Instrument ID:**	MS14
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0619585

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0619585-1	J:\MS14\DATA\112806\1128F046.D	11/28/06	22:54
Duplicate Lab Control Sample	KWG0619585-2	J:\MS14\DATA\112806\1128F047.D	11/28/06	23:14
EB-10-11/8/06	P0600200-012	J:\MS14\DATA\112806\1128F048.D	11/28/06	23:34
MW-4-4	P0600200-015	J:\MS14\DATA\112806\1128F049.D	11/28/06	23:54
MW-4-3	P0600200-016	J:\MS14\DATA\112806\1128F050.D	11/29/06	00:13
EB-11-11/9/06	P0600200-017	J:\MS14\DATA\112806\1128F051.D	11/29/06	00:33
MW-4-2	P0600200-019	J:\MS14\DATA\112806\1128F052.D	11/29/06	00:53
MW-4-1	P0600200-020	J:\MS14\DATA\112806\1128F053.D	11/29/06	01:13
DUP3-3-4Q06	P0600200-021	J:\MS14\DATA\112806\1128F054.D	11/29/06	01:33
EB-12-11/10/06	P0600200-022	J:\MS14\DATA\112806\1128F055.D	11/29/06	01:53

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600200
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/13/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006
		Time Analyzed:	18:35

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Lab Control Sample	**File ID:**	J:\MS14\DATA\112806\1128F033.D
Lab Code:	KWG0619366-3	**Instrument ID:**	MS14
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0619366

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0619366-4	J:\MS14\DATA\112806\1128F032.D	11/28/06	18:16
MW-3-1MS	KWG0619366-1	J:\MS14\DATA\112806\1128F034.D	11/28/06	18:55
MW-3-1DMS	KWG0619366-2	J:\MS14\DATA\112806\1128F035.D	11/28/06	19:15
MW-3-5	P0600200-001	J:\MS14\DATA\112806\1128F036.D	11/28/06	19:35
MW-3-4	P0600200-002	J:\MS14\DATA\112806\1128F037.D	11/28/06	19:55
EB-8-11/6/06	P0600200-003	J:\MS14\DATA\112806\1128F038.D	11/28/06	20:15
MW-3-3	P0600200-005	J:\MS14\DATA\112806\1128F039.D	11/28/06	20:35
MW-3-2	P0600200-006	J:\MS14\DATA\112806\1128F040.D	11/28/06	20:54
DUPE-2-4Q06	P0600200-007	J:\MS14\DATA\112806\1128F041.D	11/28/06	21:14
EB-9-11/7/06	P0600200-008	J:\MS14\DATA\112806\1128F042.D	11/28/06	21:34
MW-4-5	P0600200-010	J:\MS14\DATA\112806\1128F043.D	11/28/06	21:54
MW-3-1	P0600200-011	J:\MS14\DATA\112806\1128F044.D	11/28/06	22:14

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200

Lab Control Sample/Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0619585-1	**Lab Code:**	KWG0619585-2
File ID:	J:\MS14\DATA\112806\1128F046.D	**File ID:**	J:\MS14\DATA\112806\1128F047.D
Instrument ID:	MS14	**Instrument ID:**	MS14
Date Extracted:	11/15/2006	**Date Extracted:**	11/15/2006
Date Analyzed:	11/28/2006	**Date Analyzed:**	11/28/2006
Time Analyzed:	22:54	**Time Analyzed:**	23:14

Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0619585

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0619585-3	J:\MS14\DATA\112806\1128F045.D	11/28/06	22:34
EB-10-11/8/06	P0600200-012	J:\MS14\DATA\112806\1128F048.D	11/28/06	23:34
MW-4-4	P0600200-015	J:\MS14\DATA\112806\1128F049.D	11/28/06	23:54
MW-4-3	P0600200-016	J:\MS14\DATA\112806\1128F050.D	11/29/06	00:13
EB-11-11/9/06	P0600200-017	J:\MS14\DATA\112806\1128F051.D	11/29/06	00:33
MW-4-2	P0600200-019	J:\MS14\DATA\112806\1128F052.D	11/29/06	00:53
MW-4-1	P0600200-020	J:\MS14\DATA\112806\1128F053.D	11/29/06	01:13
DUP3-3-4Q06	P0600200-021	J:\MS14\DATA\112806\1128F054.D	11/29/06	01:33
EB-12-11/10/06	P0600200-022	J:\MS14\DATA\112806\1128F055.D	11/29/06	01:53

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/28/2006
Time Analyzed: 13:56

Tune Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID: J:\MS14\DATA\112806\1128G001.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0620352

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	23.3	414919	PASS
68	69	0	2	1.6	8002	PASS
69	198	0	100	27.6	491990	PASS
70	69	0	2	0.3	1621	PASS
127	198	10	80	41.2	733301	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	46.9	1779410	PASS
199	198	5	9	6.8	121043	PASS
275	198	10	60	32.9	586048	PASS
365	442	1	50	1.9	73208	PASS
441	443	0	100	71.4	534976	PASS
442	442	100	100	100.0	3796480	PASS
443	442	15	24	19.7	749568	PASS

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/28/2006
Time Analyzed: 13:56

Tune Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID: J:\MS14\DATA\112806\1128G001.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0620352

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0620352-2	J:\MS14\DATA\112806\1128G002.D	11/28/2006	14:16	
Method Blank	KWG0619366-4	J:\MS14\DATA\112806\1128F032.D	11/28/2006	18:16	
Lab Control Sample	KWG0619366-3	J:\MS14\DATA\112806\1128F033.D	11/28/2006	18:35	
MW-3-1MS	KWG0619366-1	J:\MS14\DATA\112806\1128F034.D	11/28/2006	18:55	
MW-3-1DMS	KWG0619366-2	J:\MS14\DATA\112806\1128F035.D	11/28/2006	19:15	
MW-3-5	P0600200-001	J:\MS14\DATA\112806\1128F036.D	11/28/2006	19:35	
MW-3-4	P0600200-002	J:\MS14\DATA\112806\1128F037.D	11/28/2006	19:55	
EB-8-11/6/06	P0600200-003	J:\MS14\DATA\112806\1128F038.D	11/28/2006	20:15	
MW-3-3	P0600200-005	J:\MS14\DATA\112806\1128F039.D	11/28/2006	20:35	
MW-3-2	P0600200-006	J:\MS14\DATA\112806\1128F040.D	11/28/2006	20:54	
DUPE-2-4Q06	P0600200-007	J:\MS14\DATA\112806\1128F041.D	11/28/2006	21:14	
EB-9-11/7/06	P0600200-008	J:\MS14\DATA\112806\1128F042.D	11/28/2006	21:34	
MW-4-5	P0600200-010	J:\MS14\DATA\112806\1128F043.D	11/28/2006	21:54	
MW-3-1	P0600200-011	J:\MS14\DATA\112806\1128F044.D	11/28/2006	22:14	
Method Blank	KWG0619585-3	J:\MS14\DATA\112806\1128F045.D	11/28/2006	22:34	
Lab Control Sample	KWG0619585-1	J:\MS14\DATA\112806\1128F046.D	11/28/2006	22:54	
Duplicate Lab Control Sample	KWG0619585-2	J:\MS14\DATA\112806\1128F047.D	11/28/2006	23:14	
EB-10-11/8/06	P0600200-012	J:\MS14\DATA\112806\1128F048.D	11/28/2006	23:34	
MW-4-4	P0600200-015	J:\MS14\DATA\112806\1128F049.D	11/28/2006	23:54	
MW-4-3	P0600200-016	J:\MS14\DATA\112806\1128F050.D	11/29/2006	00:13	
EB-11-11/9/06	P0600200-017	J:\MS14\DATA\112806\1128F051.D	11/29/2006	00:33	
MW-4-2	P0600200-019	J:\MS14\DATA\112806\1128F052.D	11/29/2006	00:53	
MW-4-1	P0600200-020	J:\MS14\DATA\112806\1128F053.D	11/29/2006	01:13	
DUP3-3-4Q06	P0600200-021	J:\MS14\DATA\112806\1128F054.D	11/29/2006	01:33	
EB-12-11/10/06	P0600200-022	J:\MS14\DATA\112806\1128F055.D	11/29/2006	01:53	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/27/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5825
Instrument ID: MS14

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS14\DATA\112706A\1127A003.D	E	J:\MS14\DATA\112706A\1127A007.D
B	J:\MS14\DATA\112706A\1127A004.D	F	J:\MS14\DATA\112706A\1127A008.D
C	J:\MS14\DATA\112706A\1127A005.D	G	J:\MS14\DATA\112706A\1127A009.D
D	J:\MS14\DATA\112706A\1127A006.D	H	J:\MS14\DATA\112706A\1127A010.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2,3-Trichloropropane-d5	A	2.0	0.810	B	5.0	0.758	C	10	0.783	D	20	0.745	E	50	0.756
	F	100	0.783	G	500	0.771	H	1000	0.773						
1,2,3-Trichloropropane	A	2.0	1.01	B	5.0	0.899	C	10	0.859	D	20	0.816	E	50	0.804
	F	100	0.829	G	500	0.820	H	1000	0.821						

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/27/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5825
Instrument ID: MS14

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
1,2,3-Trichloropropane-d5	SURR	AverageRF	% RSD	2.6		≤ 30	0.773		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	8.0		≤ 30	0.857		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Calibration Date: 11/27/2006
Date Analyzed: 11/27/2006

Second Source Calibration Verification
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL5825
Units: ng/ml

File ID: J:\MS14\DATA\112706A\1127A011.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane	100	91	0.857	0.777	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200
Date Analyzed: 11/28/2006

Continuing Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/27/2006
Calibration ID: CAL5825
Analysis Lot: KWG0620352
Units: ng/ml

File ID: J:\MS14\DATA\112806\1128G002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane-d5	100	98	0.01	0.773	0.757	-2	NA	± 20 %	AverageRF
1,2,3-Trichloropropane	100	94	0.01	0.857	0.804	-6	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Analysis Run Log
Semivolatile Organic Compounds by GC/MS SIM

Analysis Method: 8270C SIM

Analysis Lot: KWG0620352
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1128G001.D	GC/MS Tuning - Decafluorotripheny	KWG0620352-1	11/28/2006	13:56		11/28/2006	14:10
1128G002.D	Continuing Calibration Verification	KWG0620352-2	11/28/2006	14:16		11/28/2006	14:30
1128F021.D	ZZZZZZ	ZZZZZZ	11/28/2006	14:36		11/28/2006	14:50
1128F022.D	ZZZZZZ	ZZZZZZ	11/28/2006	14:56		11/28/2006	15:10
1128F023.D	ZZZZZZ	ZZZZZZ	11/28/2006	15:16		11/28/2006	15:30
1128F024.D	ZZZZZZ	ZZZZZZ	11/28/2006	15:36		11/28/2006	15:50
1128F025.D	ZZZZZZ	ZZZZZZ	11/28/2006	15:56		11/28/2006	16:10
1128F026.D	ZZZZZZ	ZZZZZZ	11/28/2006	16:16		11/28/2006	16:30
1128F027.D	ZZZZZZ	ZZZZZZ	11/28/2006	16:36		11/28/2006	16:50
1128F028.D	ZZZZZZ	ZZZZZZ	11/28/2006	16:56		11/28/2006	17:10
1128F029.D	ZZZZZZ	ZZZZZZ	11/28/2006	17:16		11/28/2006	17:30
1128F030.D	ZZZZZZ	ZZZZZZ	11/28/2006	17:36		11/28/2006	17:50
1128F031.D	ZZZZZZ	ZZZZZZ	11/28/2006	17:56		11/28/2006	18:10
1128F032.D	Method Blank	KWG0619366-4	11/28/2006	18:16		11/28/2006	18:30
1128F033.D	Lab Control Sample	KWG0619366-3	11/28/2006	18:35		11/28/2006	18:49
1128F034.D	MW-3-1MS	KWG0619366-1	11/28/2006	18:55		11/28/2006	19:09
1128F035.D	MW-3-1DMS	KWG0619366-2	11/28/2006	19:15		11/28/2006	19:29
1128F036.D	MW-3-5	P0600200-001	11/28/2006	19:35		11/28/2006	19:49
1128F037.D	MW-3-4	P0600200-002	11/28/2006	19:55		11/28/2006	20:09
1128F038.D	EB-8-11/6/06	P0600200-003	11/28/2006	20:15		11/28/2006	20:29
1128F039.D	MW-3-3	P0600200-005	11/28/2006	20:35		11/28/2006	20:49
1128F040.D	MW-3-2	P0600200-006	11/28/2006	20:54		11/28/2006	21:08
1128F041.D	DUPE-2-4Q06	P0600200-007	11/28/2006	21:14		11/28/2006	21:28
1128F042.D	EB-9-11/7/06	P0600200-008	11/28/2006	21:34		11/28/2006	21:48
1128F043.D	MW-4-5	P0600200-010	11/28/2006	21:54		11/28/2006	22:08
1128F044.D	MW-3-1	P0600200-011	11/28/2006	22:14		11/28/2006	22:28
1128F045.D	Method Blank	KWG0619585-3	11/28/2006	22:34		11/28/2006	22:48
1128F046.D	Lab Control Sample	KWG0619585-1	11/28/2006	22:54		11/28/2006	23:08
1128F047.D	Duplicate Lab Control Sample	KWG0619585-2	11/28/2006	23:14		11/28/2006	23:28
1128F048.D	EB-10-11/8/06	P0600200-012	11/28/2006	23:34		11/28/2006	23:48
1128F049.D	MW-4-4	P0600200-015	11/28/2006	23:54		11/29/2006	00:08
1128F050.D	MW-4-3	P0600200-016	11/29/2006	00:13		11/29/2006	00:27
1128F051.D	EB-11-11/9/06	P0600200-017	11/29/2006	00:33		11/29/2006	00:47
1128F052.D	MW-4-2	P0600200-019	11/29/2006	00:53		11/29/2006	01:07

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600200

Analysis Run Log
Semivolatile Organic Compounds by GC/MS SIM

Analysis Method: 8270C SIM

Analysis Lot: KWG0620352
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1128F053.D	MW-4-1	P0600200-020	11/29/2006	01:13		11/29/2006	01:27
1128F054.D	DUP3-3-4Q06	P0600200-021	11/29/2006	01:33		11/29/2006	01:47
1128F055.D	EB-12-11/10/06	P0600200-022	11/29/2006	01:53		11/29/2006	02:07

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/13/2006

Extraction Prep Log
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0619366
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-3-5	P0600200-001	11/06/06	11/06/06	1010ml	2ml	NA	
MW-3-4	P0600200-002	11/06/06	11/06/06	1010ml	2ml	NA	
EB-8-11/6/06	P0600200-003	11/06/06	11/06/06	1010ml	2ml	NA	
MW-3-3	P0600200-005	11/07/06	11/07/06	1010ml	2ml	NA	
MW-3-2	P0600200-006	11/07/06	11/07/06	1000ml	2ml	NA	
DUPE-2-4Q06	P0600200-007	11/07/06	11/07/06	1000ml	2ml	NA	
EB-9-11/7/06	P0600200-008	11/07/06	11/07/06	1000ml	2ml	NA	
MW-4-5	P0600200-010	11/08/06	11/08/06	1050ml	2ml	NA	
MW-3-1	P0600200-011	11/08/06	11/08/06	1020ml	2ml	NA	
Method Blank	KWG0619366-4	NA	NA	1050ml	2ml	NA	
MW-3-1MS	KWG0619366-1	11/08/06	11/08/06	1010ml	2ml	NA	
MW-3-1DMS	KWG0619366-2	11/08/06	11/08/06	1000ml	2ml	NA	
Lab Control Sample	KWG0619366-3	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600200
Date Extracted: 11/15/2006

Extraction Prep Log
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0619585
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
EB-10-11/8/06	P0600200-012	11/08/06	11/08/06	1020ml	2ml	NA	
MW-4-4	P0600200-015	11/09/06	11/09/06	1020ml	2ml	NA	
MW-4-3	P0600200-016	11/09/06	11/09/06	1020ml	2ml	NA	
EB-11-11/9/06	P0600200-017	11/09/06	11/09/06	1020ml	2ml	NA	
MW-4-2	P0600200-019	11/10/06	11/10/06	1020ml	2ml	NA	
MW-4-1	P0600200-020	11/10/06	11/10/06	1020ml	2ml	NA	
DUP3-3-4Q06	P0600200-021	11/10/06	11/10/06	1020ml	2ml	NA	
EB-12-11/10/06	P0600200-022	11/10/06	11/10/06	1020ml	2ml	NA	
Method Blank	KWG0619585-3	NA	NA	1020ml	2ml	NA	
Lab Control Sample	KWG0619585-1	NA	NA	1000ml	2ml	NA	
Duplicate Lab Control Sample	KWG0619585-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600233
Date Collected : 11/13-17/06
Date Received : 11/13-17/06

Chromium, Hexavalent

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

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-18-5	P0600233-001	0.01	0.004	1	NA	11/13/06	ND	
MW-18-4	P0600233-002	0.01	0.004	1	NA	11/13/06	ND	
MW-18-2	P0600233-003	0.01	0.004	1	NA	11/13/06	ND	
EB-13-11/13/06	P0600233-004	0.01	0.004	1	NA	11/13/06	ND	
MW-18-3	P0600233-006	0.01	0.004	1	NA	11/14/06	ND	
MW-18-1	P0600233-007	0.01	0.004	1	NA	11/14/06	ND	
EB-14-11/14/06	P0600233-008	0.01	0.004	1	NA	11/14/06	ND	
MW-11-5	P0600233-010	0.01	0.004	1	NA	11/16/06	ND	
MW-11-4	P0600233-011	0.01	0.004	1	NA	11/16/06	ND	
MW-11-3	P0600233-012	0.01	0.004	1	NA	11/16/06	ND	
MW-11-2	P0600233-013	0.01	0.004	1	NA	11/16/06	ND	
MW-11-1	P0600233-014	0.01	0.004	1	NA	11/16/06	ND	
DUPE-4-4Q06	P0600233-015	0.01	0.004	1	NA	11/16/06	ND	
EB-15-11/16/06	P0600233-016	0.01	0.004	1	NA	11/16/06	ND	
MW-12-5	P0600233-017	0.01	0.004	1	NA	11/17/06	ND	
MW-12-4	P0600233-018	0.01	0.004	1	NA	11/17/06	ND	
MW-12-3	P0600233-019	0.01	0.004	1	NA	11/17/06	ND	
MW-12-2	P0600233-020	0.01	0.004	1	NA	11/17/06	ND	
MW-12-1	P0600233-021	0.01	0.004	1	NA	11/17/06	ND	
EB-16-11/17/06	P0600233-022	0.01	0.004	1	NA	11/17/06	ND	
Method Blank	P0600233-MB	0.01	0.004	1	NA	11/13/06	ND	
Method Blank	P0600233-MB	0.01	0.004	1	NA	11/14/06	ND	
Method Blank	P0600233-MB	0.01	0.004	1	NA	11/16/06	ND	
Method Blank	P0600233-MB	0.01	0.004	1	NA	11/17/06	ND	

Approved By _____ Date : 11/17/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/13/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Anderson Date: 11/17/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/13/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0377	97
CCV1	0.0387	0.0377	97

Approved By: _____ Date: 11/17/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600233
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/13-17/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : P0600233-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	mg/L (ppm)	7196A	0.0400	0.0386	97	90-110	
Chromium, Hexavalent	mg/L (ppm)	7196A	0.0400	0.0387	97	90-110	
Chromium, Hexavalent	mg/L (ppm)	7196A	0.0400	0.0369	92	90-110	
Chromium, Hexavalent	mg/L (ppm)	7196A	0.0400	0.0414	104	90-110	

Approved By : Joe Anderson Date : 11/17/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600233
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/13/06
Project Number :	G486090/204142	**Date Received :**	11/13/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/13/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-18-5 Units : mg/L (ppm)
Lab Code : P0600233-001MS P0600233-001DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0441	0.0432	88	86	85-115	2	

Approved By _____ Date : 11/17/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/14/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: _____ Date: 11/17/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/14/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0396	102
CCV1	0.0387	0.0396	102

Approved By: Sue Anderson Date: 11/17/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600233
Date Collected : 11/14/06
Date Received : 11/14/06
Date Extracted : NA
Date Analyzed : 11/14/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-18-3
Lab Code : P0600233-006MS P0600233-006DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0545	0.0528	109	106	85-115	3	

Approved By Sue Anderson Date : 11/17/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/16/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND
CCB2	0.01	0.004	ND

Approved By: Sue Anderson Date: 11/17/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/16/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0360	93
CCV1	0.0387	0.0360	93
CCV2	0.0387	0.0360	93

Approved By: Sue Anderson Date: 11/17/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600233
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/16/06
Project Number :	G486090/204142	**Date Received :**	11/16/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/16/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-11-5 Units : mg/L (ppm)
Lab Code : P0600233-010MS P0600233-010DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0494	0.0512	99	102	85-115	4	

Approved By Sue Anderson Date : 11/17/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/17/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Anderson Date: 11/17/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/17/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0368	95
CCV1	0.0387	0.0377	97

Approved By: Sue Anderson Date: 11/17/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600233
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/17/06
Project Number :	G486090/204142	**Date Received :**	11/17/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/17/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-12-5 Units : mg/L (ppm)
Lab Code : P0600233-017MS P0600233-017DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0450	0.0432	90	86	85-115	4	

Approved By Sue Anderson Date : 11/17/06

Report By:RWONG

Organic Analysis:
EPA Method 504.1

Summary Package

Sample and QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233

Cover Page - Organic Analysis Data Package
EPA Method 504.1

Sample Name	Lab Code	Date Collected	Date Received
MW-18-3MS	KWG0620068-1	11/14/2006	11/14/2006
MW-18-3DMS	KWG0620068-2	11/14/2006	11/14/2006
MW-18-5	P0600233-001	11/13/2006	11/13/2006
MW-18-4	P0600233-002	11/13/2006	11/13/2006
MW-18-2	P0600233-003	11/13/2006	11/13/2006
EB-13-11/13/06	P0600233-004	11/13/2006	11/13/2006
TB-13-11/13/06	P0600233-005	11/13/2006	11/13/2006
MW-18-3	P0600233-006	11/14/2006	11/14/2006
MW-18-1	P0600233-007	11/14/2006	11/14/2006
EB-14-11/14/06	P0600233-008	11/14/2006	11/14/2006
TB-14-11/14/06	P0600233-009	11/14/2006	11/14/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Tim Smith

Date: 11/24/06 Title: Project Manager

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Collected: 11/13/2006
Date Received: 11/13/2006

EPA Method 504.1

Sample Name: MW-18-5
Lab Code: P0600233-001

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0098	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0098	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Collected: 11/13/2006
Date Received: 11/13/2006

EPA Method 504.1

Sample Name: MW-18-4
Lab Code: P0600233-002

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0097	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0097	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

EPA Method 504.1

Sample Name:	MW-18-2	**Units:**	ug/L
Lab Code:	P0600233-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0098	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0098	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Collected: 11/13/2006
Date Received: 11/13/2006

EPA Method 504.1

Sample Name: EB-13-11/13/06
Lab Code: P0600233-004

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

EPA Method 504.1

Sample Name:	TB-13-11/13/06	**Units:**	ug/L
Lab Code:	P0600233-005	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0097	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0097	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

EPA Method 504.1

Sample Name:	MW-18-3	**Units:**	ug/L
Lab Code:	P0600233-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

EPA Method 504.1

Sample Name:	MW-18-1	**Units:**	ug/L
Lab Code:	P0600233-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

EPA Method 504.1

Sample Name:	EB-14-11/14/06	**Units:**	ug/L
Lab Code:	P0600233-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0098	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0098	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

EPA Method 504.1

Sample Name:	TB-14-11/14/06	**Units:**	ug/L
Lab Code:	P0600233-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	0.00170	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	0.00180	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

EPA Method 504.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0620068-5	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0017	1	11/21/06	11/22/06	KWG0620068	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0018	1	11/21/06	11/22/06	KWG0620068	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/21/2006
Date Analyzed: 11/22/2006

Matrix Spike/Duplicate Matrix Spike Summary
EPA Method 504.1

Sample Name: MW-18-3
Lab Code: P0600233-006

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low
Extraction Lot: KWG0620068

Analyte Name	Sample Result	MW-18-3MS KWG0620068-1 Matrix Spike			MW-18-3DMS KWG0620068-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	ND	0.0671	0.0692	97	0.0676	0.0666	101	65-135	1	30
1,2-Dibromo-3-chloropropane (DBCP	ND	0.0682	0.0692	99	0.0646	0.0666	97	65-135	5	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/21/2006
Sample Matrix:	Water	**Date Analyzed:**	11/22/2006

Lab Control Spike Summary
EPA Method 504.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	504.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0620068

	Lab Control Sample KWG0620068-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.0729	0.0714	102	70-130
1,2-Dibromo-3-chloropropane (DBCP	0.0712	0.0714	100	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/21/2006
Sample Matrix:	Water	**Date Analyzed:**	11/22/2006

Lab Control Spike Summary
EPA Method 504.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	504.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0620068

	Lab Control Sample KWG0620068-4 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.0767	0.0714	107	70-130
1,2-Dibromo-3-chloropropane (DBCP	0.0745	0.0714	104	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/21/2006
Date Analyzed: 11/22/2006
Time Analyzed: 11:48

Method Blank Summary
EPA Method 504.1

Sample Name: Method Blank
Lab Code: KWG0620068-5

File ID: J:\GC24\DATA\112206\11220011.D
Instrument ID: GC24

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low
Extraction Lot: KWG0620068

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0620068-3	J:\GC24\DATA\112206\11220012.D	11/22/06	12:12
Lab Control Sample	KWG0620068-4	J:\GC24\DATA\112206\11220013.D	11/22/06	12:37
MW-18-5	P0600233-001	J:\GC24\DATA\112206\11220014.D	11/22/06	13:01
MW-18-4	P0600233-002	J:\GC24\DATA\112206\11220015.D	11/22/06	13:26
MW-18-2	P0600233-003	J:\GC24\DATA\112206\11220016.D	11/22/06	13:50
EB-13-11/13/06	P0600233-004	J:\GC24\DATA\112206\11220017.D	11/22/06	14:14
TB-13-11/13/06	P0600233-005	J:\GC24\DATA\112206\11220018.D	11/22/06	14:38
MW-18-3	P0600233-006	J:\GC24\DATA\112206\11220019.D	11/22/06	15:03
MW-18-3MS	KWG0620068-1	J:\GC24\DATA\112206\11220021.D	11/22/06	15:51
MW-18-3DMS	KWG0620068-2	J:\GC24\DATA\112206\11220022.D	11/22/06	16:15
MW-18-1	P0600233-007	J:\GC24\DATA\112206\11220023.D	11/22/06	16:39
EB-14-11/14/06	P0600233-008	J:\GC24\DATA\112206\11220024.D	11/22/06	17:04
TB-14-11/14/06	P0600233-009	J:\GC24\DATA\112206\11220025.D	11/22/06	17:28

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/21/2006
Sample Matrix:	Water	**Date Analyzed:**	11/22/2006
		Time Analyzed:	12:12

Lab Control Sample Summary
EPA Method 504.1

Sample Name:	Lab Control Sample	**File ID:**	J:\GC24\DATA\112206\11220012.D
Lab Code:	KWG0620068-3	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0620068

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0620068-5	J:\GC24\DATA\112206\11220011.D	11/22/06	11:48
MW-18-5	P0600233-001	J:\GC24\DATA\112206\11220014.D	11/22/06	13:01
MW-18-4	P0600233-002	J:\GC24\DATA\112206\11220015.D	11/22/06	13:26
MW-18-2	P0600233-003	J:\GC24\DATA\112206\11220016.D	11/22/06	13:50
EB-13-11/13/06	P0600233-004	J:\GC24\DATA\112206\11220017.D	11/22/06	14:14
TB-13-11/13/06	P0600233-005	J:\GC24\DATA\112206\11220018.D	11/22/06	14:38
MW-18-3	P0600233-006	J:\GC24\DATA\112206\11220019.D	11/22/06	15:03
MW-18-3MS	KWG0620068-1	J:\GC24\DATA\112206\11220021.D	11/22/06	15:51
MW-18-3DMS	KWG0620068-2	J:\GC24\DATA\112206\11220022.D	11/22/06	16:15
MW-18-1	P0600233-007	J:\GC24\DATA\112206\11220023.D	11/22/06	16:39
EB-14-11/14/06	P0600233-008	J:\GC24\DATA\112206\11220024.D	11/22/06	17:04
TB-14-11/14/06	P0600233-009	J:\GC24\DATA\112206\11220025.D	11/22/06	17:28

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/21/2006
Sample Matrix:	Water	**Date Analyzed:**	11/22/2006
		Time Analyzed:	12:37

Lab Control Sample Summary
EPA Method 504.1

Sample Name:	Lab Control Sample	**File ID:**	J:\GC24\DATA\112206\11220013.D
Lab Code:	KWG0620068-4	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0620068

This Lab Control Sample applies to the following analyses:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC24\DATA\112206\11220002.D	E	J:\GC24\DATA\112206\11220006.D
B	J:\GC24\DATA\112206\11220003.D	F	J:\GC24\DATA\112206\11220007.D
C	J:\GC24\DATA\112206\11220004.D	G	J:\GC24\DATA\112206\11220008.D
D	J:\GC24\DATA\112206\11220005.D	H	J:\GC24\DATA\112206\11220009.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
1,2-Dibromoethane (EDB)	A	0.075	1.67E+6	B	0.13	1.44E+6	C	0.25	1.65E+6	D	0.63	1.44E+6	E	1.3	1.52E+6
	F	3.8	1.41E+6	G	5.0	1.34E+6	H	10	1.29E+6						
1,2-Dibromo-3-chloropropane (DBCP	A	0.075	2.70E+6	B	0.13	2.52E+6	C	0.25	2.95E+6	D	0.63	2.53E+6	E	1.3	2.56E+6
	F	3.8	2.46E+6	G	5.0	2.47E+6	H	10	2.28E+6						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	9.3		≤ 20
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	7.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/22/2006
Date Analyzed: 11/22/2006

Second Source Calibration Verification
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration ID: CAL5812
Units: ppb

File ID: J:\GC24\DATA\112206\11220010.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.2	1470000	1440000	-2	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	2560000	2520000	-2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-XLB

Level ID	File ID	Level ID	File ID
A	J:\GC24\DATA\112206\11220002.D\11220002c.d	E	J:\GC24\DATA\112206\11220006.D\11220006c.d
B	J:\GC24\DATA\112206\11220003.D\11220003c.d	F	J:\GC24\DATA\112206\11220007.D\11220007c.d
C	J:\GC24\DATA\112206\11220004.D\11220004c.d	G	J:\GC24\DATA\112206\11220008.D\11220008c.d
D	J:\GC24\DATA\112206\11220005.D\11220005c.d	H	J:\GC24\DATA\112206\11220009.D\11220009c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
1,2-Dibromoethane (EDB)	A	0.075	3.83E+6	B	0.13	3.72E+6	C	0.25	3.29E+6	D	0.63	3.05E+6	E	1.3	2.99E+6
	F	3.8	2.95E+6	G	5.0	2.84E+6	H	10	2.78E+6						
1,2-Dibromo-3-chloropropane (DBCP	A	0.075	4.46E+6	B	0.13	4.79E+6	C	0.25	4.76E+6	D	0.63	4.44E+6	E	1.3	4.27E+6
	F	3.8	4.30E+6	G	5.0	4.41E+6	H	10	4.11E+6						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	12.5		≤ 20
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	5.3		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/22/2006
Date Analyzed: 11/22/2006

Second Source Calibration Verification
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration ID: CAL5812
Units: ppb

File ID: J:\GC24\DATA\112206\11220010.D\11220010c.d

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.2	3180000	2930000	-8	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	4440000	4250000	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 11/22/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0620178
Units: ppb

File ID: J:\GC24\DATA\112206\11220010.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.2	1470000	1440000	-2	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	2560000	2520000	-2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 11/22/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0620178
Units: ppb

File ID: J:\GC24\DATA\112206\11220010.D\11220010C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.2	3180000	2930000	-8	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	4440000	4250000	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 11/22/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0620178
Units: ppb

File ID: J:\GC24\DATA\112206\11220020.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	3.8	3.7	1470000	1460000	-1	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	3.8	3.5	2560000	2380000	-7	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 11/22/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0620178
Units: ppb

File ID: J:\GC24\DATA\112206\11220020.D\11220020C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	3.8	3.4	3180000	2900000	-9	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	3.8	3.5	4440000	4140000	-7	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 11/22/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0620178
Units: ppb

File ID: J:\GC24\DATA\112206\11220031.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	3.8	3.7	1470000	1450000	-1	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	3.8	3.7	2560000	2510000	-2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 11/22/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0620178
Units: ppb

File ID: J:\GC24\DATA\112206\11220031.D\11220031C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	3.8	3.2	3180000	2740000	-14	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	3.8	3.5	4440000	4180000	-6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233

Analysis Run Log
EPA Method 504.1

Analysis Method: 504.1

Analysis Lot: KWG0620178
Instrument ID: GC24
Column: DB-35MS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
11220010.D	Continuing Calibration Verification	KWG0620178-1	11/22/06	11:24		11/22/06	11:41
11220011.D	Method Blank	KWG0620068-5	11/22/06	11:48		11/22/06	12:05
11220012.D	Lab Control Sample	KWG0620068-3	11/22/06	12:12		11/22/06	12:29
11220013.D	Lab Control Sample	KWG0620068-4	11/22/06	12:37		11/22/06	12:54
11220014.D	MW-18-5	P0600233-001	11/22/06	13:01		11/22/06	13:18
11220015.D	MW-18-4	P0600233-002	11/22/06	13:26		11/22/06	13:43
11220016.D	MW-18-2	P0600233-003	11/22/06	13:50		11/22/06	14:07
11220017.D	EB-13-11/13/06	P0600233-004	11/22/06	14:14		11/22/06	14:31
11220018.D	TB-13-11/13/06	P0600233-005	11/22/06	14:38		11/22/06	14:55
11220019.D	MW-18-3	P0600233-006	11/22/06	15:03		11/22/06	15:20
11220020.D	Continuing Calibration Verification	KWG0620178-2	11/22/06	15:27		11/22/06	15:44
11220021.D	MW-18-3MS	KWG0620068-1	11/22/06	15:51		11/22/06	16:08
11220022.D	MW-18-3DMS	KWG0620068-2	11/22/06	16:15		11/22/06	16:32
11220023.D	MW-18-1	P0600233-007	11/22/06	16:39		11/22/06	16:56
11220024.D	EB-14-11/14/06	P0600233-008	11/22/06	17:04		11/22/06	17:21
11220025.D	TB-14-11/14/06	P0600233-009	11/22/06	17:28		11/22/06	17:45
11220026.D	ZZZZZZ	ZZZZZZ	11/22/06	17:52		11/22/06	18:09
11220027.D	ZZZZZZ	ZZZZZZ	11/22/06	18:16		11/22/06	18:33
11220028.D	ZZZZZZ	ZZZZZZ	11/22/06	18:41		11/22/06	18:58
11220029.D	ZZZZZZ	ZZZZZZ	11/22/06	19:05		11/22/06	19:22
11220030.D	ZZZZZZ	ZZZZZZ	11/22/06	19:29		11/22/06	19:46
11220031.D	Continuing Calibration Verification	KWG0620178-3	11/22/06	19:53		11/22/06	20:10

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/21/2006

Extraction Prep Log
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Extraction Lot: KWG0620068
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-18-5	P0600233-001	11/13/06	11/13/06	35.73ml	2ml	NA	
MW-18-4	P0600233-002	11/13/06	11/13/06	36.17ml	2ml	NA	
MW-18-2	P0600233-003	11/13/06	11/13/06	36.05ml	2ml	NA	
EB-13-11/13/06	P0600233-004	11/13/06	11/13/06	36.66ml	2ml	NA	
TB-13-11/13/06	P0600233-005	11/13/06	11/13/06	36.28ml	2ml	NA	
MW-18-3	P0600233-006	11/14/06	11/14/06	36.69ml	2ml	NA	
MW-18-1	P0600233-007	11/14/06	11/14/06	36.67ml	2ml	NA	
EB-14-11/14/06	P0600233-008	11/14/06	11/14/06	35.97ml	2ml	NA	
TB-14-11/14/06	P0600233-009	11/14/06	11/14/06	36.68ml	2ml	NA	
Method Blank	KWG0620068-5	NA	NA	35ml	2ml	NA	
MW-18-3MS	KWG0620068-1	11/14/06	11/14/06	36.15ml	2ml	NA	
MW-18-3DMS	KWG0620068-2	11/14/06	11/14/06	37.53ml	2ml	NA	
Lab Control Sample	KWG0620068-3	NA	NA	35ml	2ml	NA	
Lab Control Sample	KWG0620068-4	NA	NA	35ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

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Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233

Cover Page - Organic Analysis Data Package
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
MW-18-3MS	KWG0620320-1	11/14/2006	11/14/2006
MW-18-3DMS	KWG0620320-2	11/14/2006	11/14/2006
MW-18-5	P0600233-001	11/13/2006	11/13/2006
MW-18-4	P0600233-002	11/13/2006	11/13/2006
MW-18-2	P0600233-003	11/13/2006	11/13/2006
EB-13-11/13/06	P0600233-004	11/13/2006	11/13/2006
MW-18-3	P0600233-006	11/14/2006	11/14/2006
MW-18-1	P0600233-007	11/14/2006	11/14/2006
EB-14-11/14/06	P0600233-008	11/14/2006	11/14/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Jim Sulls

Date: 12/13/06 Title: Lab Manager

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

Nitrosamines by EPA 521

Sample Name:	MW-18-5	**Units:**	ng/L
Lab Code:	P0600233-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/07/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/07/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	89	70-130	12/07/06	Acceptable

Comments:

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

Nitrosamines by EPA 521

Sample Name:	MW-18-4	**Units:**	ng/L
Lab Code:	P0600233-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/07/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/07/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	78	70-130	12/07/06	Acceptable

Comments:

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

Nitrosamines by EPA 521

Sample Name:	MW-18-2	**Units:**	ng/L
Lab Code:	P0600233-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/07/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/07/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	76	70-130	12/07/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

Nitrosamines by EPA 521

Sample Name:	EB-13-11/13/06	**Units:**	ng/L
Lab Code:	P0600233-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/07/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/07/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/07/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	90	70-130	12/07/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

Nitrosamines by EPA 521

Sample Name:	MW-18-3	**Units:**	ng/L
Lab Code:	P0600233-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/28/06	12/07/06	KWG0620320	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	77	70-130	12/07/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

Nitrosamines by EPA 521

Sample Name:	MW-18-1	**Units:**	ng/L
Lab Code:	P0600233-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/28/06	12/07/06	KWG0620320	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	77	70-130	12/07/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

Nitrosamines by EPA 521

Sample Name:	EB-14-11/14/06	**Units:**	ng/L
Lab Code:	P0600233-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/28/06	12/07/06	KWG0620320	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	99	70-130	12/07/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Collected: NA
Date Received: NA

Nitrosamines by EPA 521

Sample Name: Method Blank
Lab Code: KWG0619857-4

Units: ng/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 521

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/17/06	12/04/06	KWG0619857	*
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/17/06	12/04/06	KWG0619857	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/17/06	12/04/06	KWG0619857	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	81	70-130	12/04/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0620320-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	11/28/06	12/07/06	KWG0620320	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	11/28/06	12/07/06	KWG0620320	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	84	70-130	12/07/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233

Surrogate Recovery Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Level: Low

Sample Name	Lab Code	Sur1
MW-18-5	P0600233-001	89
MW-18-4	P0600233-002	78
MW-18-2	P0600233-003	76
EB-13-11/13/06	P0600233-004	90
MW-18-3	P0600233-006	77
MW-18-1	P0600233-007	77
EB-14-11/14/06	P0600233-008	99
Method Blank	KWG0619857-4	81
Method Blank	KWG0620320-4	84
Batch QCMS	KWG0619857-1	94
Batch QCDMS	KWG0619857-2	86
MW-18-3MS	KWG0620320-1	93
MW-18-3DMS	KWG0620320-2	86
Batch QC	P0600200-011	79
Lab Control Sample	KWG0619857-3	81
Lab Control Sample	KWG0620320-3	74

Surrogate Recovery Control Limits (%)

Sur1 = N-Nitrosodimethylamine-d6 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/17/2006
Sample Matrix:	Water	**Date Analyzed:**	12/06/2006

Matrix Spike/Duplicate Matrix Spike Summary
Nitrosamines by EPA 521

Sample Name:	Batch QC	**Units:**	ng/L
Lab Code:	P0600200-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619857

Analyte Name	Sample Result	Batch QCMS KWG0619857-1 Matrix Spike			Batch QCDMS KWG0619857-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
N-Nitrosodimethylamine	ND	31.3	40.0	78	32.0	40.0	80	70-130	2	30
N-Nitrosomethylethylamine	ND	31.4	40.0	79	29.4	40.0	74	70-130	7	30
N-Nitrosodiethylamine	ND	32.3	40.0	81	39.4	40.0	98	70-130	20	30
N-Nitrosopyrrolidine	ND	37.9	40.0	95	42.0	40.0	105	70-130	10	30
N-Nitrosodi-n-propylamine	ND	38.4	40.0	96	35.1	40.0	88	70-130	9	30
N-Nitrosopiperidine	ND	31.8	40.0	80	32.4	40.0	81	70-130	2	30
N-Nitrosodi-n-butylamine	ND	31.5	40.0	79	35.7	40.0	89	70-130	13	30
N-Nitrosodiphenylamine	ND	9.10	40.0	23 *	9.40	40.0	24 *	70-130	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/28/2006
Date Analyzed: 12/07/2006

Matrix Spike/Duplicate Matrix Spike Summary
Nitrosamines by EPA 521

Sample Name: MW-18-3
Lab Code: P0600233-006

Units: ng/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 521

Level: Low
Extraction Lot: KWG0620320

Analyte Name	Sample Result	MW-18-3MS KWG0620320-1 Matrix Spike Result	Expected	%Rec	MW-18-3DMS KWG0620320-2 Duplicate Matrix Spike Result	Expected	%Rec	%Rec Limits	RPD	RPD Limit
N-Nitrosodimethylamine	ND	26.2	40.0	66 *	22.9	40.0	57 *	70-130	14	30
N-Nitrosomethylethylamine	ND	31.8	40.0	80	30.1	40.0	75	70-130	6	30
N-Nitrosodiethylamine	ND	35.2	40.0	88	34.2	40.0	86	70-130	3	30
N-Nitrosopyrrolidine	ND	42.8	40.0	107	38.1	40.0	95	70-130	12	30
N-Nitrosodi-n-propylamine	ND	44.5	40.0	111	37.6	40.0	94	70-130	17	30
N-Nitrosopiperidine	ND	33.7	40.0	84	30.5	40.0	76	70-130	10	30
N-Nitrosodi-n-butylamine	ND	36.2	40.0	91	36.4	40.0	91	70-130	0	30
N-Nitrosodiphenylamine	ND	11.4	40.0	29 *	12.8	40.0	32 *	70-130	12	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/17/2006
Date Analyzed: 12/04/2006

Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Basis: NA
Level: Low
Extraction Lot: KWG0619857

Analyte Name	Lab Control Sample KWG0619857-3 Lab Control Spike Result	Expected	%Rec	%Rec Limits
N-Nitrosodimethylamine	28.3	40.0	71	70-130
N-Nitrosomethylethylamine	30.2	40.0	75	70-130
N-Nitrosodiethylamine	32.1	40.0	80	70-130
N-Nitrosopyrrolidine	52.4	40.0	131 *	70-130
N-Nitrosodi-n-propylamine	43.2	40.0	108	70-130
N-Nitrosopiperidine	40.2	40.0	100	70-130
N-Nitrosodi-n-butylamine	45.0	40.0	113	70-130
N-Nitrosodiphenylamine	13.7	40.0	34 *	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/28/2006
Sample Matrix:	Water	**Date Analyzed:**	12/07/2006

Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method:	METHOD	**Units:**	ng/L
Analysis Method:	521	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0620320

	Lab Control Sample KWG0620320-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
N-Nitrosodimethylamine	34.4	40.0	86	70-130
N-Nitrosomethylethylamine	30.2	40.0	76	70-130
N-Nitrosodiethylamine	34.0	40.0	85	70-130
N-Nitrosopyrrolidine	41.7	40.0	104	70-130
N-Nitrosodi-n-propylamine	44.1	40.0	110	70-130
N-Nitrosopiperidine	32.6	40.0	82	70-130
N-Nitrosodi-n-butylamine	38.7	40.0	97	70-130
N-Nitrosodiphenylamine	10.4	40.0	26 *	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/17/2006
Sample Matrix:	Water	**Date Analyzed:**	12/04/2006
		Time Analyzed:	16:08

Method Blank Summary
Nitrosamines by EPA 521

Sample Name:	Method Blank	**File ID:**	J:\MS16\DATA\120406A\1204012.D
Lab Code:	KWG0619857-4	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619857

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0619857-3	J:\MS16\DATA\120406A\1204009.D	12/04/06	13:56
Batch QC	P0600200-011	J:\MS16\DATA\120606\1206017.D	12/06/06	18:55
Batch QCMS	KWG0619857-1	J:\MS16\DATA\120606\1206018.D	12/06/06	19:34
Batch QCDMS	KWG0619857-2	J:\MS16\DATA\120606\1206019.D	12/06/06	20:13
MW-18-5	P0600233-001	J:\MS16\DATA\120606\1206029.D	12/07/06	02:42
MW-18-4	P0600233-002	J:\MS16\DATA\120606\1206030.D	12/07/06	03:21
MW-18-2	P0600233-003	J:\MS16\DATA\120606\1206031.D	12/07/06	04:00
EB-13-11/13/06	P0600233-004	J:\MS16\DATA\120606\1206032.D	12/07/06	04:38

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/28/2006
Sample Matrix:	Water	**Date Analyzed:**	12/07/2006
		Time Analyzed:	11:08

Method Blank Summary
Nitrosamines by EPA 521

Sample Name:	Method Blank	**File ID:**	J:\MS16\DATA\120606\1206042.D
Lab Code:	KWG0620320-4	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0620320

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0620320-3	J:\MS16\DATA\120606\1206040.D	12/07/06	09:50
MW-18-3	P0600233-006	J:\MS16\DATA\120606\1206043.D	12/07/06	11:47
MW-18-3MS	KWG0620320-1	J:\MS16\DATA\120606\1206044.D	12/07/06	12:26
MW-18-3DMS	KWG0620320-2	J:\MS16\DATA\120606\1206045.D	12/07/06	13:05
MW-18-1	P0600233-007	J:\MS16\DATA\120606\1206046.D	12/07/06	13:44
EB-14-11/14/06	P0600233-008	J:\MS16\DATA\120606\1206047.D	12/07/06	14:23

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/17/2006
Sample Matrix:	Water	**Date Analyzed:**	12/04/2006
		Time Analyzed:	13:56

Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**File ID:**	J:\MS16\DATA\120406A\1204009.D
Lab Code:	KWG0619857-3	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0619857

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0619857-4	J:\MS16\DATA\120406A\1204012.D	12/04/06	16:08
Batch QC	P0600200-011	J:\MS16\DATA\120606\1206017.D	12/06/06	18:55
Batch QCMS	KWG0619857-1	J:\MS16\DATA\120606\1206018.D	12/06/06	19:34
Batch QCDMS	KWG0619857-2	J:\MS16\DATA\120606\1206019.D	12/06/06	20:13
MW-18-5	P0600233-001	J:\MS16\DATA\120606\1206029.D	12/07/06	02:42
MW-18-4	P0600233-002	J:\MS16\DATA\120606\1206030.D	12/07/06	03:21
MW-18-2	P0600233-003	J:\MS16\DATA\120606\1206031.D	12/07/06	04:00
EB-13-11/13/06	P0600233-004	J:\MS16\DATA\120606\1206032.D	12/07/06	04:38

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/28/2006
Sample Matrix:	Water	**Date Analyzed:**	12/07/2006
		Time Analyzed:	09:50

Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**File ID:**	J:\MS16\DATA\120606\1206040.D
Lab Code:	KWG0620320-3	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0620320

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0620320-4	J:\MS16\DATA\120606\1206042.D	12/07/06	11:08
MW-18-3	P0600233-006	J:\MS16\DATA\120606\1206043.D	12/07/06	11:47
MW-18-3MS	KWG0620320-1	J:\MS16\DATA\120606\1206044.D	12/07/06	12:26
MW-18-3DMS	KWG0620320-2	J:\MS16\DATA\120606\1206045.D	12/07/06	13:05
MW-18-1	P0600233-007	J:\MS16\DATA\120606\1206046.D	12/07/06	13:44
EB-14-11/14/06	P0600233-008	J:\MS16\DATA\120606\1206047.D	12/07/06	14:23

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 12/04/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5837
Instrument ID: MS16

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS16\DATA\120406A\1204001.D	D	J:\MS16\DATA\120406A\1204004.D
B	J:\MS16\DATA\120406A\1204002.D	E	J:\MS16\DATA\120406A\1204005.D
C	J:\MS16\DATA\120406A\1204003.D	F	J:\MS16\DATA\120406A\1204006.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosopiperidine	A	1.0	7.06	B	2.0	7.07	C	5.0	8.20	D	10	9.15	E	20	10.0
	F	50	9.98												
N-Nitrosomethylethylamine	A	1.0	5.00	B	2.0	5.19	C	5.0	6.22	D	10	6.64	E	20	7.17
	F	50	6.83												
N-Nitrosodimethylamine-d6	A	20	1.03	B	20	1.05	C	20	0.988	D	20	1.07	E	20	1.06
	F	20	1.25												
N-Nitrosodiethylamine	A	1.0	1.23	B	2.0	1.29	C	5.0	1.37	D	10	1.60	E	20	1.55
	F	50	1.55												
N-Nitrosodimethylamine	A	1.0	0.779	B	2.0	0.839	C	5.0	0.878	D	10	1.06	E	20	1.23
	F	50	1.06												
N-Nitrosodi-n-propylamine	A	1.0	0.466	B	2.0	0.585	C	5.0	0.650	D	10	0.753	E	20	0.696
	F	50	0.760												
N-Nitrosodiphenylamine	A	1.0	4.31	B	2.0	4.47	C	5.0	4.40	D	10	4.04	E	20	5.42
	F	50	5.07												
N-Nitrosodi-n-butylamine	A	1.0	2.73	B	2.0	3.20	C	5.0	3.35	D	10	3.72	E	20	3.85
	F	50	3.72												
N-Nitrosopyrrolidine	A	1.0	0.825	B	2.0	0.778	C	5.0	0.951	D	10	1.05	E	20	1.25
	F	50	1.26												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 12/04/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5837
Instrument ID: MS16

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosopiperidine	MS	AverageRF	% RSD	15.7		≤ 30	8.58		
N-Nitrosomethylethylamine	MS	AverageRF	% RSD	14.5		≤ 30	6.17		
N-Nitrosodimethylamine-d6	SURR	AverageRF	% RSD	8.5		≤ 30	1.08		
N-Nitrosodiethylamine	MS	AverageRF	% RSD	10.9		≤ 30	1.43		
N-Nitrosodimethylamine	MS	AverageRF	% RSD	17.6		≤ 30	0.975		
N-Nitrosodi-n-propylamine	MS	AverageRF	% RSD	17.2		≤ 30	0.652		
N-Nitrosodiphenylamine	MS	AverageRF	% RSD	11.2		≤ 30	4.62		
N-Nitrosodi-n-butylamine	MS	AverageRF	% RSD	12.4		≤ 30	3.43		
N-Nitrosopyrrolidine	MS	AverageRF	% RSD	20.2		≤ 30	1.02		

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 12/04/2006
Date Analyzed: 12/04/2006

Second Source Calibration Verification
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration ID: CAL5837
Units: ug/l

File ID: J:\MS16\DATA\120406A\1204007.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodi-n-butylamine	20	20	3.43	3.48	2	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	20	0.652	0.652	0	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	20	1.43	1.42	-1	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	25	0.975	1.23	26	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19	4.62	4.33	-6	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21	6.17	6.53	6	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	18	8.58	7.67	-11	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	20	1.02	1.03	1	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 12/06/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5850
Instrument ID: MS16

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS16\DATA\120606\1206001.D	D	J:\MS16\DATA\120606\1206004.D
B	J:\MS16\DATA\120606\1206002.D	E	J:\MS16\DATA\120606\1206005.D
C	J:\MS16\DATA\120606\1206003.D	F	J:\MS16\DATA\120606\1206006.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosopiperidine	A	1.0	9.63	B	2.0	10.3	C	5.0	9.76	D	10	10.1	E	20	10.1
	F	50	10.9												
N-Nitrosomethylethylamine	A	1.0	5.25	B	2.0	5.65	C	5.0	6.41	D	10	6.33	E	20	6.40
	F	50	6.63												
N-Nitrosodimethylamine-d6	A	20	1.06	B	20	1.13	C	20	1.16	D	20	1.09	E	20	1.32
	F	20	0.926												
N-Nitrosodiethylamine	A	1.0	1.32	B	2.0	1.33	C	5.0	1.57	D	10	1.49	E	20	1.42
	F	50	1.50												
N-Nitrosodimethylamine	A	1.0	0.766	B	2.0	0.699	C	5.0	0.958	D	10	1.02	E	20	0.812
	F	50	1.04												
N-Nitrosodi-n-propylamine	A	1.0	0.580	B	2.0	0.685	C	5.0	0.727	D	10	0.713	E	20	0.690
	F	50	0.719												
N-Nitrosodiphenylamine	A	1.0	4.75	B	2.0	5.37	C	5.0	5.77	D	10	5.04	E	20	6.27
	F	50	5.46												
N-Nitrosodi-n-butylamine	A	1.0	4.05	B	2.0	4.05	C	5.0	3.64	D	10	3.78	E	20	4.45
	F	50	4.28												
N-Nitrosopyrrolidine	A	1.0	1.20	B	2.0	1.44	C	5.0	1.38	D	10	1.38	E	20	1.34
	F	50	1.56												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 12/06/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5850
Instrument ID: MS16

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosopiperidine	MS	AverageRF	% RSD	4.3		≤ 30	10.1		
N-Nitrosomethylethylamine	MS	AverageRF	% RSD	8.8		≤ 30	6.11		
N-Nitrosodimethylamine-d6	SURR	AverageRF	% RSD	11.5		≤ 30	1.11		
N-Nitrosodiethylamine	MS	AverageRF	% RSD	7.0		≤ 30	1.44		
N-Nitrosodimethylamine	MS	AverageRF	% RSD	16.1		≤ 30	0.882		
N-Nitrosodi-n-propylamine	MS	AverageRF	% RSD	7.9		≤ 30	0.686		
N-Nitrosodiphenylamine	MS	AverageRF	% RSD	9.9		≤ 30	5.44		
N-Nitrosodi-n-butylamine	MS	AverageRF	% RSD	7.5		≤ 30	4.04		
N-Nitrosopyrrolidine	MS	AverageRF	% RSD	8.5		≤ 30	1.38		

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 12/06/2006
Date Analyzed: 12/06/2006

Second Source Calibration Verification
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration ID: CAL5850
Units: ug/l

File ID: J:\MS16\DATA\120606\1206007.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodi-n-butylamine	20	19	4.04	3.76	-7	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	23	0.686	0.802	17	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	18	1.44	1.29	-10	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	18	0.882	0.772	-12	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19	5.44	5.11	-6	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21	6.11	6.41	5	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	19	10.1	9.58	-5	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	22	1.38	1.50	9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 12/04/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620781
Units: ug/l

File ID: J:\MS16\DATA\120406A\1204007.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	18		1.08	0.972	-10	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	25		0.975	1.23	26	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21		6.17	6.53	6	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	20		1.43	1.42	-1	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	20		1.02	1.03	1	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	20		0.652	0.652	0	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	18		8.58	7.67	-11	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	20		3.43	3.48	2	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19		4.62	4.33	-6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 12/04/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/04/2006
Calibration ID: CAL5837
Analysis Lot: KWG0620781
Units: ug/l

File ID: J:\MS16\DATA\120406A\1204015.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	20		1.08	1.07	-1	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	7.7		0.975	0.754	-23	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	9.5		6.17	5.88	-5	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	10		1.43	1.44	1	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	12		1.02	1.17	15	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	10		0.652	0.662	2	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	12		8.58	9.89	15	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	11		3.43	3.67	7	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	12		4.62	5.47	18	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 12/06/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206011.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	22		1.11	1.25	12	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	16		0.882	0.725	-18	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	20		6.11	5.99	-2	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	16		1.44	1.15	-20	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	22		1.38	1.50	8	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	17		0.686	0.574	-16	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	19		10.1	9.59	-5	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	17		4.04	3.49	-14	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	15		5.44	4.09	-25	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 12/06/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206022.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	21		1.11	1.16	4	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	9.4		0.882	0.831	-6	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	11		6.11	6.49	6	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	11		1.44	1.54	7	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	10		1.38	1.45	5	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	11		0.686	0.763	11	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	11		10.1	10.7	6	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	11		4.04	4.61	14	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	10		5.44	5.55	2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 12/07/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206033.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	25		1.11	1.41	26	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	20		0.882	0.900	2	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	24		6.11	7.36	20	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	18		1.44	1.26	-12	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	23		1.38	1.58	14	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	23		0.686	0.780	14	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	23		10.1	11.4	13	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	24		4.04	4.76	18	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	24		5.44	6.58	21	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 12/07/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206038.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	22		1.11	1.22	10	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	10		0.882	0.921	4	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	10		6.11	6.25	2	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	8.9		1.44	1.28	-11	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	11		1.38	1.54	12	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	11		0.686	0.726	6	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	9.8		10.1	9.94	-2	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	9.7		4.04	3.93	-3	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	9.9		5.44	5.36	-1	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 12/07/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206048.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	20		1.11	1.12	1	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	11		0.882	0.983	11	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	11		6.11	6.57	7	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	11		1.44	1.55	8	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	11		1.38	1.52	10	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	10		0.686	0.686	0	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	10		10.1	10.2	1	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	9.4		4.04	3.81	-6	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	9.1		5.44	4.97	-9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0620781
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1204006.D	GC/MS Tuning - Decafluorotripheny	KWG0620781-1	12/4/06	11:57		12/4/06	12:30
\1204007.D	Continuing Calibration Verification	KWG0620781-2	12/4/06	12:36		12/4/06	13:09
\1204008.D	ZZZZZZ	ZZZZZZ	12/4/06	13:15		12/4/06	13:48
\1204009.D	Lab Control Sample	KWG0619857-3	12/4/06	13:56		12/4/06	14:29
\1204012.D	Method Blank	KWG0619857-4	12/4/06	16:08		12/4/06	16:41
\1204013.D	ZZZZZZ	ZZZZZZ	12/4/06	16:47		12/4/06	17:20
\1204015.D	Continuing Calibration Verification	KWG0620781-3	12/4/06	18:05		12/4/06	18:38
\1204017.D	ZZZZZZ	ZZZZZZ	12/4/06	19:23		12/4/06	19:56
\1204019.D	ZZZZZZ	ZZZZZZ	12/4/06	20:41		12/4/06	21:14
\1204021.D	ZZZZZZ	ZZZZZZ	12/4/06	21:59		12/4/06	22:32
\1204022.D	ZZZZZZ	ZZZZZZ	12/4/06	22:38		12/4/06	23:11
\1204023.D	ZZZZZZ	ZZZZZZ	12/4/06	23:17		12/4/06	23:50
\1204024.D	ZZZZZZ	ZZZZZZ	12/4/06	23:56		12/5/06	00:29
\1204026.D	Continuing Calibration Verification	KWG0620781-4	12/5/06	01:13		12/5/06	01:46
\1204027.D	ZZZZZZ	ZZZZZZ	12/5/06	01:52		12/5/06	02:25
\1204036.D	Continuing Calibration Verification	KWG0620781-5	12/5/06	07:43		12/5/06	08:16

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle **Service Request:** P0600233
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521 **Analysis Lot:** KWG0620857
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
606\1206.D	GC/MS Tuning - Decafluorotripheny	KWG0620857-1	12/6/06	07:49		12/6/06	08:22
\1206007.D	Continuing Calibration Verification	KWG0620857-2	12/6/06	12:26		12/6/06	12:59
\1206009.D	ZZZZZZ	ZZZZZZ	12/6/06	13:44		12/6/06	14:17
\1206011.D	Continuing Calibration Verification	KWG0620857-3	12/6/06	15:02		12/6/06	15:35
\1206012.D	ZZZZZZ	ZZZZZZ	12/6/06	15:41		12/6/06	16:14
\1206013.D	ZZZZZZ	ZZZZZZ	12/6/06	16:20		12/6/06	16:53
\1206014.D	ZZZZZZ	ZZZZZZ	12/6/06	16:59		12/6/06	17:32
\1206015.D	ZZZZZZ	ZZZZZZ	12/6/06	17:38		12/6/06	18:11
\1206016.D	ZZZZZZ	ZZZZZZ	12/6/06	18:16		12/6/06	18:49
\1206017.D	Batch QC	P0600200-011	12/6/06	18:55		12/6/06	19:28
\1206018.D	Batch QCMS	KWG0619857-1	12/6/06	19:34		12/6/06	20:07
\1206019.D	Batch QCDMS	KWG0619857-2	12/6/06	20:13		12/6/06	20:46
\1206020.D	ZZZZZZ	ZZZZZZ	12/6/06	20:52		12/6/06	21:25
\1206021.D	ZZZZZZ	ZZZZZZ	12/6/06	21:31		12/6/06	22:04
\1206022.D	Continuing Calibration Verification	KWG0620857-4	12/6/06	22:10		12/6/06	22:43
\1206023.D	ZZZZZZ	ZZZZZZ	12/6/06	22:49		12/6/06	23:22
\1206024.D	ZZZZZZ	ZZZZZZ	12/6/06	23:28		12/7/06	00:01
\1206025.D	ZZZZZZ	ZZZZZZ	12/7/06	00:07		12/7/06	00:40
\1206026.D	ZZZZZZ	ZZZZZZ	12/7/06	00:46		12/7/06	01:19
\1206027.D	ZZZZZZ	ZZZZZZ	12/7/06	01:24		12/7/06	01:57
\1206028.D	ZZZZZZ	ZZZZZZ	12/7/06	02:03		12/7/06	02:36
\1206029.D	MW-18-5	P0600233-001	12/7/06	02:42		12/7/06	03:15
\1206030.D	MW-18-4	P0600233-002	12/7/06	03:21		12/7/06	03:54
\1206031.D	MW-18-2	P0600233-003	12/7/06	04:00		12/7/06	04:33
\1206032.D	EB-13-11/13/06	P0600233-004	12/7/06	04:38		12/7/06	05:11
\1206033.D	Continuing Calibration Verification	KWG0620857-5	12/7/06	05:17		12/7/06	05:50
\1206035.D	Continuing Calibration Verification	KWG0620857-6	12/7/06	06:35		12/7/06	07:08
\1206036.D	ZZZZZZ	ZZZZZZ	12/7/06	07:14		12/7/06	07:47
\1206037.D	ZZZZZZ	ZZZZZZ	12/7/06	07:53		12/7/06	08:26
\1206038.D	Continuing Calibration Verification	KWG0620857-7	12/7/06	08:32		12/7/06	09:05
\1206040.D	Lab Control Sample	KWG0620320-3	12/7/06	09:50		12/7/06	10:23
\1206042.D	Method Blank	KWG0620320-4	12/7/06	11:08		12/7/06	11:41
\1206043.D	MW-18-3	P0600233-006	12/7/06	11:47		12/7/06	12:20
\1206044.D	MW-18-3MS	KWG0620320-1	12/7/06	12:26		12/7/06	12:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0620857
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1206045.D	MW-18-3DMS	KWG0620320-2	12/7/06	13:05		12/7/06	13:38
\1206046.D	MW-18-1	P0600233-007	12/7/06	13:44		12/7/06	14:17
\1206047.D	EB-14-11/14/06	P0600233-008	12/7/06	14:23		12/7/06	14:56
\1206048.D	Continuing Calibration Verification	KWG0620857-8	12/7/06	15:02		12/7/06	15:35
\1206049.D	ZZZZZZ	ZZZZZZ	12/7/06	15:41		12/7/06	16:14
\1206050.D	ZZZZZZ	ZZZZZZ	12/7/06	16:20		12/7/06	16:53
\1206051.D	ZZZZZZ	ZZZZZZ	12/7/06	16:59		12/7/06	17:32
\1206052.D	ZZZZZZ	ZZZZZZ	12/7/06	17:37		12/7/06	18:10
\1206053.D	ZZZZZZ	ZZZZZZ	12/7/06	18:16		12/7/06	18:49
\1206054.D	Continuing Calibration Verification	KWG0620857-9	12/7/06	18:56		12/7/06	19:29

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/17/2006

Extraction Prep Log
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Extraction Lot: KWG0619857
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-18-5	P0600233-001	11/13/06	11/13/06	500ml	1ml	NA	
MW-18-4	P0600233-002	11/13/06	11/13/06	500ml	1ml	NA	
MW-18-2	P0600233-003	11/13/06	11/13/06	500ml	1ml	NA	
EB-13-11/13/06	P0600233-004	11/13/06	11/13/06	500ml	1ml	NA	
Method Blank	KWG0619857-4	NA	NA	500ml	1ml	NA	
Batch QCMS	KWG0619857-1	NA	NA	500ml	1ml	NA	
Batch QCDMS	KWG0619857-2	NA	NA	500ml	1ml	NA	
Batch QC	P0600200-011	NA	NA	500ml	1ml	NA	
Lab Control Sample	KWG0619857-3	NA	NA	500ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/28/2006

Extraction Prep Log
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Extraction Lot: KWG0620320
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-18-3	P0600233-006	11/14/06	11/14/06	500ml	1ml	NA	
MW-18-1	P0600233-007	11/14/06	11/14/06	500ml	1ml	NA	
EB-14-11/14/06	P0600233-008	11/14/06	11/14/06	500ml	1ml	NA	
Method Blank	KWG0620320-4	NA	NA	500ml	1ml	NA	
MW-18-3MS	KWG0620320-1	11/14/06	11/14/06	500ml	1ml	NA	
MW-18-3DMS	KWG0620320-2	11/14/06	11/14/06	500ml	1ml	NA	
Lab Control Sample	KWG0620320-3	NA	NA	500ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Semivolatile Organic Compounds by GC/MS SIM
Summary Package

Sample and QC Results

521

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233

Cover Page - Organic Analysis Data Package
Semivolatile Organic Compounds by GC/MS SIM

Sample Name	Lab Code	Date Collected	Date Received
MW-18-3MS	KWG0619801-1	11/14/2006	11/14/2006
MW-18-3DMS	KWG0619801-2	11/14/2006	11/14/2006
MW-18-5	P0600233-001	11/13/2006	11/13/2006
MW-18-4	P0600233-002	11/13/2006	11/13/2006
MW-18-2	P0600233-003	11/13/2006	11/13/2006
EB-13-11/13/06	P0600233-004	11/13/2006	11/13/2006
MW-18-3	P0600233-006	11/14/2006	11/14/2006
MW-18-1	P0600233-007	11/14/2006	11/14/2006
EB-14-11/14/06	P0600233-008	11/14/2006	11/14/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Deger
Name: Carl Deger
Date: 12/1/06
Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-18-5	**Units:**	ng/L
Lab Code:	P0600233-001	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	11/17/06	11/28/06	KWG0619801	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	77	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-18-4	**Units:**	ng/L
Lab Code:	P0600233-002	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	**39**		4.9	2.3	1	11/17/06	11/28/06	KWG0619801	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	74	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-18-2	**Units:**	ng/L
Lab Code:	P0600233-003	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	11/17/06	11/28/06	KWG0619801	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	74	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/13/2006
Sample Matrix:	Water	**Date Received:**	11/13/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	EB-13-11/13/06	**Units:**	ng/L
Lab Code:	P0600233-004	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/17/06	11/28/06	KWG0619801	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	77	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-18-3	**Units:**	ng/L
Lab Code:	P0600233-006	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	**7.6**		5.0	2.3	1	11/17/06	11/28/06	KWG0619801	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	84	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	11/14/2006
Sample Matrix:	Water	**Date Received:**	11/14/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-18-1	**Units:**	ng/L
Lab Code:	P0600233-007	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/17/06	11/28/06	KWG0619801	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	72	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Collected: 11/14/2006
Date Received: 11/14/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name: EB-14-11/14/06
Lab Code: P0600233-008

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	5.0	2.3	1	11/17/06	11/28/06	KWG0619801	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	83	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0619801-4	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	11/17/06	11/28/06	KWG0619801	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	80	70-130	11/28/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233

Surrogate Recovery Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
MW-18-5	P0600233-001	77
MW-18-4	P0600233-002	74
MW-18-2	P0600233-003	74
EB-13-11/13/06	P0600233-004	77
MW-18-3	P0600233-006	84
MW-18-1	P0600233-007	72
EB-14-11/14/06	P0600233-008	83
Method Blank	KWG0619801-4	80
MW-18-3MS	KWG0619801-1	70
MW-18-3DMS	KWG0619801-2	74
Lab Control Sample	KWG0619801-3	82

Surrogate Recovery Control Limits (%)

Sur1 = 1,2,3-Trichloropropane-d5 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	11/28/2006
		Time Analyzed:	14:16

Internal Standard Area and RT Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID:	J:\MS14\DATA\112806\1128G002.D	**Lab Code:**	KWG0620352-2
Instrument ID:	MS14	**Analysis Lot:**	KWG0620352
Analysis Method:	8270C SIM		

		1,4-Dichlorobenzene-d4	
		Area	**RT**
	Results ==>	58,540	6.50
	Upper Limit ==>	117,080	7.00
	Lower Limit ==>	29,270	6.00
	ICAL Result ==>	49,805	6.54
Associated Analyses			
Method Blank	KWG0619801-4	58,607	6.51
Lab Control Sample	KWG0619801-3	58,091	6.51
MW-18-3MS	KWG0619801-1	54,487	6.51
MW-18-3DMS	KWG0619801-2	57,118	6.50
MW-18-5	P0600233-001	58,500	6.50
MW-18-4	P0600233-002	56,137	6.50
MW-18-2	P0600233-003	55,601	6.50
EB-13-11/13/06	P0600233-004	55,285	6.50
MW-18-3	P0600233-006	56,215	6.50
MW-18-1	P0600233-007	56,237	6.50
EB-14-11/14/06	P0600233-008	58,248	6.50

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/17/2006
Date Analyzed: 11/28/2006

Matrix Spike/Duplicate Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name: MW-18-3
Lab Code: P0600233-006

Units: ng/L
Basis: NA

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Level: Low
Extraction Lot: KWG0619801

Analyte Name	Sample Result	MW-18-3MS KWG0619801-1 Matrix Spike			MW-18-3DMS KWG0619801-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,2,3-Trichloropropane	7.6	127	200	60 *	137	200	64 *	70-130	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/17/2006
Date Analyzed: 11/28/2006

Lab Control Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: ng/L
Basis: NA
Level: Low
Extraction Lot: KWG0619801

	Lab Control Sample KWG0619801-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2,3-Trichloropropane	146	200	73	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/17/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006
		Time Analyzed:	14:36

Method Blank Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**File ID:**	J:\MS14\DATA\112806\1128F021.D
Lab Code:	KWG0619801-4	**Instrument ID:**	MS14
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0619801

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0619801-3	J:\MS14\DATA\112806\1128F022.D	11/28/06	14:56
MW-18-3MS	KWG0619801-1	J:\MS14\DATA\112806\1128F023.D	11/28/06	15:16
MW-18-3DMS	KWG0619801-2	J:\MS14\DATA\112806\1128F024.D	11/28/06	15:36
MW-18-5	P0600233-001	J:\MS14\DATA\112806\1128F025.D	11/28/06	15:56
MW-18-4	P0600233-002	J:\MS14\DATA\112806\1128F026.D	11/28/06	16:16
MW-18-2	P0600233-003	J:\MS14\DATA\112806\1128F027.D	11/28/06	16:36
EB-13-11/13/06	P0600233-004	J:\MS14\DATA\112806\1128F028.D	11/28/06	16:56
MW-18-3	P0600233-006	J:\MS14\DATA\112806\1128F029.D	11/28/06	17:16
MW-18-1	P0600233-007	J:\MS14\DATA\112806\1128F030.D	11/28/06	17:36
EB-14-11/14/06	P0600233-008	J:\MS14\DATA\112806\1128F031.D	11/28/06	17:56

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600233
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	11/17/2006
Sample Matrix:	Water	**Date Analyzed:**	11/28/2006
		Time Analyzed:	14:56

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Lab Control Sample	**File ID:**	J:\MS14\DATA\112806\1128F022.D
Lab Code:	KWG0619801-3	**Instrument ID:**	MS14
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0619801

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0619801-4	J:\MS14\DATA\112806\1128F021.D	11/28/06	14:36
MW-18-3MS	KWG0619801-1	J:\MS14\DATA\112806\1128F023.D	11/28/06	15:16
MW-18-3DMS	KWG0619801-2	J:\MS14\DATA\112806\1128F024.D	11/28/06	15:36
MW-18-5	P0600233-001	J:\MS14\DATA\112806\1128F025.D	11/28/06	15:56
MW-18-4	P0600233-002	J:\MS14\DATA\112806\1128F026.D	11/28/06	16:16
MW-18-2	P0600233-003	J:\MS14\DATA\112806\1128F027.D	11/28/06	16:36
EB-13-11/13/06	P0600233-004	J:\MS14\DATA\112806\1128F028.D	11/28/06	16:56
MW-18-3	P0600233-006	J:\MS14\DATA\112806\1128F029.D	11/28/06	17:16
MW-18-1	P0600233-007	J:\MS14\DATA\112806\1128F030.D	11/28/06	17:36
EB-14-11/14/06	P0600233-008	J:\MS14\DATA\112806\1128F031.D	11/28/06	17:56

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 11/28/2006
Time Analyzed: 13:56

Tune Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID: J:\MS14\DATA\112806\1128G001.D
Instrument ID: MS14
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0620352

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	23.3	414919	PASS
68	69	0	2	1.6	8002	PASS
69	198	0	100	27.6	491990	PASS
70	69	0	2	0.3	1621	PASS
127	198	10	80	41.2	733301	PASS
197	198	0	2	0.0	0	PASS
198	442	30	100	46.9	1779410	PASS
199	198	5	9	6.8	121043	PASS
275	198	10	60	32.9	586048	PASS
365	442	1	50	1.9	73208	PASS
441	443	0	100	71.4	534976	PASS
442	442	100	100	100.0	3796480	PASS
443	442	15	24	19.7	749568	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0620352-2	J:\MS14\DATA\112806\1128G002.D	11/28/2006	14:16	
Method Blank	KWG0619801-4	J:\MS14\DATA\112806\1128F021.D	11/28/2006	14:36	
Lab Control Sample	KWG0619801-3	J:\MS14\DATA\112806\1128F022.D	11/28/2006	14:56	
MW-18-3MS	KWG0619801-1	J:\MS14\DATA\112806\1128F023.D	11/28/2006	15:16	
MW-18-3DMS	KWG0619801-2	J:\MS14\DATA\112806\1128F024.D	11/28/2006	15:36	
MW-18-5	P0600233-001	J:\MS14\DATA\112806\1128F025.D	11/28/2006	15:56	
MW-18-4	P0600233-002	J:\MS14\DATA\112806\1128F026.D	11/28/2006	16:16	
MW-18-2	P0600233-003	J:\MS14\DATA\112806\1128F027.D	11/28/2006	16:36	
EB-13-11/13/06	P0600233-004	J:\MS14\DATA\112806\1128F028.D	11/28/2006	16:56	
MW-18-3	P0600233-006	J:\MS14\DATA\112806\1128F029.D	11/28/2006	17:16	
MW-18-1	P0600233-007	J:\MS14\DATA\112806\1128F030.D	11/28/2006	17:36	
EB-14-11/14/06	P0600233-008	J:\MS14\DATA\112806\1128F031.D	11/28/2006	17:56	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/27/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5825
Instrument ID: MS14

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS14\DATA\112706A\1127A003.D	E	J:\MS14\DATA\112706A\1127A007.D
B	J:\MS14\DATA\112706A\1127A004.D	F	J:\MS14\DATA\112706A\1127A008.D
C	J:\MS14\DATA\112706A\1127A005.D	G	J:\MS14\DATA\112706A\1127A009.D
D	J:\MS14\DATA\112706A\1127A006.D	H	J:\MS14\DATA\112706A\1127A010.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2,3-Trichloropropane-d5	A	2.0	0.810	B	5.0	0.758	C	10	0.783	D	20	0.745	E	50	0.756
	F	100	0.783	G	500	0.771	H	1000	0.773						
1,2,3-Trichloropropane	A	2.0	1.01	B	5.0	0.899	C	10	0.859	D	20	0.816	E	50	0.804
	F	100	0.829	G	500	0.820	H	1000	0.821						

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/27/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5825
Instrument ID: MS14

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
1,2,3-Trichloropropane-d5	SURR	AverageRF	% RSD	2.6		≤ 30	0.773		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	8.0		≤ 30	0.857		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Calibration Date: 11/27/2006
Date Analyzed: 11/27/2006

Second Source Calibration Verification
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL5825
Units: ng/ml

File ID: J:\MS14\DATA\112706A\1127A011.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane	100	91	0.857	0.777	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233
Date Analyzed: 11/28/2006

Continuing Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 11/27/2006
Calibration ID: CAL5825
Analysis Lot: KWG0620352
Units: ng/ml

File ID: J:\MS14\DATA\112806\1128G002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane-d5	100	98	0.01	0.773	0.757	-2	NA	± 20 %	AverageRF
1,2,3-Trichloropropane	100	94	0.01	0.857	0.804	-6	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233

Analysis Run Log
Semivolatile Organic Compounds by GC/MS SIM

Analysis Method: 8270C SIM

Analysis Lot: KWG0620352
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1128G001.D	GC/MS Tuning - Decafluorotripheny	KWG0620352-1	11/28/2006	13:56		11/28/2006	14:10
1128G002.D	Continuing Calibration Verification	KWG0620352-2	11/28/2006	14:16		11/28/2006	14:30
1128F021.D	Method Blank	KWG0619801-4	11/28/2006	14:36		11/28/2006	14:50
1128F022.D	Lab Control Sample	KWG0619801-3	11/28/2006	14:56		11/28/2006	15:10
1128F023.D	MW-18-3MS	KWG0619801-1	11/28/2006	15:16		11/28/2006	15:30
1128F024.D	MW-18-3DMS	KWG0619801-2	11/28/2006	15:36		11/28/2006	15:50
1128F025.D	MW-18-5	P0600233-001	11/28/2006	15:56		11/28/2006	16:10
1128F026.D	MW-18-4	P0600233-002	11/28/2006	16:16		11/28/2006	16:30
1128F027.D	MW-18-2	P0600233-003	11/28/2006	16:36		11/28/2006	16:50
1128F028.D	EB-13-11/13/06	P0600233-004	11/28/2006	16:56		11/28/2006	17:10
1128F029.D	MW-18-3	P0600233-006	11/28/2006	17:16		11/28/2006	17:30
1128F030.D	MW-18-1	P0600233-007	11/28/2006	17:36		11/28/2006	17:50
1128F031.D	EB-14-11/14/06	P0600233-008	11/28/2006	17:56		11/28/2006	18:10
1128F032.D	ZZZZZZ	ZZZZZZ	11/28/2006	18:16		11/28/2006	18:30
1128F033.D	ZZZZZZ	ZZZZZZ	11/28/2006	18:35		11/28/2006	18:49
1128F034.D	ZZZZZZ	ZZZZZZ	11/28/2006	18:55		11/28/2006	19:09
1128F035.D	ZZZZZZ	ZZZZZZ	11/28/2006	19:15		11/28/2006	19:29
1128F036.D	ZZZZZZ	ZZZZZZ	11/28/2006	19:35		11/28/2006	19:49
1128F037.D	ZZZZZZ	ZZZZZZ	11/28/2006	19:55		11/28/2006	20:09
1128F038.D	ZZZZZZ	ZZZZZZ	11/28/2006	20:15		11/28/2006	20:29
1128F039.D	ZZZZZZ	ZZZZZZ	11/28/2006	20:35		11/28/2006	20:49
1128F040.D	ZZZZZZ	ZZZZZZ	11/28/2006	20:54		11/28/2006	21:08
1128F041.D	ZZZZZZ	ZZZZZZ	11/28/2006	21:14		11/28/2006	21:28
1128F042.D	ZZZZZZ	ZZZZZZ	11/28/2006	21:34		11/28/2006	21:48
1128F043.D	ZZZZZZ	ZZZZZZ	11/28/2006	21:54		11/28/2006	22:08
1128F044.D	ZZZZZZ	ZZZZZZ	11/28/2006	22:14		11/28/2006	22:28
1128F045.D	ZZZZZZ	ZZZZZZ	11/28/2006	22:34		11/28/2006	22:48
1128F046.D	ZZZZZZ	ZZZZZZ	11/28/2006	22:54		11/28/2006	23:08
1128F047.D	ZZZZZZ	ZZZZZZ	11/28/2006	23:14		11/28/2006	23:28
1128F048.D	ZZZZZZ	ZZZZZZ	11/28/2006	23:34		11/28/2006	23:48
1128F049.D	ZZZZZZ	ZZZZZZ	11/28/2006	23:54		11/29/2006	00:08
1128F050.D	ZZZZZZ	ZZZZZZ	11/29/2006	00:13		11/29/2006	00:27
1128F051.D	ZZZZZZ	ZZZZZZ	11/29/2006	00:33		11/29/2006	00:47
1128F052.D	ZZZZZZ	ZZZZZZ	11/29/2006	00:53		11/29/2006	01:07

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600233

Analysis Run Log
Semivolatile Organic Compounds by GC/MS SIM

Analysis Method: 8270C SIM

Analysis Lot: KWG0620352
Instrument ID: MS14

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1128F053.D	ZZZZZZ	ZZZZZZ	11/29/2006	01:13		11/29/2006	01:27
1128F054.D	ZZZZZZ	ZZZZZZ	11/29/2006	01:33		11/29/2006	01:47
1128F055.D	ZZZZZZ	ZZZZZZ	11/29/2006	01:53		11/29/2006	02:07

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600233
Date Extracted: 11/17/2006

Extraction Prep Log
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0619801
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-18-5	P0600233-001	11/13/06	11/13/06	1030ml	2ml	NA	
MW-18-4	P0600233-002	11/13/06	11/13/06	1030ml	2ml	NA	
MW-18-2	P0600233-003	11/13/06	11/13/06	1030ml	2ml	NA	
EB-13-11/13/06	P0600233-004	11/13/06	11/13/06	1020ml	2ml	NA	
MW-18-3	P0600233-006	11/14/06	11/14/06	1010ml	2ml	NA	
MW-18-1	P0600233-007	11/14/06	11/14/06	1010ml	2ml	NA	
EB-14-11/14/06	P0600233-008	11/14/06	11/14/06	1010ml	2ml	NA	
Method Blank	KWG0619801-4	NA	NA	1030ml	2ml	NA	
MW-18-3MS	KWG0619801-1	11/14/06	11/14/06	1000ml	2ml	NA	
MW-18-3DMS	KWG0619801-2	11/14/06	11/14/06	1000ml	2ml	NA	
Lab Control Sample	KWG0619801-3	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600257
Date Collected : 11/20,21/06
Date Received : 11/20,21/06

Chromium, Hexavalent

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

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-22-5	P0600257-001	0.01	0.004	1	NA	11/20/06	ND	
MW-22-4	P0600257-002	0.01	0.004	1	NA	11/20/06	ND	
MW-22-3	P0600257-003	0.01	0.004	1	NA	11/20/06	ND	
MW-22-2	P0600257-004	0.01	0.004	1	NA	11/20/06	ND	
MW-22-1	P0600257-005	0.01	0.004	1	NA	11/20/06	ND	
DUPE-5-4Q06	P0600257-006	0.01	0.004	1	NA	11/20/06	ND	
MW-23-5	P0600257-007	0.01	0.004	1	NA	11/20/06	ND	
MW-23-4	P0600257-008	0.01	0.004	1	NA	11/21/06	ND	
MW-23-3	P0600257-009	0.01	0.004	1	NA	11/21/06	ND	
MW-23-2	P0600257-010	0.01	0.004	1	NA	11/21/06	ND	
MW-23-1	P0600257-011	0.01	0.004	1	NA	11/21/06	ND	
EB-18-11/21/06	P0600257-012	0.01	0.004	1	NA	11/21/06	ND	
Method Blank	P0600257-MB	0.01	0.004	1	NA	11/20/06	ND	
Method Blank	P0600257-MB	0.01	0.004	1	NA	11/21/06	ND	

Approved By Sue Anderson Date : 11/21/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600257
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	11/20/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND
CCB2	0.01	0.004	ND

Approved By: Sue Anderson Date: 11/21/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06

Service Request: P0600257
Date Analyzed: 11/20/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0393	102
CCV1	0.0387	0.0384	99
CCV2	0.0387	0.0384	99

Approved By: Sue Anderson Date: 11/21/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600257
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/20,21/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name : Laboratory Control Sample
Lab Code : P0600257-LCS
Test Notes :

Basis : NA

Analyte	Units	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	mg/L (ppm)	7196A	0.0400	0.0411	103	90-110	
Chromium, Hexavalent	mg/L (ppm)	7196A	0.0400	0.0416	104	90-110	

Approved By : Sue Ouderkirk Date : 11/21/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600257
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/20/06
Project Number :	G486090/204142	**Date Received :**	11/20/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/20/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-22-1
Lab Code : P0600257-005MS P0600257-005DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0475	0.0457	95	91	85-115	4	

Approved By Sue Anderson Date : 11/21/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600257
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	11/21/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	**PQL**	**MDL**	**Result**
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Anderson Date: 11/21/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06

Service Request: P0600257
Date Analyzed: 10/21/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0380	98
CCV1	0.0387	0.0380	98

Approved By: Sue Anderson Date: 11/21/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600257
Date Collected : 11/21/06
Date Received : 11/21/06
Date Extracted : NA
Date Analyzed : 11/21/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-23-2
Lab Code : P0600257-010MS P0600257-010DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	MRL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0497	0.0515	99	103	85-115	4	

Approved By Sue Anderson Date : 11/21/06

Report By:RWONG

DIVIDER SHEET

RAW DATA FOR

Hexavalent Chromium

ANALYSIS

Columbia Analytical Services inc.

Hexavalent Chromium
Methods SM 3500-Cr-D
EPA3060A/EPA7196A

Service Request #: 257 Run #: 71623
Prep Run # NA

10PPM STOCK # S18-10190602@1/10 EXP. 2/1/07 Conc. H2SO4 Lot#: EMD 442577E EXP: 1/31/08
387ppb ICV/CCV # S18-10260601@1/10 EXP: 11/26/06 Coloring Reagent Ref# S18-11100603 EXP: 12/10/06
Digestion solution(for solids) NA

	Sample #	Sample vol./g. used	Dilution	Bkg	Absorbance @ 540nm	Corrected Abs.	Results mg/L	Results mg/Kg	QA/QC %R	QA/QC %RPD
1	0	0/10	—	0.000	0.000	0.000				
2	0.01	0.1/10	—	0.000	0.011	0.011			CC = 0.9995	
3	0.05	0.5/10	—	0.000	0.054	0.054				
4	0.1	1.0/10	—	0.000	0.110	0.110				
5	ICB	10ml	—	0.000	0.000	0.000	0.000169		<0.004	
6	ICV 0.0387PPM		—	0.000	0.043	0.043	0.0393		102%	
7	MB		—	0.000	0.000	0.000	0.000169		<0.004	
8	LCS 0.040 PPM		—	0.000	0.045	0.045	0.0411		103%	
9	257-1.01		—	0.000	0.000	0.000	0.000169		<0.004	
10	-2.01		—	0.001	0.004	0.003	0.00290		<0.004	
11	-3.01		—	0.001	0.003	0.002	0.00199		<0.004	
12	-4.01		—	0.000	0.001	0.001	0.00108		<0.004	
13	-5.01		—	0.002	0.002	0.000	0.000169		<0.004	
14	-5.01 MS 0.050PPM		—	0.002	0.054	0.052	0.0475		95%	4% RPD
15	-5.01 MSD		—	0.002	0.052	0.050	0.0457		91%	
16	-6.01		—	0.003	0.005	0.002	0.00199		<0.004	
17	CCV 0.0387PPM		—	0.000	0.042	0.042	0.0384		99%	
18	CCB1		—	0.000	0.000	0.000	0.000169		<0.004	
19	257-7.01		—	0.000	0.000	0.000	0.000169		<0.004	
~~20~~	~~CCV2 0.0387PPM~~		~~—~~	~~0.000~~	~~0.042~~	~~0.042~~	~~0.0384~~		~~99%~~	
20	CCB2		—	0.000	0.000	0.000	0.000169		<0.004	

Comments: LCS - SPIKED w/0.4ml S18-10190602@1/10 ↑10ml w/ DI Water
MS/MSD - SPIKED w/0.5ml " " " " w/ Sample

Digested: NA
Prepared by: [signature] Date/Time: 11/20/06 @1500
Analyzed by: [signature] Date/Time: 11/20/06 @1529
Reviewed by: [signature] Date: 11/21/06 @ 08:15

Hexavalent Chromium
Methods SM 3500-Cr-D
EPA3060A/EPA7196A

Columbia Analytical Services inc.

Service Request #: 257 (7-12) Run #: 71767
Prep Run # NA

10ppm STOCK # S18-1019 0602 @ 1/10 exp: 2/1/07 Conc. H2SO4 Lot#: EMP 442576 exp 1/31/08
387ppb ICV/CCV # S18-1026 0601 @ 1/10 exp: 11/26/06 Coloring Reagent Ref# S18-1110 0603 exp 12/10/06
Digestion solution(for solids) NA

	Sample #	Sample vol./g. used	Dilution	Bkg	Absorbance @ 540nm	Corrected Abs.	Results mg/L	mg/Kg	QA/QC %R	%RPD
1	0	0/10		0.000	0.000					
2	0.01	0.1/10			0.011					
3	0.05	0.5/10			0.055	0.999987				
4	0.1	1/10			0.111					
5	ICB	10			0.000	0.000	0.00012		<0.004	
6	ICV 0.0387ppm				0.042	0.042	0.0380		98 %	
7	MB				0.001	0.001	0.00102		<0.004	
8	LCS 0.040ppm				0.046	0.046	0.0416		104%	
9	0257-7.1			0.002	0.003	0.001	0.00102		<0.004	
10	-8.1			0.005	0.005	0.000	0.00012		<0.004	
11	-9.1			0.001	0.001	0.000	0.00012		<0.004	
12	-10.1			0.001	0.004	0.003	0.00283		<0.004	
13	-10.1 MS 0.050ppm			0.001	0.056	0.055	0.0497		99%	RPD
14	-10.1 MSD			0.001	0.058	0.057	0.0515		103%	4%
* 15	-11.1			0.000	0.001	0.001	0.00102		<0.004	
16	-12.1			0.001	0.004	0.003	0.00283			
17	CCV1 0.0387ppm			0.000	0.042	0.042	0.0380		98 %	
18	CCB1				0.000	0.000	0.00012		<0.004	
19										
20										

Comments: LCS - spiked w/ 0.4 ml S18-1019 0602 @ 1/10 ↑ 10 ml w/DI
MS/MSD - spiked w/ 0.5 ml " " 1/10 ml w/sample
* filtered

Digested: NA
Prepared by: RW Date/Time: 11/21/06 @ 15:00
Analyzed by: RW Date/Time: 11/21/06 @ 22:10
Reviewed by: [illegible] Date: 11/21/06

S18-10090603 PCR Cr^{6+} IC-2

10/9/06

0.5 g of 1,5-Diphenylcarbohydrazide (EM 34234521 exp:) dissolve in 100 mL of Methanol (DI CAS 770 EXP: 9/14/07 8/1/11) and add 10 @ 900 mL of DI H2O containing 5.6 mL of H2SO4 EMD 4425 EXP: 11/31/08). Bring up to 1000 mL with DI H2O, mix and degass.

EXP: 10/14/06

9-9.5 10/11/06 S18-10110601 IC2 1.94ppb ICV/CCV

0.5ml S18-09260606 ↑ 100ml w/DEGASSED ADJUSTED DI @ 9-9.5 pH

EXP: 10/26/06

10/13/06 RW S18-10130601 IC Eluent

200ml S18-09140601B ↑ 2L w/DI H_2O

Exp 9/14/07

RW 10/17/06 7

10/17/06 RW S18-10130601 IC Eluent

200 ml S18-09140601B ↑ 2L w/DI H_2O

Exp 9/14/07

10/18/06 S18-10180601 IC-1 Eluent

200ml S18-09140601B ↑ 2L with DI H2O

EXP: 9/14/07

10/19/06 RW S18-10190601 Fl 100ppm

1ml # 923 ↑ 10 ml DI

Exp 4/19/~~06~~ 07 RW 10/27/06

10/19/06 RW S18-10190602 Cr^{6+} 10ppm Std

1ml # 3346 (Cr^{6+} 1000 ppm) ↑ 100ml DI

Exp 2/1/07

10/19/06 RW S18-10190603 Cr^{6+} Coloring Reagent

0.25 g 1,5-Diphenyl-carbohydrazide (EM 34234521)

↑ 50 ml Acetone (EMD 45351A)

EXP: 11/19/06

Columbia Analytical Services inc.

Miscellaneous Reagents and Standards Log

Std # 3346	Date: 1/17/06	Initial: RW
Source: IV	Lot#: Y-CR02144	
Reagent: Cr+6 1000ppm	Test: Cr^{+6}	
Method: 218.6	Expiration Date: 2/1/07	

Preparation:

Purchased

Std # 3347	Date: 1/17/06	Initial: NM
Source: See below	Lot#: See below	
Reagent: ICV/CCV Ammonia	Test: NH_3	
Method: 350.3 / 350.2	Expiration Date: 01/17/07	

Preparation: 0.3819 gof NH_4Cl NM 1/19/06 EMallinckrodT LOT 3384 A38588 / 100 mL

Std # 3348	Date: 1/20/06	Initial: [illegible]
Source: Ref # 3335	Lot#: —	
Reagent: 1.25N NaOH	Test: Cyanide	
Method: 335.2	Expiration Date: 12/29/06	

Preparation:

400ml Ref # 3335 ↑ 2L W/ DI

10/26/06 S18-10260601 IC2/1 Cr^{6+} ICV/CCV
RW 10ml #3426 (APG 42496) ↑ 100ml
exp 11/26/06 TV = 337ppb

10/26/06 S18-10260602 ICV/CCV IC 2
RW 0.5ml S18-10260601 ↑ 100ml w/degassed
pH 9-9.5 H_2O
TV = 1.94 Exp 10/30/06

10/27/06 S18-10270601 ELUENT IC-2
100ml Ref#3448 ↑ 1L w/ Degassed DI Water
EXP: 9/6/07

10/27/06 S18-10270602 PCR IC-2

0.5 g of 1.5-Diphenylcarbohydrazide (EM 34234531 exp 2/1/11 dissolve in 100 mL of Methanol (ed I C287700) and add to @500 mL of DI H2O containing 56 mL of H2SO4 (EMD 442576 exp 1/31/08). Bring up to 100 mL with DI H2O, mix and degass exp 5/14/07

EXP: 11/1/06

2 10/27/06 S18-10270603 ICV/CCV IC2
RW 0.5 ml S18-10260601 ↑ 100ml w/degassed
H_2O (pH 9-9.5) TV = 1.94 exp 10/31/06

10/26/06 S18-10260603 IC 1 Eluent
RW 200ml S18-10230604A ↑ 2L DI
exp: 10/23/07

10/27/06 S18-10270604 (A-D) pH Reference
RW Rec'd 10/26/06 from APG Lot 47028
exp 4/2008
· open date A
B
C
D

Columbia Analytical Services inc.

Miscellaneous Reagents and Standards Log

Std # 3424	Date: 4/12/06	Initial: RW
Source: VWR	Lot#: 3523	
Reagent: Cond Std	Test: Cond / Rest	
Method: 120.1	Expiration Date: 12/12/06	

Preparation:

TV = 1000 µ 40/cm

Purchase

Std # 3425	Date: 4/12/06	Initial: RW
Source: RICCA	Lot#: 1511394	
Reagent: Color Std	Test: Color	
Method: 110.2	Expiration Date: 11/2007	

Preparation: Purchased

TV = 500 color units

Std # 3426	Date: 4/14/06	Initial: RW
Source: APG	Lot#: 42496	
Reagent: Cr^{6+} Std	Test: Cr^{6+}	
Method: 218.6, 7199	Expiration Date: 4/2007	

Preparation: Prep Value = 387 ug/L

~~10ml @~~ RW 4/14/06

10ml ↑ 1000ml DI

Purchased

c 11/7/06 S18-11070601 IC1 Eluent
200ml S18-10230604B ↑ 2L
w/DI H_2O
exp 10/23/07

Sn 11/8/06

9 11/8/06 S18-~~1107~~11080601 IC-1 Eluent
200 ml S18-10230604B ↑ 2L w/DI H_2O
Exp: 10/23/07

c 11/9/06 RW S18-11090601 Cond/Rest Std
0.7453 g KCl (EMD 0794B29) ↑ 1L
of DF TV = 1413 uMHOS/cm
exp 11/9/07

11/10/06 RW S18-11100601 IC1 Eluent
c 200ml S18-10230604B ↑ 2L w/DI
exp 10/23/07

11/10/06 S18-11100602 Cr^{6+} Alkaline DIGESTION SOLN
20.0g NaOH + 30.0g Na_2CO_3 ↑ 1L w/DI H_2O
EMD 45176538 exp 10/28/10 EMD 43353404C exp 3/12/09
EXP: ~~12/10/~~ Sn 11/10/06 12/10/06

a 11/10/06 S18-11100603 Cr^{6+} Coloring Reagent (W)
0.25 g 1,5 Diphenylcarbohydrazide ↑
50ml w/Acetone (EM 34234521 exp 2/VII)
Acetone: EM 45351A exp 8/16/09
exp 12/10/06

a 11/10/06 S18-11100604(A-D) Minerals Std
Purchased ERA (Lot # 8102) exp 1/2010

CAS CSR #P0600257

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Hexavalent Chromium Raw Data..... 20, 21, 22R, 23-27

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

Columbia Analytical Services INC.
An Employee - Owned Company

December 20, 2006

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

RE: JPL Groundwater Monitoring 4Q06/Project #G486090/204142

Dear David:

Enclosed are the revised report pages for the samples submitted to our laboratory on November 20-21, 2006. Due to a login error the samples received on 11/21/06 were mislabeled. All of the samples for both days were analyzed and the affected report pages have been amended to reflect the proper information and paginated accordingly. For your reference, these analyses have been assigned our service request number P0600257.

All analyses were performed in accordance with our laboratory's quality assurance program. Results are intended to be considered in their entirety and apply only to the samples analyzed. Columbia Analytical Services is not responsible for use of less than the complete report. Your report contains 28 pages.

Columbia Analytical Services is certified for environmental analyses by NELAP (certificate number: 02115CA); Los Angeles County Laboratory ID (No. 10151); and Arizona Department of Health Services (License number: AZ0694).

If you have any questions, please call me at (805) 577-2086.

Respectfully submitted,

Columbia Analytical Services, Inc.

Sue Anderson
Project Chemist

SA

1A

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600257

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
P0600257-001	MW-22-5	11/20/06	07:46
P0600257-002	MW-22-4	11/20/06	08:16
P0600257-003	MW-22-3	11/20/06	08:44
P0600257-004	MW-22-2	11/20/06	09:15
P0600257-005	MW-22-1	11/20/06	09:43
P0600257-006	DUPE-5-4Q06	11/20/06	00:00
P0600257-007	EB-17-11/20/06	11/20/06	09:56
P0600257-008	MW-23-5	11/21/06	07:49
P0600257-009	MW-23-4	11/21/06	08:19
P0600257-010	MW-23-3	11/21/06	08:51
P0600257-011	MW-23-2	11/21/06	09:27
P0600257-012	MW-23-1	11/21/06	10:18
P0600257-013	EB-18-11/21/06	11/21/06	09:40

4R

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

6925 Canoga Ave. • Canoga Park, CA 91303 • (818) 587-5550 • 800-695-7222 x02 • FAX (818) 587-5555

PAGE 1 OF 1

CAS Contact

Project Name: JPL GW MON 4Q06
Project Number: G1486090/204142
Project Manager: DAVID CONNER
Report CC:
Company/Address: BATTELLE, 3990 OLD TOWN AVE, STE. C-205, SAN DIEGO, CA 92110
Phone #: 619-726-7311
FAX#:
Sampler's Signature:
Sampler's Printed Name: MARCO MENDOZA

ANALYSIS REQUESTED *(Include Method Number and Container Preservative)*

PRESERVATIVE: 0

Preservative Key: 0. NONE; 1. HCL; 2. HNO_3; 3. H_2SO_4; 4. NaOH; 5. Zn. Acetate; 6. MeOH; 7. $NaHSO_4$; 8. Other _____

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	NUMBER OF CONTAINERS	TPH Gas 8015m (purgeable)	TPH Diesel ☐ Fuel Char. ☐ 8015m (extractable)	BTEX ☐ MTBE ☐ 8021 / 602	Halogenated Volatiles 8260	VOA by GCMS ☐ Oxygenates ☐ 8260 / 624	SemiVOA by GCMS 8270 / 625	Pesticides ☐ PCBs ☐ 8081 / 8082 / 608	CCR Metals (17) 6010 / 6020 / 7000 / 200.7 / 200.8	Cr VI (7196)						REMARKS/ ALTERNATE DESCRIPTION
MW-22-5	1	11/20/06	746	W	1									X						
MW-22-4	2		816											X						
MW-22-3	3		844											X						
MW-22-2	4		915											X						
MW-22-1	5		943											X						
DUPE-5-4Q06	~~5~~ 6		—											X						DUPLICATE
EB-17-11/20/06	~~6~~ 7		956											X						EQUIP. BLANK

5R

SPECIAL INSTRUCTIONS/COMMENTS: 12/20/06

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
PLEASE CIRCLE WORK DAYS: 1 2 3 4
✓ STANDARD
REQUESTED FAX DATE _____
REQUESTED REPORT DATE _____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
MRL ____Yes ____No
PQL/MDL/J ____Yes ____No
Edata ____Yes ____No

INVOICE INFORMATION
PO# 204142
BILL TO: BATTELLE/GIERALD TOMPKINS, 505 KING AVE, COLUMBUS, OH 43201
Lab No: P0600257

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: MARCO MENDOZA	Printed Name: Ignacio Martinez	Printed Name: Ignacio Martinez	Printed Name: Connie Kukuta	Printed Name	Printed Name
Firm: GEDEON	Firm: CAS	Firm: CAS	Firm: CAS	Firm	Firm
Date/Time: 11/20/06 / 1140	Date/Time: 11/20/06 1140	Date/Time: 11/20/06 1250	Date/Time: 11/20/06 1250	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-0603-15

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CHAIN OF CUSTODY/LABORATORY ANALYSIS REQUEST FORM

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PAGE 1 OF 1

CAS Contact

Project Name: JPL GW MON 4Q06
Project Number: G4186090/204142
Project Manager: DAVID CONNER
Report CC:
Company/Address: BATTELLE
3990 OLD TOWN AVE, STE C-205
SAN DIEGO, CA 92110
Phone #: 619-726-7311
FAX#:
Sampler's Signature:
Sampler's Printed Name: MARCO MENDOZA

ANALYSIS REQUESTED (Include Method Number and Container Preservative)

PRESERVATIVE: 0

NUMBER OF CONTAINERS

Preservative Key
0. NONE
1. HCL
2. HNO_3
3. H_2SO_4
4. NaOH
5. Zn. Acetate
6. MeOH
7. $NaHSO_4$
8. Other _____

CLIENT SAMPLE ID	LAB ID	SAMPLING DATE	SAMPLING TIME	MATRIX	TPH Gas 8015m (purgeable)	TPH Diesel ☐ Fuel Char. ☐ 8015m (extractable)	BTEX ☐ MTBE ☐ 8021 / 602	Halogenated Volatiles 8260	VOA by GCMS ☐ Oxygenates ☐ 8260 / 624	SemiVOA by GCMS 8270 / 625	Pesticides ☐ PCBs ☐ 8081 / 8082 / 608	CCR Metals (17) 6010 / 6020 / 7000 / 200.7 / 200.8	Cr VI (7196)						REMARKS/ ALTERNATE DESCRIPTION
MW-23-5	~~7~~ 8	11/21/06	749	W	1								X						LEVEL IV QC
MW-23-4	~~8~~ 9		819		1								X						
MW-23-3	~~9~~ 10		851		1								X						
MW-23-2	~~10~~ 11		927		2								X						MS/MSD
MW-23-1	~~11~~ 12		1018		1								X						
LB-18-11/21/06	~~12~~ 13		940		1								X						EQUIP. BLANK

6R

12/20/06

SPECIAL INSTRUCTIONS/COMMENTS

See QAPP ☐

TURNAROUND REQUIREMENTS
_____ RUSH (SURCHARGES APPLY)
PLEASE CIRCLE WORK DAYS
1 2 3 4
X STANDARD
REQUESTED FAX DATE_____
REQUESTED REPORT DATE_____

REPORT REQUIREMENTS
____ I. Results Only
____ II. Results + QC Summaries (LCS, DUP, MS/MSD as required)
____ III. Results + QC and Calibration Summaries
____ IV. Data Validation Report with Raw Data
MRL ____Yes ____No
PQL/MDL/J ____Yes ____No
Edata ____Yes ____No

INVOICE INFORMATION
PO# 204142
BILL TO: BATTELLE / GIERALD TOMPKINS
505 KING AVE
COLUMBUS, OH 43201
Lab No: P0600257

SAMPLE RECEIPT: CONDITION/COOLER TEMP: _____ CUSTODY SEALS: Y N

RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY	RELINQUISHED BY	RECEIVED BY
Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature: [signature]	Signature	Signature
Printed Name: MARCO MENDOZA	Printed Name: J. BUENASEDA	Printed Name: J. BUENASEDA	Printed Name: Sue Anderson	Printed Name	Printed Name
Firm: GEOFON	Firm: CAS	Firm: CAS	Firm: CAS	Firm	Firm
Date/Time: 11/21/06 / 1:50	Date/Time: 11/21/06 1150	Date/Time: 11/21/06 1250	Date/Time: 11/21/06 1250	Date/Time	Date/Time

Distribution: White - Return to Originator; Yellow - Lab Copy; Pink - Retained by Client

SCOC-0603-15

Columbia Analytical Services, Inc.
Chain of Custody Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600257

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0600257-001.01	11/20/2006	1256	SMO / LKUKITA	
	11/20/2006	1300	In Lab / SANDERSON	
	11/20/2006	1527	P-37 / LKUKITA	
P0600257-002.01	11/20/2006	1256	SMO / LKUKITA	
	11/20/2006	1300	In Lab / SANDERSON	
	11/20/2006	1527	P-37 / LKUKITA	
P0600257-003.01	11/20/2006	1256	SMO / LKUKITA	
	11/20/2006	1300	In Lab / SANDERSON	
	11/20/2006	1527	P-37 / LKUKITA	
P0600257-004.01	11/20/2006	1256	SMO / LKUKITA	
	11/20/2006	1300	In Lab / SANDERSON	
	11/20/2006	1527	P-37 / LKUKITA	
P0600257-005.01	11/20/2006	1256	SMO / LKUKITA	
	11/20/2006	1300	In Lab / SANDERSON	
	11/20/2006	1527	P-37 / LKUKITA	
P0600257-006.01	11/20/2006	1256	SMO / LKUKITA	
	11/20/2006	1300	In Lab / SANDERSON	
	11/20/2006	1527	P-37 / LKUKITA	
P0600257-007.01	11/20/2006	1256	SMO / LKUKITA	
	11/20/2006	1300	In Lab / SANDERSON	
	11/20/2006	1527	P-37 / LKUKITA	
	~~11/21/2006~~	~~1347~~	~~In Lab / RWONG~~	
	~~11/21/2006~~	~~1540~~	~~P-37 / RWONG~~ NA SW 12/20/06	
P0600257-008.01	11/21/2006	1254	SMO / LKUKITA	
	11/21/2006	1347	In Lab / RWONG	
	11/21/2006	1540	P-37 / RWONG	
P0600257-009.01	11/21/2006	1254	SMO / LKUKITA	
	11/21/2006	1347	In Lab / RWONG	
	11/21/2006	1540	P-37 / RWONG	
P0600257-010.01	11/21/2006	1254	SMO / LKUKITA	
	11/21/2006	1347	In Lab / RWONG	
	11/21/2006	1540	P-37 / RWONG	
P0600257-010.02	11/21/2006	1255	SMO / LKUKITA	
	11/21/2006	1347	In Lab / RWONG	

7R

Columbia Analytical Services, Inc.
Chain of Custody Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600257

Bottle ID	Date	Time	Sample Location / User	Disposed On
P0600257-010.02	11/21/2006	1540	P-37 / RWONG	
P0600257-011.01	11/21/2006	1254	SMO / LKUKITA	
	11/21/2006	1347	In Lab / RWONG	
	11/21/2006	1540	P-37 / RWONG	
P0600257-012.01	11/21/2006	1254	SMO / LKUKITA *	
	11/21/2006	1347	In Lab / RWONG *	
	11/21/2006	1540	P-37 / RWONG *	
P0600257-013.01	12/20/2006	1003	SMO / SANDERSON *	

* same time as -012.
-013 LOGGED IN INCORRECTL
DUE TO LOGIN ERROR BUT
WAS RUN WITH ALL
SAMPLES ON 11/21/06

12/20/06

8R

SAMPLE RECEIPT FORM

Service Request No: P060 0257 Client: BATTELLE

Sample(s) delivered by: Client _____ CAS Emp ✓ After Hours _____ DHL_____

Golden State Overnight _____ Fed X _____ UPS _____ Other Courier _____

Chain of Custody filled out accurately? Yes ✓ No _____(See Comments)

Appropriate sample volume and containers? Yes ✓ No _____(See Comments)

Sufficient labeling on container(s) ? Yes ✓ No _____(See Comments)

Container(s) supplied by CAS? Yes ✓ No _____(See Comments)

Custody seal(s) intact? N/A ✓ Yes ____ No _____(See Comments)

Trip Blank(s) received Yes ____ No ✓

If Trip Blank was supplied by CAS, record serial # _____-TB-_____

Temperature of sample(s)/cooler 3 °C Temp Blank? Y or N (Circle One)

Voa's Marked Preserved? Yes _____ No ____ Filled Properly? Yes ____ No ____ (See Comments)

Preserved Bottles Requiring pH check(s)? Yes _____ Appropriate Preservation? Yes____ No____

RUSH Turn around time? Yes _____ Notified _____Date & Time_____

Short Hold-Time Analysis (check all that apply)

ASAP	Res Cl____	D.O_____	Flash ✓	Diss S2-____	Ferrous Fe____
24HR	pH_____	Odor____	Cr+6 ✓		
48HR	BOD_____	Color____	MBAS____	Nitrate_____	
	Nitrite____	O-PO4____	Sett Sol____	Turbidity____	
72HR	Vapors____				

Notified SUE Date & Time 11/20/06 1300

Container(s) received and their preservative(s):

-1 → -~~6~~ 7 = 1-125ml Pl (NP)

12/20/06

Comments_____

Initials, Date, Time UK 11/20/06 9 1300 9R 11/20/06

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SAMPLE RECEIPT FORM

Service Request No: P060 0247 Client: BATTELLE

Sample(s) delivered by: Client ____ CAS Emp ✓ After Hours ____ DHL____

Golden State Overnight ____ Fed X ____ UPS ____ Other Courier ____

Chain of Custody filled out accurately? Yes ✓ No ____(See Comments)

Appropriate sample volume and containers? Yes ✓ No ____(See Comments)

Sufficient labeling on container(s) ? Yes ✓ No ____(See Comments)

Container(s) supplied by CAS? Yes ✓ No ____(See Comments)

Custody seal(s) intact? N/A ✓ Yes ____ No ____(See Comments)

Trip Blank(s) received Yes ____ No ✓

If Trip Blank was supplied by CAS, record serial # ____-TB-____

Temperature of sample(s)/cooler 3 °C Temp Blank? Y or N (Circle One)

Voa's Marked Preserved? Yes ____ No ____ Filled Properly? Yes ____ No ____ (See Comments)

Preserved Bottles Requiring pH check(s)? Yes ____ Appropriate Preservation? Yes____ No____

RUSH Turn around time? Yes ____ Notified ____Date & Time____

Short Hold-Time Analysis (check all that apply)

ASAP	Res Cl____	D.O____	Flash ✓	Diss S2-____	Ferrous Fe____
24HR	pH____	Odor____	Cr+6 ✓		
48HR	BOD____	Color____	MBAS____	Nitrate____	
	Nitrite____	O-PO4____	Sett Sol____	Turbidity____	
72HR	Vapors____				

Notified SUE Date & Time 11/21/06 1300

Container(s) received and their preservative(s):

-8 → 10 -12 -13

-~~7~~ → ~~9~~, ~~11~~, ~~12~~ = 1-125ml PL(NP)

11

-~~10~~ = 2-125ml PL(NP)

SM 12/20/06

Comments: MS/MSD ON -10

Initials, Date, Time LE 11/21/06 1305 SM 11/21/06

r:\sr_forms\cooler.doc Rev. 2/25/02

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600257
Date Collected : 11/20,21/06
Date Received : 11/20,21/06

Chromium, Hexavalent

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

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-22-5	P0600257-001	0.01	0.004	1	NA	11/20/06	ND	
MW-22-4	P0600257-002	0.01	0.004	1	NA	11/20/06	ND	
MW-22-3	P0600257-003	0.01	0.004	1	NA	11/20/06	ND	
MW-22-2	P0600257-004	0.01	0.004	1	NA	11/20/06	ND	
MW-22-1	P0600257-005	0.01	0.004	1	NA	11/20/06	ND	
DUPE-5-4Q06	P0600257-006	0.01	0.004	1	NA	11/20/06	ND	
EB-17-11/20/06	P0600257-007	0.01	0.004	1	NA	11/20/06	ND	
MW-23-5	P0600257-008	0.01	0.004	1	NA	11/21/06	ND	
MW-23-4	P0600257-009	0.01	0.004	1	NA	11/21/06	ND	
MW-23-3	P0600257-010	0.01	0.004	1	NA	11/21/06	ND	
MW-23-2	P0600257-011	0.01	0.004	1	NA	11/21/06	ND	
MW-23-1	P0600257-012	0.01	0.004	1	NA	11/21/06	ND	
EB-18-11/21/06	P0600257-013	0.01	0.004	1	NA	11/21/06	ND	
Method Blank	P0600257-MB	0.01	0.004	1	NA	11/20/06	ND	
Method Blank	P0600257-MB	0.01	0.004	1	NA	11/21/06	ND	

Approved By Sue Ouderkirk 12R Date : 12/20/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600257
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/21/06
Project Number :	G486090/204142	**Date Received :**	11/21/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/21/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-23-2 Units : mg/L (ppm)
Lab Code : P0600257-011MS P0600257-011DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0497	0.0515	99	103	85-115	4	

Approved By Sue Quilesh 19R Date : 12/20/06

Report By:RWONG

Hexavalent Chromium
Methods SM 3500-Cr-D
EPA3060A/EPA7196A

Columbia Analytical Services inc.

Service Request #: 257 (7-12) Run #: 71767
Prep Run # - NA

10ppm STOCK # S18-1019 0602 @ 1/10 exp: 2/1/07 Conc. H2SO4 Lot#: EMP 44257E exp 1/31/08
387ppb ICV/CCV # S18-1026 0601 @ 1/10 exp: 11/26/06 Coloring Reagent Ref# S18-1110 0603 exp 12/10/06
Digestion solution(for solids) NA

	Sample #	Sample vol./g. used	Dilution	Bkg	Absorbance @ 540nm	Corrected Abs.	Results mg/L	Results mg/Kg	QA/QC %R	QA/QC %RPD
1	0	0/10	—	0.000	0.000					
2	0.01	0.1/10			0.011					
3	0.05	0.5/10			0.055	0.999987				
4	0.1	1/10			0.111					
5	ICB	10			0.000	0.000	0.00012		<0.004	
6	ICV 0.0387ppm				0.042	0.042	0.0380		98 %	
7	MB				0.001	0.001	0.00102		<0.004	
8	LCS 0.040ppm				0.046	0.046	0.0416		104%	
9	0257-8.1			0.002	0.003	0.001	0.00102		<0.004	
10	9.1			0.005	0.005	0.000	0.00012		<0.004	
11	10.1			0.001	0.001	0.000	0.00012		<0.004	
12	11.1			0.001	0.004	0.003	0.00283		<0.004	
13	11.1 MS 0.050ppm			0.001	0.056	0.055	0.0497		99%	RPD
14	11.1 MSD			0.001	0.058	0.057	0.0515		103%	4%
* 15	12.1			0.000	0.001	0.001	0.00102		<0.004	
16	13.1			0.001	0.004	0.003	0.00283			
17	CCV1 0.0387ppm			0.000	0.042	0.042	0.0380		98 %	
18	CCB1				0.000	0.000	0.00012		<0.004	
19										
20										

Comments: LCS - spiked w/ 0.4ml S18-1019 0602 @ 1/10 ↑ 10ml w/DI
MS/MSD - spiked w/ 0.5ml " " ↑ 10ml w/sample
* filtered

Digested: NA
Prepared by: RW Date/Time: 11/21/06 @ 15:00
Analyzed by: RW Date/Time: 11/21/06 @ 15:00
Reviewed by: [signature] Date: 11/21/06

22R

Sr 12/20/06 corrected due to login error

DIVIDER SHEET

ANALYTICAL DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600267
Date Collected : 11/28-12/01/06
Date Received : 11/28-12/01/06

Chromium, Hexavalent

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

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-24-5	P0600267-001	0.01	0.004	1	NA	11/28/06	ND	
MW-24-4	P0600267-002	0.01	0.004	1	NA	11/28/06	ND	
MW-24-3	P0600267-003	0.01	0.004	1	NA	11/28/06	ND	
MW-24-2	P0600267-004	0.01	0.004	1	NA	11/28/06	ND	
MW-24-1	P0600267-005	0.01	0.004	1	NA	11/28/06	ND	
EB-19-11/28/06	P0600267-006	0.01	0.004	1	NA	11/28/06	ND	
MW-25-5	P0600267-007	0.01	0.004	1	NA	11/29/06	ND	
MW-25-4	P0600267-008	0.01	0.004	1	NA	11/29/06	ND	
MW-25-3	P0600267-009	0.01	0.004	1	NA	11/29/06	ND	
MW-25-2	P0600267-010	0.01	0.004	1	NA	11/29/06	ND	
MW-25-1	P0600267-011	0.01	0.004	1	NA	11/29/06	ND	
DUPE-6-4Q06	P0600267-012	0.01	0.004	1	NA	11/29/06	ND	
EB-20-11/29/06	P0600267-013	0.01	0.004	1	NA	11/29/06	ND	
MW-26-2	P0600267-014	0.01	0.004	1	NA	11/30/06	ND	
MW-26-1	P0600267-015	0.01	0.004	1	NA	11/30/06	ND	
EB-21-11/30/06	P0600267-016	0.01	0.004	1	NA	11/30/06	ND	
MW-5	P0600267-017	0.01	0.004	1	NA	12/01/06	ND	
MW-6	P0600267-018	0.01	0.004	1	NA	12/01/06	ND	
Method Blank	P0600267-MB	0.01	0.004	1	NA	11/28/06	ND	
Method Blank	P0600267-MB	0.01	0.004	1	NA	11/29/06	ND	
Method Blank	P0600267-MB	0.01	0.004	1	NA	11/30/06	ND	
Method Blank	P0600267-MB	0.01	0.004	1	NA	12/01/06	ND	

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	11/28/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND
CCB2	0.01	0.004	ND

Approved By: Sue Anderson Date: 12/12/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06

Service Request: P0600267
Date Analyzed: 11/28/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0387	100
CCV1	0.0387	0.0396	102
CCV2	0.0387	0.0370	96

Approved By: Sue Anderson Date: 12/12/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600267
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/28/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	P0600267-LCS	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	None	7196A	0.0400	0.0396	99	90-110	
Chromium, Hexavalent	None	7196A	0.0400	0.0393	98	90-110	
Chromium, Hexavalent	None	7196A	0.0400	0.0404	101	90-110	
Chromium, Hexavalent	None	7196A	0.0400	0.0414	104	90-110	

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600267
Date Collected : 11/28/06
Date Received : 11/28/06
Date Extracted : NA
Date Analyzed : 11/28/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-24-5
Lab Code : P0600267-001MS P0600267-001DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0378	0.0387	76	77	85-115	2	E1

E1 See case narrative.

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	11/29/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND
CCB2	0.01	0.004	ND

Approved By: Sue Anderson Date: 12/12/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06

Service Request: P0600267
Date Analyzed: 11/29/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0384	99
CCV1	0.0387	0.0393	102
CCV2	0.0387	0.0393	102

Approved By: _____ Date: 12/12/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600267
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	11/29/06
Project Number :	G486090/204142	**Date Received :**	11/29/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	11/29/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-25-2
Lab Code : P0600267-010MS P0600267-010DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0522	0.0531	104	106	85-115	2	

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	11/30/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	**PQL**	**MDL**	**Result**
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Anderson Date: 12/12/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06

Service Request: P0600267
Date Analyzed: 11/30/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0413	107
CCV1	0.0387	0.0378	98

Approved By: _____ Date: 12/12/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600267
Date Collected : 11/30/06
Date Received : 11/30/06
Date Extracted : NA
Date Analyzed : 11/30/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : EB-21-11/30/06
Lab Code : P0600267-016MS P0600267-016DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0483	0.0474	97	95	85-115	2	

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	12/01/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	**PQL**	**MDL**	**Result**
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Anderson Date: 12/12/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	12/01/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0376	97
CCV1	0.0387	0.0376	97

Approved By: Sue Ouderkirk Date: 12/12/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600267
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	12/01/06
Project Number :	G486090/204142	**Date Received :**	12/01/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	12/01/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-5 Units : mg/L (ppm)
Lab Code : P0600267-017MS P0600267-017DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0518	0.0518	104	104	85-115	<1	

Approved By Sue Quelette Date : 12/12/06

Report By:RWONG

Organic Analysis:
EPA Method 504.1

Summary Package

Sample and QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267

Cover Page - Organic Analysis Data Package
EPA Method 504.1

Sample Name	Lab Code	Date Collected	Date Received
MW-5MS	KWG0621335-1	12/01/2006	12/01/2006
MW-5DMS	KWG0621335-2	12/01/2006	12/01/2006
MW-5	P0600267-017	12/01/2006	12/01/2006
TB-22-12/1/06	P0600267-019	12/01/2006	12/01/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Jim Smith

Date: 12/19/06 Title: Mr Manager

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/01/2006
Sample Matrix:	Water	**Date Received:**	12/01/2006

EPA Method 504.1

Sample Name:	MW-5	**Units:**	ug/L
Lab Code:	P0600267-017	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0099	0.00170	1	12/14/06	12/14/06	KWG0621335	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0099	0.00180	1	12/14/06	12/14/06	KWG0621335	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/01/2006
Sample Matrix:	Water	**Date Received:**	12/01/2006

EPA Method 504.1

Sample Name:	TB-22-12/1/06	**Units:**	ug/L
Lab Code:	P0600267-019	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	12/14/06	12/14/06	KWG0621335	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	12/14/06	12/14/06	KWG0621335	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

EPA Method 504.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0621335-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0017	1	12/14/06	12/14/06	KWG0621335	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0018	1	12/14/06	12/14/06	KWG0621335	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/14/2006
Sample Matrix:	Water	**Date Analyzed:**	12/14/2006

Matrix Spike/Duplicate Matrix Spike Summary
EPA Method 504.1

Sample Name:	MW-5	**Units:**	ug/L
Lab Code:	P0600267-017	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0621335

Analyte Name	Sample Result	MW-5MS KWG0621335-1 Matrix Spike			MW-5DMS KWG0621335-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	ND	0.0790	0.0732	108	0.0856	0.0717	119	65-135	8	30
1,2-Dibromo-3-chloropropane (DBCP	ND	0.0683	0.0732	93	0.0687	0.0717	96	65-135	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600267
Date Extracted: 12/14/2006
Date Analyzed: 12/14/2006

Lab Control Spike Summary
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0621335

	Lab Control Sample KWG0621335-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.0870	0.0714	122	70-130
1,2-Dibromo-3-chloropropane (DBCP	0.0709	0.0714	99	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/14/2006
Sample Matrix:	Water	**Date Analyzed:**	12/14/2006
		Time Analyzed:	18:55

Method Blank Summary
EPA Method 504.1

Sample Name:	Method Blank	**File ID:**	J:\GC24\DATA\121406\12140005.D
Lab Code:	KWG0621335-4	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0621335

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0621335-3	J:\GC24\DATA\121406\12140004.D	12/14/06	18:31
MW-5	P0600267-017	J:\GC24\DATA\121406\12140006.D	12/14/06	19:20
TB-22-12/1/06	P0600267-019	J:\GC24\DATA\121406\12140007.D	12/14/06	19:44
MW-5MS	KWG0621335-1	J:\GC24\DATA\121406\12140013.D	12/14/06	22:09
MW-5DMS	KWG0621335-2	J:\GC24\DATA\121406\12140014.D	12/14/06	22:33

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/14/2006
Sample Matrix:	Water	**Date Analyzed:**	12/14/2006
		Time Analyzed:	18:31

Lab Control Sample Summary
EPA Method 504.1

Sample Name:	Lab Control Sample	**File ID:**	J:\GC24\DATA\121406\12140004.D
Lab Code:	KWG0621335-3	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0621335

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0621335-4	J:\GC24\DATA\121406\12140005.D	12/14/06	18:55
MW-5	P0600267-017	J:\GC24\DATA\121406\12140006.D	12/14/06	19:20
TB-22-12/1/06	P0600267-019	J:\GC24\DATA\121406\12140007.D	12/14/06	19:44
MW-5MS	KWG0621335-1	J:\GC24\DATA\121406\12140013.D	12/14/06	22:09
MW-5DMS	KWG0621335-2	J:\GC24\DATA\121406\12140014.D	12/14/06	22:33

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC24\DATA\112206\11220002.D	E	J:\GC24\DATA\112206\11220006.D
B	J:\GC24\DATA\112206\11220003.D	F	J:\GC24\DATA\112206\11220007.D
C	J:\GC24\DATA\112206\11220004.D	G	J:\GC24\DATA\112206\11220008.D
D	J:\GC24\DATA\112206\11220005.D	H	J:\GC24\DATA\112206\11220009.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
1,2-Dibromoethane (EDB)	A	0.075	1.67E+6	B	0.13	1.44E+6	C	0.25	1.65E+6	D	0.63	1.44E+6	E	1.3	1.52E+6
	F	3.8	1.41E+6	G	5.0	1.34E+6	H	10	1.29E+6						
1,2-Dibromo-3-chloropropane (DBCP	A	0.075	2.70E+6	B	0.13	2.52E+6	C	0.25	2.95E+6	D	0.63	2.53E+6	E	1.3	2.56E+6
	F	3.8	2.46E+6	G	5.0	2.47E+6	H	10	2.28E+6						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation					
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	9.3		≤ 20	
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	7.7		≤ 20	

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 11/22/2006
Date Analyzed: 11/22/2006

Second Source Calibration Verification
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration ID: CAL5812
Units: ppb

File ID: J:\GC24\DATA\112206\11220010.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.2	1470000	1440000	-2	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	2560000	2520000	-2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-XLB

Level ID	File ID	Level ID	File ID
A	J:\GC24\DATA\112206\11220002.D\11220002c.d	E	J:\GC24\DATA\112206\11220006.D\11220006c.d
B	J:\GC24\DATA\112206\11220003.D\11220003c.d	F	J:\GC24\DATA\112206\11220007.D\11220007c.d
C	J:\GC24\DATA\112206\11220004.D\11220004c.d	G	J:\GC24\DATA\112206\11220008.D\11220008c.d
D	J:\GC24\DATA\112206\11220005.D\11220005c.d	H	J:\GC24\DATA\112206\11220009.D\11220009c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
1,2-Dibromoethane (EDB)	A	0.075	3.83E+6	B	0.13	3.72E+6	C	0.25	3.29E+6	D	0.63	3.05E+6	E	1.3	2.99E+6
	F	3.8	2.95E+6	G	5.0	2.84E+6	H	10	2.78E+6						
1,2-Dibromo-3-chloropropane (DBCP	A	0.075	4.46E+6	B	0.13	4.79E+6	C	0.25	4.76E+6	D	0.63	4.44E+6	E	1.3	4.27E+6
	F	3.8	4.30E+6	G	5.0	4.41E+6	H	10	4.11E+6						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	12.5		≤ 20
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	5.3		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 11/22/2006
Date Analyzed: 11/22/2006

Second Source Calibration Verification
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration ID: CAL5812
Units: ppb

File ID: J:\GC24\DATA\112206\11220010.D\11220010c.d

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.2	3180000	2930000	-8	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	4440000	4250000	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0621440
Units: ppb

File ID: J:\GC24\DATA\121406\12140003.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.6	1470000	1840000	25		NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.7	2560000	3380000	32	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0621440
Units: ppb

File ID: J:\GC24\DATA\121406\12140003.D\12140003C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.1	3180000	2690000	-16	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	4440000	4210000	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0621440
Units: ppb

File ID: J:\GC24\DATA\121406\12140015.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	5.6	1470000	1650000	13	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	5.9	2560000	3040000	19	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0621440
Units: ppb

File ID: J:\GC24\DATA\121406\12140015.D\12140015C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	4.1	3180000	2590000	-19	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	4.7	4440000	4190000	-6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267

Analysis Run Log
EPA Method 504.1

Analysis Method: 504.1

Analysis Lot: KWG0621440
Instrument ID: GC24
Column: DB-35MS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
12140003.D	Continuing Calibration Verification	KWG0621440-1	12/14/06	18:07		12/14/06	18:24
12140004.D	Lab Control Sample	KWG0621335-3	12/14/06	18:31		12/14/06	18:48
12140005.D	Method Blank	KWG0621335-4	12/14/06	18:55		12/14/06	19:12
12140006.D	MW-5	P0600267-017	12/14/06	19:20		12/14/06	19:37
12140007.D	TB-22-12/1/06	P0600267-019	12/14/06	19:44		12/14/06	20:01
12140008.D	ZZZZZZ	ZZZZZZ	12/14/06	20:08		12/14/06	20:25
12140009.D	ZZZZZZ	ZZZZZZ	12/14/06	20:32		12/14/06	20:49
12140010.D	ZZZZZZ	ZZZZZZ	12/14/06	20:57		12/14/06	21:14
12140011.D	ZZZZZZ	ZZZZZZ	12/14/06	21:21		12/14/06	21:38
12140012.D	ZZZZZZ	ZZZZZZ	12/14/06	21:45		12/14/06	22:02
12140013.D	MW-5MS	KWG0621335-1	12/14/06	22:09		12/14/06	22:26
12140014.D	MW-5DMS	KWG0621335-2	12/14/06	22:33		12/14/06	22:50
12140015.D	Continuing Calibration Verification	KWG0621440-2	12/14/06	22:57		12/14/06	23:14

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600267
Date Extracted: 12/14/2006

Extraction Prep Log
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Extraction Lot: KWG0621335
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-5	P0600267-017	12/01/06	12/01/06	35.61ml	2ml	NA	
TB-22-12/1/06	P0600267-019	12/01/06	12/01/06	33.82ml	2ml	NA	
Method Blank	KWG0621335-4	NA	NA	35ml	2ml	NA	
MW-5MS	KWG0621335-1	12/01/06	12/01/06	34.16ml	2ml	NA	
MW-5DMS	KWG0621335-2	12/01/06	12/01/06	34.87ml	2ml	NA	
Lab Control Sample	KWG0621335-3	NA	NA	35ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

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Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267

Cover Page - Organic Analysis Data Package
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
MW-5MS	KWG0621132-1	12/01/2006	12/01/2006
MW-5DMS	KWG0621132-2	12/01/2006	12/01/2006
MW-5	P0600267-017	12/01/2006	12/01/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Tim Smith

Date: 12/13/06 Title: Lab Manager

Analytical Results

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/01/2006
Sample Matrix:	Water	**Date Received:**	12/01/2006

Nitrosamines by EPA 521

Sample Name:	MW-5	**Units:**	ng/L
Lab Code:	P0600267-017	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	12/07/06	12/07/06	KWG0621132	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	83	70-130	12/07/06	Acceptable

Comments:

Analytical Results

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0621132-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	12/07/06	12/07/06	KWG0621132	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	12/07/06	12/07/06	KWG0621132	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	86	70-130	12/07/06	Acceptable

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600267

Surrogate Recovery Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Level: Low

Sample Name	Lab Code	Sur1
MW-5	P0600267-017	83
Method Blank	KWG0621132-4	86
MW-5MS	KWG0621132-1	101
MW-5DMS	KWG0621132-2	80
Lab Control Sample	KWG0621132-3	88

Surrogate Recovery Control Limits (%)

Sur1 = N-Nitrosodimethylamine-d6 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/07/2006
Sample Matrix:	Water	**Date Analyzed:**	12/07/2006

Matrix Spike/Duplicate Matrix Spike Summary
Nitrosamines by EPA 521

Sample Name:	MW-5	**Units:**	ng/L
Lab Code:	P0600267-017	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0621132

Analyte Name	Sample Result	MW-5MS KWG0621132-1 Matrix Spike			MW-5DMS KWG0621132-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
N-Nitrosodimethylamine	ND	25.7	40.0	64 *	25.4	40.0	64 *	70-130	1	30
N-Nitrosomethylethylamine	ND	26.6	40.0	66 *	21.6	40.0	54 *	70-130	21	30
N-Nitrosodiethylamine	ND	35.8	40.0	89	28.9	40.0	72	70-130	21	30
N-Nitrosopyrrolidine	ND	46.3	40.0	116	33.6	40.0	84	70-130	32 *	30
N-Nitrosodi-n-propylamine	ND	41.1	40.0	103	33.9	40.0	85	70-130	19	30
N-Nitrosopiperidine	ND	37.8	40.0	95	27.0	40.0	67 *	70-130	33 *	30
N-Nitrosodi-n-butylamine	ND	47.1	40.0	118	30.2	40.0	76	70-130	44 *	30
N-Nitrosodiphenylamine	ND	13.5	40.0	34 *	8.00	40.0	20 *	70-130	51 *	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600267
Date Extracted: 12/07/2006
Date Analyzed: 12/08/2006

Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Basis: NA
Level: Low
Extraction Lot: KWG0621132

	Lab Control Sample KWG0621132-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
N-Nitrosodimethylamine	28.3	40.0	71	70-130
N-Nitrosomethylethylamine	30.3	40.0	76	70-130
N-Nitrosodiethylamine	36.3	40.0	91	70-130
N-Nitrosopyrrolidine	50.5	40.0	126	70-130
N-Nitrosodi-n-propylamine	38.6	40.0	97	70-130
N-Nitrosopiperidine	35.4	40.0	89	70-130
N-Nitrosodi-n-butylamine	44.3	40.0	111	70-130
N-Nitrosodiphenylamine	13.9	40.0	35 *	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/07/2006
Sample Matrix:	Water	**Date Analyzed:**	12/07/2006
		Time Analyzed:	16:20

Method Blank Summary
Nitrosamines by EPA 521

Sample Name:	Method Blank	**File ID:**	J:\MS16\DATA\120606\1206050.D
Lab Code:	KWG0621132-4	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0621132

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
MW-5	P0600267-017	J:\MS16\DATA\120606\1206051.D	12/07/06	16:59
MW-5MS	KWG0621132-1	J:\MS16\DATA\120606\1206052.D	12/07/06	17:37
MW-5DMS	KWG0621132-2	J:\MS16\DATA\120606\1206053.D	12/07/06	18:16
Lab Control Sample	KWG0621132-3	J:\MS16\DATA\120806\1208003.D	12/08/06	10:02

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/07/2006
Sample Matrix:	Water	**Date Analyzed:**	12/08/2006
		Time Analyzed:	10:02

Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**File ID:**	J:\MS16\DATA\120806\1208003.D
Lab Code:	KWG0621132-3	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0621132

This Lab Control Sample applies to the following analyses:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 12/06/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5850
Instrument ID: MS16

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS16\DATA\120606\1206001.D	D	J:\MS16\DATA\120606\1206004.D
B	J:\MS16\DATA\120606\1206002.D	E	J:\MS16\DATA\120606\1206005.D
C	J:\MS16\DATA\120606\1206003.D	F	J:\MS16\DATA\120606\1206006.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosopiperidine	A	1.0	9.63	B	2.0	10.3	C	5.0	9.76	D	10	10.1	E	20	10.1
	F	50	10.9												
N-Nitrosomethylethylamine	A	1.0	5.25	B	2.0	5.65	C	5.0	6.41	D	10	6.33	E	20	6.40
	F	50	6.63												
N-Nitrosodimethylamine-d6	A	20	1.06	B	20	1.13	C	20	1.16	D	20	1.09	E	20	1.32
	F	20	0.926												
N-Nitrosodiethylamine	A	1.0	1.32	B	2.0	1.33	C	5.0	1.57	D	10	1.49	E	20	1.42
	F	50	1.50												
N-Nitrosodimethylamine	A	1.0	0.766	B	2.0	0.699	C	5.0	0.958	D	10	1.02	E	20	0.812
	F	50	1.04												
N-Nitrosodi-n-propylamine	A	1.0	0.580	B	2.0	0.685	C	5.0	0.727	D	10	0.713	E	20	0.690
	F	50	0.719												
N-Nitrosodiphenylamine	A	1.0	4.75	B	2.0	5.37	C	5.0	5.77	D	10	5.04	E	20	6.27
	F	50	5.46												
N-Nitrosodi-n-butylamine	A	1.0	4.05	B	2.0	4.05	C	5.0	3.64	D	10	3.78	E	20	4.45
	F	50	4.28												
N-Nitrosopyrrolidine	A	1.0	1.20	B	2.0	1.44	C	5.0	1.38	D	10	1.38	E	20	1.34
	F	50	1.56												

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 12/06/2006

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5850
Instrument ID: MS16

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	Compound Type	Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosopiperidine	MS	AverageRF	% RSD	4.3		≤ 30	10.1		
N-Nitrosomethylethylamine	MS	AverageRF	% RSD	8.8		≤ 30	6.11		
N-Nitrosodimethylamine-d6	SURR	AverageRF	% RSD	11.5		≤ 30	1.11		
N-Nitrosodiethylamine	MS	AverageRF	% RSD	7.0		≤ 30	1.44		
N-Nitrosodimethylamine	MS	AverageRF	% RSD	16.1		≤ 30	0.882		
N-Nitrosodi-n-propylamine	MS	AverageRF	% RSD	7.9		≤ 30	0.686		
N-Nitrosodiphenylamine	MS	AverageRF	% RSD	9.9		≤ 30	5.44		
N-Nitrosodi-n-butylamine	MS	AverageRF	% RSD	7.5		≤ 30	4.04		
N-Nitrosopyrrolidine	MS	AverageRF	% RSD	8.5		≤ 30	1.38		

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 12/06/2006
Date Analyzed: 12/06/2006

Second Source Calibration Verification
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration ID: CAL5850
Units: ug/l

File ID: J:\MS16\DATA\120606\1206007.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodi-n-butylamine	20	19	4.04	3.76	-7	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	23	0.686	0.802	17	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	18	1.44	1.29	-10	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	18	0.882	0.772	-12	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19	5.44	5.11	-6	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21	6.11	6.41	5	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	19	10.1	9.58	-5	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	22	1.38	1.50	9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/07/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206048.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	20		1.11	1.12	1	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	11		0.882	0.983	11	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	11		6.11	6.57	7	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	11		1.44	1.55	8	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	11		1.38	1.52	10	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	10		0.686	0.686	0	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	10		10.1	10.2	1	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	9.4		4.04	3.81	-6	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	9.1		5.44	4.97	-9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/07/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0620857
Units: ug/l

File ID: J:\MS16\DATA\120606\1206054.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	21		1.11	1.18	6	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	21		0.882	0.924	5	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	22		6.11	6.57	7	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	20		1.44	1.42	-1	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	23		1.38	1.56	13	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	22		0.686	0.748	9	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	21		10.1	10.5	4	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	20	18		4.04	3.70	-9	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	19		5.44	5.19	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/08/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0621137
Units: ug/l

File ID: J:\MS16\DATA\120806\1208.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	18		1.11	0.986	-12	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	1.0	1.2		0.882	1.05	18	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	1.0	0.94		6.11	5.76	-6	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	1.0	1.1		1.44	1.58	10	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	1.0	0.94		1.38	1.30	-6	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	1.0	1.0		0.686	0.688	0	NA	± 30 %	AverageRF
N-Nitrosopiperidine	1.0	0.89		10.1	9.01	-11	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	1.0	0.81		4.04	3.29	-19	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	1.0	0.88		5.44	4.79	-12	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/08/2006

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 12/06/2006
Calibration ID: CAL5850
Analysis Lot: KWG0621137
Units: ug/l

File ID: J:\MS16\DATA\120806\1208004.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	20		1.11	1.14	2	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	10		0.882	0.926	5	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	11		6.11	6.43	5	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	9.8		1.44	1.41	-2	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	10		1.38	1.39	1	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	10		0.686	0.714	4	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	9.9		10.1	9.98	-1	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	8.3		4.04	3.37	-17	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	7.9		5.44	4.27	-22	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0620857
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
606\1206.D	GC/MS Tuning - Decafluorotripheny	KWG0620857-1	12/6/06	07:49		12/6/06	08:22
\1206007.D	Continuing Calibration Verification	KWG0620857-2	12/6/06	12:26		12/6/06	12:59
\1206009.D	ZZZZZZ	ZZZZZZ	12/6/06	13:44		12/6/06	14:17
\1206011.D	Continuing Calibration Verification	KWG0620857-3	12/6/06	15:02		12/6/06	15:35
\1206012.D	ZZZZZZ	ZZZZZZ	12/6/06	15:41		12/6/06	16:14
\1206013.D	ZZZZZZ	ZZZZZZ	12/6/06	16:20		12/6/06	16:53
\1206014.D	ZZZZZZ	ZZZZZZ	12/6/06	16:59		12/6/06	17:32
\1206015.D	ZZZZZZ	ZZZZZZ	12/6/06	17:38		12/6/06	18:11
\1206016.D	ZZZZZZ	ZZZZZZ	12/6/06	18:16		12/6/06	18:49
\1206017.D	ZZZZZZ	ZZZZZZ	12/6/06	18:55		12/6/06	19:28
\1206018.D	ZZZZZZ	ZZZZZZ	12/6/06	19:34		12/6/06	20:07
\1206019.D	ZZZZZZ	ZZZZZZ	12/6/06	20:13		12/6/06	20:46
\1206020.D	ZZZZZZ	ZZZZZZ	12/6/06	20:52		12/6/06	21:25
\1206021.D	ZZZZZZ	ZZZZZZ	12/6/06	21:31		12/6/06	22:04
\1206022.D	Continuing Calibration Verification	KWG0620857-4	12/6/06	22:10		12/6/06	22:43
\1206023.D	ZZZZZZ	ZZZZZZ	12/6/06	22:49		12/6/06	23:22
\1206024.D	ZZZZZZ	ZZZZZZ	12/6/06	23:28		12/7/06	00:01
\1206025.D	ZZZZZZ	ZZZZZZ	12/7/06	00:07		12/7/06	00:40
\1206026.D	ZZZZZZ	ZZZZZZ	12/7/06	00:46		12/7/06	01:19
\1206027.D	ZZZZZZ	ZZZZZZ	12/7/06	01:24		12/7/06	01:57
\1206028.D	ZZZZZZ	ZZZZZZ	12/7/06	02:03		12/7/06	02:36
\1206029.D	ZZZZZZ	ZZZZZZ	12/7/06	02:42		12/7/06	03:15
\1206030.D	ZZZZZZ	ZZZZZZ	12/7/06	03:21		12/7/06	03:54
\1206031.D	ZZZZZZ	ZZZZZZ	12/7/06	04:00		12/7/06	04:33
\1206032.D	ZZZZZZ	ZZZZZZ	12/7/06	04:38		12/7/06	05:11
\1206033.D	Continuing Calibration Verification	KWG0620857-5	12/7/06	05:17		12/7/06	05:50
\1206035.D	Continuing Calibration Verification	KWG0620857-6	12/7/06	06:35		12/7/06	07:08
\1206036.D	ZZZZZZ	ZZZZZZ	12/7/06	07:14		12/7/06	07:47
\1206037.D	ZZZZZZ	ZZZZZZ	12/7/06	07:53		12/7/06	08:26
\1206038.D	Continuing Calibration Verification	KWG0620857-7	12/7/06	08:32		12/7/06	09:05
\1206040.D	ZZZZZZ	ZZZZZZ	12/7/06	09:50		12/7/06	10:23
\1206042.D	ZZZZZZ	ZZZZZZ	12/7/06	11:08		12/7/06	11:41
\1206043.D	ZZZZZZ	ZZZZZZ	12/7/06	11:47		12/7/06	12:20
\1206044.D	ZZZZZZ	ZZZZZZ	12/7/06	12:26		12/7/06	12:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0620857
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1206045.D	ZZZZZZ	ZZZZZZ	12/7/06	13:05		12/7/06	13:38
\1206046.D	ZZZZZZ	ZZZZZZ	12/7/06	13:44		12/7/06	14:17
\1206047.D	ZZZZZZ	ZZZZZZ	12/7/06	14:23		12/7/06	14:56
\1206048.D	Continuing Calibration Verification	KWG0620857-8	12/7/06	15:02		12/7/06	15:35
\1206049.D	ZZZZZZ	ZZZZZZ	12/7/06	15:41		12/7/06	16:14
\1206050.D	Method Blank	KWG0621132-4	12/7/06	16:20		12/7/06	16:53
\1206051.D	MW-5	P0600267-017	12/7/06	16:59		12/7/06	17:32
\1206052.D	MW-5MS	KWG0621132-1	12/7/06	17:37		12/7/06	18:10
\1206053.D	MW-5DMS	KWG0621132-2	12/7/06	18:16		12/7/06	18:49
\1206054.D	Continuing Calibration Verification	KWG0620857-9	12/7/06	18:56		12/7/06	19:29

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0621137
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
\1206062.D	GC/MS Tuning - Decafluorotripheny	KWG0621137-3	12/8/06	00:08		12/8/06	00:41
806\1208.D	Continuing Calibration Verification	KWG0621137-1	12/8/06	08:00		12/8/06	08:33
\1208003.D	Lab Control Sample	KWG0621132-3	12/8/06	10:02		12/8/06	10:35
\1208004.D	Continuing Calibration Verification	KWG0621137-2	12/8/06	10:46		12/8/06	11:19

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600267
Date Extracted: 12/07/2006

Extraction Prep Log
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Extraction Lot: KWG0621132
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-5	P0600267-017	12/01/06	12/01/06	500ml	1ml	NA	
Method Blank	KWG0621132-4	NA	NA	500ml	1ml	NA	
MW-5MS	KWG0621132-1	12/01/06	12/01/06	500ml	1ml	NA	
MW-5DMS	KWG0621132-2	12/01/06	12/01/06	500ml	1ml	NA	
Lab Control Sample	KWG0621132-3	NA	NA	500ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Semivolatile Organic Compounds by GC/MS SIM

Summary Package

Sample and QC Results

300

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267

Cover Page - Organic Analysis Data Package
Semivolatile Organic Compounds by GC/MS SIM

Sample Name	Lab Code	Date Collected	Date Received
MW-5DMS	KWG0620707-1	12/01/2006	12/01/2006
MW-5MS	KWG0620707-4	12/01/2006	12/01/2006
MW-5	P0600267-017	12/01/2006	12/01/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: [signature] Name: Carl Degnan

Date: 12/26/06 Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/01/2006
Sample Matrix:	Water	**Date Received:**	12/01/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-5	**Units:**	ng/L
Lab Code:	P0600267-017	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	12/05/06	12/21/06	KWG0620707	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	85	70-130	12/21/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0620707-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	12/05/06	12/21/06	KWG0620707	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	84	70-130	12/21/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600267

Surrogate Recovery Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
MW-5	P0600267-017	85
Method Blank	KWG0620707-3	84
MW-5DMS	KWG0620707-1	84
MW-5MS	KWG0620707-4	84
Lab Control Sample	KWG0620707-2	84

Surrogate Recovery Control Limits (%)

Sur1 = 1,2,3-Trichloropropane-d5 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	12/21/2006
		Time Analyzed:	12:16

Internal Standard Area and RT Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID:	J:\MS17\DATA\122106\1221F002.D	**Lab Code:**	KWG0621733-2
Instrument ID:	MS17	**Analysis Lot:**	KWG0621733
Analysis Method:	8270C SIM		

		1,4-Dichlorobenzene-d4	
		Area	**RT**
	Results ==>	51,221	6.58
	Upper Limit ==>	102,442	7.08
	Lower Limit ==>	25,611	6.08
	ICAL Result ==>	47,297	6.57
Associated Analyses			
Method Blank	KWG0620707-3	47,519	6.56
Lab Control Sample	KWG0620707-2	48,565	6.57
MW-5MS	KWG0620707-4	47,508	6.56
MW-5DMS	KWG0620707-1	46,995	6.56
MW-5	P0600267-017	47,019	6.56

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/05/2006
Sample Matrix:	Water	**Date Analyzed:**	12/21/2006

Matrix Spike/Duplicate Matrix Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-5	**Units:**	ng/L
Lab Code:	P0600267-017	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0620707

		MW-5MS KWG0620707-4 Matrix Spike			MW-5DMS KWG0620707-1 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2,3-Trichloropropane	ND	144	194	74	148	194	76	70-130	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/05/2006
Sample Matrix:	Water	**Date Analyzed:**	12/21/2006

Lab Control Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method:	EPA 3520C	**Units:**	ng/L
Analysis Method:	8270C SIM	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0620707

	Lab Control Sample KWG0620707-2 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2,3-Trichloropropane	162	200	81	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/05/2006
Sample Matrix:	Water	**Date Analyzed:**	12/21/2006
		Time Analyzed:	17:33

Method Blank Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**File ID:**	J:\MS17\DATA\122106\1221F019.D
Lab Code:	KWG0620707-3	**Instrument ID:**	MS17
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0620707

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0620707-2	J:\MS17\DATA\122106\1221F020.D	12/21/06	17:51
MW-5MS	KWG0620707-4	J:\MS17\DATA\122106\1221F021.D	12/21/06	18:10
MW-5DMS	KWG0620707-1	J:\MS17\DATA\122106\1221F022.D	12/21/06	18:28
MW-5	P0600267-017	J:\MS17\DATA\122106\1221F023.D	12/21/06	18:47

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/05/2006
Sample Matrix:	Water	**Date Analyzed:**	12/21/2006
		Time Analyzed:	17:51

Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Lab Control Sample	**File ID:**	J:\MS17\DATA\122106\1221F020.D
Lab Code:	KWG0620707-2	**Instrument ID:**	MS17
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0620707

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0620707-3	J:\MS17\DATA\122106\1221F019.D	12/21/06	17:33
MW-5MS	KWG0620707-4	J:\MS17\DATA\122106\1221F021.D	12/21/06	18:10
MW-5DMS	KWG0620707-1	J:\MS17\DATA\122106\1221F022.D	12/21/06	18:28
MW-5	P0600267-017	J:\MS17\DATA\122106\1221F023.D	12/21/06	18:47

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/21/2006
Time Analyzed: 11:58

Tune Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID: J:\MS17\DATA\122106\1221F001.D
Instrument ID: MS17
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0621733

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	18.0	186836	PASS
68	69	0	2	1.4	3178	PASS
69	198	0	100	21.3	220617	PASS
70	69	0	2	0.5	1020	PASS
127	198	10	80	35.6	368567	PASS
197	198	0	2	0.2	2039	PASS
198	442	30	100	49.0	1035541	PASS
199	198	5	9	6.6	68480	PASS
275	198	10	60	33.4	345664	PASS
365	442	1	50	2.2	45802	PASS
441	443	0	100	74.2	308480	PASS
442	442	100	100	100.0	2114730	PASS
443	442	15	24	19.7	415658	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0621733-2	J:\MS17\DATA\122106\1221F002.D	12/21/2006	12:16	
Method Blank	KWG0620707-3	J:\MS17\DATA\122106\1221F019.D	12/21/2006	17:33	
Lab Control Sample	KWG0620707-2	J:\MS17\DATA\122106\1221F020.D	12/21/2006	17:51	
MW-5MS	KWG0620707-4	J:\MS17\DATA\122106\1221F021.D	12/21/2006	18:10	
MW-5DMS	KWG0620707-1	J:\MS17\DATA\122106\1221F022.D	12/21/2006	18:28	
MW-5	P0600267-017	J:\MS17\DATA\122106\1221F023.D	12/21/2006	18:47	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 12/20/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5886
Instrument ID: MS17

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS17\DATA\122006\1220F003.D	E	J:\MS17\DATA\122006\1220F007.D
B	J:\MS17\DATA\122006\1220F004.D	F	J:\MS17\DATA\122006\1220F008.D
C	J:\MS17\DATA\122006\1220F005.D	G	J:\MS17\DATA\122006\1220F009.D
D	J:\MS17\DATA\122006\1220F006.D	H	J:\MS17\DATA\122006\1220F010.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2,3-Trichloropropane-d5	A	2.0	0.742	B	5.0	0.723	C	10	0.700	D	20	0.678	E	50	0.673
	F	100	0.697	G	500	0.688	H	1000	0.686						
1,2,3-Trichloropropane	A	2.0	0.998	B	5.0	0.846	C	10	0.761	D	20	0.714	E	50	0.692
	F	100	0.714	G	500	0.701	H	1000	0.701						

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Calibration Date: 12/20/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5886
Instrument ID: MS17

Column: MS

		Calibration Evaluation					RRF Evaluation		
Analyte Name	**Compound Type**	**Fit Type**	**Eval.**	**Eval. Result**	**Q**	**Control Criteria**	**Average RRF**	**Q**	**Minimum RRF**
1,2,3-Trichloropropane-d5	SURR	AverageRF	% RSD	3.4		≤ 30	0.698		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	13.9		≤ 30	0.766		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client:	Battelle	**Service Request:**	P0600267
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Calibration Date:**	12/20/2006
		Date Analyzed:	12/20/2006

Second Source Calibration Verification
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type:	Internal Standard	**Calibration ID:**	CAL5886
Analysis Method:	8270C SIM	**Units:**	ng/ml

File ID: J:\MS17\DATA\122006\1220F011.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane	100	88	0.766	0.675	-12	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600267
Date Analyzed: 12/21/2006

Continuing Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 12/20/2006
Calibration ID: CAL5886
Analysis Lot: KWG0621733
Units: ng/ml

File ID: J:\MS17\DATA\122106\1221F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane-d5	20	20	0.01	0.698	0.682	-2	NA	± 20 %	AverageRF
1,2,3-Trichloropropane	20	18	0.01	0.766	0.696	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle **Service Request:** P0600267
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Analysis Run Log
Semivolatile Organic Compounds by GC/MS SIM

Analysis Method: 8270C SIM **Analysis Lot:** KWG0621733
Instrument ID: MS17

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1221F001.D	GC/MS Tuning - Decafluorotripheny	KWG0621733-1	12/21/2006	11:58		12/21/2006	12:10
1221F002.D	Continuing Calibration Verification	KWG0621733-2	12/21/2006	12:16		12/21/2006	12:28
1221F014.D	ZZZZZZ	ZZZZZZ	12/21/2006	16:00		12/21/2006	16:12
1221F015.D	ZZZZZZ	ZZZZZZ	12/21/2006	16:18		12/21/2006	16:30
1221F016.D	ZZZZZZ	ZZZZZZ	12/21/2006	16:37		12/21/2006	16:49
1221F017.D	ZZZZZZ	ZZZZZZ	12/21/2006	16:55		12/21/2006	17:07
1221F018.D	ZZZZZZ	ZZZZZZ	12/21/2006	17:14		12/21/2006	17:26
1221F019.D	Method Blank	KWG0620707-3	12/21/2006	17:33		12/21/2006	17:45
1221F020.D	Lab Control Sample	KWG0620707-2	12/21/2006	17:51		12/21/2006	18:03
1221F021.D	MW-5MS	KWG0620707-4	12/21/2006	18:10		12/21/2006	18:22
1221F022.D	MW-5DMS	KWG0620707-1	12/21/2006	18:28		12/21/2006	18:40
1221F023.D	MW-5	P0600267-017	12/21/2006	18:47		12/21/2006	18:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600267
Date Extracted: 12/05/2006

Extraction Prep Log
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0620707
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-5	P0600267-017	12/01/06	12/01/06	1030ml	2ml	NA	
Method Blank	KWG0620707-3	NA	NA	1030ml	2ml	NA	
MW-5DMS	KWG0620707-1	12/01/06	12/01/06	1030ml	2ml	NA	
MW-5MS	KWG0620707-4	12/01/06	12/01/06	1030ml	2ml	NA	
Lab Control Sample	KWG0620707-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

DIVIDER SHEET

RAW DATA FOR

Hexavalent Chromium

ANALYSIS

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600280
Date Collected : 12/04-07/06
Date Received : 12/04-07/06

Chromium, Hexavalent

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

Units : mg/L (ppm)
Basis : NA

Sample Name	Lab Code	PQL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	Result Notes
MW-1	P0600280-001	0.01	0.004	1	NA	12/05/06	ND	
MW-9	P0600280-002	0.01	0.004	1	NA	12/05/06	ND	
MW-15	P0600280-003	0.01	0.004	1	NA	12/05/06	ND	
DUPE-7-4Q06	P0600280-004	0.01	0.004	1	NA	12/05/06	ND	
MW-7	P0600280-005	0.01	0.004	1	NA	12/05/06	ND	
MW-16	P0600280-006	0.01	0.004	1	NA	12/05/06	ND	
MW-13	P0600280-007	0.05	0.02	5	NA	12/07/06	0.084	
MW-8	P0600280-008	0.01	0.004	1	NA	12/07/06	ND	
MW-10	P0600280-009	0.01	0.004	1	NA	12/07/06	ND	
DUPE-8-4Q06	P0600280-011	0.01	0.004	1	NA	12/07/06	ND	
Method Blank	P0600280-MB1	0.01	0.004	1	NA	12/05/06	ND	
Method Blank	P0600280-MB2	0.01	0.004	1	NA	12/05/06	ND	
Method Blank	P0600280-MB1	0.01	0.004	1	NA	12/07/06	ND	
Method Blank	P0600280-MB2	0.01	0.004	1	NA	12/07/06	ND	

Approved By Sue Quilerton Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	12/05/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	**PQL**	**MDL**	**Result**
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND

Approved By: Sue Anderson Date: 12/12/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06

Service Request: P0600280
Date Analyzed: 12/05/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0376	97
CCV1	0.0387	0.0367	95

Approved By: Sue Anderson Date: 12/12/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600280
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	12/05/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	P0600280-LCS1	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	None	7196A	0.0400	0.0428	107	90-110	

Approved By _____ Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600280
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	12/04/06
Project Number :	G486090/204142	**Date Received :**	12/04/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	12/05/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-1 Units : mg/L (ppm)
Lab Code : P0600280-001MS P0600280-001DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0525	0.0507	105	101	85-115	3	

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	12/05/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	**PQL**	**MDL**	**Result**
ICB2	0.01	0.004	ND
CCB1-B	0.01	0.004	ND

Approved By: Sue Anderson Date: 12/12/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06

Service Request: P0600280
Date Analyzed: 12/05/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV2	0.0387	0.0398	103
CCV1-B	0.0387	0.0380	98

Approved By: _____ Date: 12/12/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600280
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	12/05/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	P0600280-LCS2	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	None	7196A	0.0400	0.0424	106	90-110	

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600280
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	12/05/06
Project Number :	G486090/204142	**Date Received :**	12/05/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	12/05/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-7 Units : mg/L (ppm)
Lab Code : P0600280-005MS P0600280-005DMS Basis : NA
Test Notes :

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0520	0.0489	104	98	85-115	6	

Approved By Sue Underwood Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	12/07/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	**PQL**	**MDL**	**Result**
ICB	0.01	0.004	ND
CCB1	0.01	0.004	ND
CCB2	0.01	0.004	ND

Approved By: _____ Date: 12/12/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	12/07/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV	0.0387	0.0404	104
CCV1	0.0387	0.0413	107
CCV2	0.0387	0.0411	106

Approved By: Sue Anderson Date: 12/12/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600280
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	12/07/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	P0600280-LCS1	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	None	7196A	0.0400	0.0404	101	90-110	

Approved By Sue Ondeck Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600280
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	12/06/06
Project Number :	G486090/204142	**Date Received :**	12/06/06
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	12/07/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-13
Lab Code : P0600280-007MS P0600280-007DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.05	0.250	0.250	0.0840	0.329	0.342	98	103	85-115	4	

Approved By _____ Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	12/07/06

Title: Initial and Continuing Calibration Blank (ICB and CCB) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	PQL	MDL	Result
ICB2	0.01	0.004	ND
CCB1-B	0.01	0.004	ND

Approved By: Sue Anderson Date: 12/12/06

ICCBMDL/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06	**Date Analyzed:**	12/07/06

Title: Initial and Continuing Calibration Verification (ICV and CCV) Summary
Analyte: Chromium, Hexavalent
Method: 7196A
Units: mg/L (ppm)

Sample Name	True Value	Result	Percent Recovery
ICV2	0.0387	0.0385	99
CCV1-B	0.0387	0.0393	102

Approved By: Sue Jenkins Date: 12/12/06

CCV1A/120594

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client :	Battelle	**Service Request :**	P0600280
Project Name :	JPL Groundwater Monitoring 4Q06	**Date Collected :**	NA
Project Number :	G486090/204142	**Date Received :**	NA
Sample Matrix :	WATER	**Date Extracted :**	NA
		Date Analyzed :	12/07/06

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name :	Laboratory Control Sample	Units :	mg/L (ppm)
Lab Code :	P0600280-LCS2	Basis :	NA
Test Notes :			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chromium, Hexavalent	None	7196A	0.0400	0.0385	96	90-110	

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client : Battelle
Project Name : JPL Groundwater Monitoring 4Q06
Project Number : G486090/204142
Sample Matrix : WATER

Service Request : P0600280
Date Collected : 12/07/06
Date Received : 12/07/06
Date Extracted : NA
Date Analyzed : 12/07/06

Matrix Spike/Duplicate Matrix Spike Summary

Sample Name : MW-10
Lab Code : P0600280-009MS P0600280-009DMS
Test Notes :

Units : mg/L (ppm)
Basis : NA

Analyte	Prep Method	Analysis Method	PQL	Spike Level MS	Spike Level DMS	Sample Result	Spike Result MS	Spike Result DMS	Spike Recovery MS	Spike Recovery DMS	CAS Acceptance Limits	Relative Percent Difference	Result Notes
Chromium, Hexavalent	None	7196A	0.01	0.0500	0.0500	ND	0.0516	0.0524	103	105	85-115	2	

Approved By Sue Anderson Date : 12/12/06

Report By:RWONG

EPA Method 504.1

Organic Analysis:
EPA Method 504.1

Summary Package

Sample and QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280

Cover Page - Organic Analysis Data Package
EPA Method 504.1

Sample Name	Lab Code	Date Collected	Date Received
MW-10	P0600280-009	12/07/2006	12/07/2006
TB-26-12/7/06	P0600280-010	12/07/2006	12/07/2006
DUPE-8-4Q06	P0600280-011	12/07/2006	12/07/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Tim Smith

Date: 12/19/06 Title: Dir Manager

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/07/2006
Sample Matrix:	Water	**Date Received:**	12/07/2006

EPA Method 504.1

Sample Name:	MW-10	**Units:**	ug/L
Lab Code:	P0600280-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	12/14/06	12/14/06	KWG0621335	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	12/14/06	12/14/06	KWG0621335	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/07/2006
Sample Matrix:	Water	**Date Received:**	12/07/2006

EPA Method 504.1

Sample Name:	TB-26-12/7/06	**Units:**	ug/L
Lab Code:	P0600280-010	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	12/14/06	12/14/06	KWG0621335	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	12/14/06	12/14/06	KWG0621335	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/07/2006
Sample Matrix:	Water	**Date Received:**	12/07/2006

EPA Method 504.1

Sample Name:	DUPE-8-4Q06	**Units:**	ug/L
Lab Code:	P0600280-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0018	1	12/14/06	12/14/06	KWG0621335	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0019	1	12/14/06	12/14/06	KWG0621335	

Surrogate Name	%Rec	Control Limits	Note

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

EPA Method 504.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG0621335-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.011	0.0017	1	12/14/06	12/14/06	KWG0621335	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.011	0.0018	1	12/14/06	12/14/06	KWG0621335	

Surrogate Name	%Rec	Control Limits	Note

Comments:

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280
Date Extracted: 12/14/2006
Date Analyzed: 12/14/2006

Matrix Spike/Duplicate Matrix Spike Summary
EPA Method 504.1

Sample Name: Batch QC
Lab Code: P0600267-017

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low
Extraction Lot: KWG0621335

Analyte Name	Sample Result	Batch QCMS KWG0621335-1 Matrix Spike			Batch QCDMS KWG0621335-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,2-Dibromoethane (EDB)	ND	0.0790	0.0732	108	0.0856	0.0717	119	65-135	8	30
1,2-Dibromo-3-chloropropane (DBCP	ND	0.0683	0.0732	93	0.0687	0.0717	96	65-135	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280
Date Extracted: 12/14/2006
Date Analyzed: 12/14/2006

Lab Control Spike Summary
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG0621335

	Lab Control Sample KWG0621335-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.0870	0.0714	122	70-130
1,2-Dibromo-3-chloropropane (DBCP	0.0709	0.0714	99	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280
Date Extracted: 12/14/2006
Date Analyzed: 12/14/2006
Time Analyzed: 18:55

Method Blank Summary
EPA Method 504.1

Sample Name: Method Blank
Lab Code: KWG0621335-4
File ID: J:\GC24\DATA\121406\12140005.D
Instrument ID: GC24
Extraction Method: METHOD
Analysis Method: 504.1
Level: Low
Extraction Lot: KWG0621335

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0621335-3	J:\GC24\DATA\121406\12140004.D	12/14/06	18:31
Batch QC	P0600267-017	J:\GC24\DATA\121406\12140006.D	12/14/06	19:20
MW-10	P0600280-009	J:\GC24\DATA\121406\12140008.D	12/14/06	20:08
TB-26-12/7/06	P0600280-010	J:\GC24\DATA\121406\12140009.D	12/14/06	20:32
DUPE-8-4Q06	P0600280-011	J:\GC24\DATA\121406\12140010.D	12/14/06	20:57
Batch QCMS	KWG0621335-1	J:\GC24\DATA\121406\12140013.D	12/14/06	22:09
Batch QCDMS	KWG0621335-2	J:\GC24\DATA\121406\12140014.D	12/14/06	22:33

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/14/2006
Sample Matrix:	Water	**Date Analyzed:**	12/14/2006
		Time Analyzed:	18:31

Lab Control Sample Summary
EPA Method 504.1

Sample Name:	Lab Control Sample	**File ID:**	J:\GC24\DATA\121406\12140004.D
Lab Code:	KWG0621335-3	**Instrument ID:**	GC24
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1	**Extraction Lot:**	KWG0621335

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0621335-4	J:\GC24\DATA\121406\12140005.D	12/14/06	18:55
Batch QC	P0600267-017	J:\GC24\DATA\121406\12140006.D	12/14/06	19:20
MW-10	P0600280-009	J:\GC24\DATA\121406\12140008.D	12/14/06	20:08
TB-26-12/7/06	P0600280-010	J:\GC24\DATA\121406\12140009.D	12/14/06	20:32
DUPE-8-4Q06	P0600280-011	J:\GC24\DATA\121406\12140010.D	12/14/06	20:57
Batch QCMS	KWG0621335-1	J:\GC24\DATA\121406\12140013.D	12/14/06	22:09
Batch QCDMS	KWG0621335-2	J:\GC24\DATA\121406\12140014.D	12/14/06	22:33

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-35MS

Level ID	File ID	Level ID	File ID
A	J:\GC24\DATA\112206\11220002.D	E	J:\GC24\DATA\112206\11220006.D
B	J:\GC24\DATA\112206\11220003.D	F	J:\GC24\DATA\112206\11220007.D
C	J:\GC24\DATA\112206\11220004.D	G	J:\GC24\DATA\112206\11220008.D
D	J:\GC24\DATA\112206\11220005.D	H	J:\GC24\DATA\112206\11220009.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
1,2-Dibromoethane (EDB)	A	0.075	1.67E+6	B	0.13	1.44E+6	C	0.25	1.65E+6	D	0.63	1.44E+6	E	1.3	1.52E+6
	F	3.8	1.41E+6	G	5.0	1.34E+6	H	10	1.29E+6						
1,2-Dibromo-3-chloropropane (DBCP	A	0.075	2.70E+6	B	0.13	2.52E+6	C	0.25	2.95E+6	D	0.63	2.53E+6	E	1.3	2.56E+6
	F	3.8	2.46E+6	G	5.0	2.47E+6	H	10	2.28E+6						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	9.3		≤ 20
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	7.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 11/22/2006
Date Analyzed: 11/22/2006

Second Source Calibration Verification
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration ID: CAL5812
Units: ppb

File ID: J:\GC24\DATA\112206\11220010.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.2	1470000	1440000	-2	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	2560000	2520000	-2	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-XLB

Level ID	File ID	Level ID	File ID
A	J:\GC24\DATA\112206\11220002.D\11220002c.d	E	J:\GC24\DATA\112206\11220006.D\11220006c.d
B	J:\GC24\DATA\112206\11220003.D\11220003c.d	F	J:\GC24\DATA\112206\11220007.D\11220007c.d
C	J:\GC24\DATA\112206\11220004.D\11220004c.d	G	J:\GC24\DATA\112206\11220008.D\11220008c.d
D	J:\GC24\DATA\112206\11220005.D\11220005c.d	H	J:\GC24\DATA\112206\11220009.D\11220009c.d

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
1,2-Dibromoethane (EDB)	A	0.075	3.83E+6	B	0.13	3.72E+6	C	0.25	3.29E+6	D	0.63	3.05E+6	E	1.3	2.99E+6
	F	3.8	2.95E+6	G	5.0	2.84E+6	H	10	2.78E+6						
1,2-Dibromo-3-chloropropane (DBCP	A	0.075	4.46E+6	B	0.13	4.79E+6	C	0.25	4.76E+6	D	0.63	4.44E+6	E	1.3	4.27E+6
	F	3.8	4.30E+6	G	5.0	4.41E+6	H	10	4.11E+6						

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 11/22/2006

Initial Calibration Summary
EPA Method 504.1

Calibration ID: CAL5812
Instrument ID: GC24

Column: DB-XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
1,2-Dibromoethane (EDB)	MS	AverageRF	% RSD	12.5		≤ 20
1,2-Dibromo-3-chloropropane (DBCP)	MS	AverageRF	% RSD	5.3		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 11/22/2006
Date Analyzed: 11/22/2006

Second Source Calibration Verification
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration ID: CAL5812
Units: ppb

File ID: J:\GC24\DATA\112206\11220010.D\11220010c.d

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.2	3180000	2930000	-8	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	4440000	4250000	-4	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0621440
Units: ppb

File ID: J:\GC24\DATA\121406\12140003.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D		%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.6	1470000	1840000	25		NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.7	2560000	3380000	32	*	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0621440
Units: ppb

File ID: J:\GC24\DATA\121406\12140003.D\12140003C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	1.3	1.1	3180000	2690000	-16	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	1.3	1.2	4440000	4210000	-5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0621440
Units: ppb

File ID: J:\GC24\DATA\121406\12140015.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	5.6	1470000	1650000	13	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	5.9	2560000	3040000	19	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 12/14/2006

Continuing Calibration Verification Summary
EPA Method 504.1

Calibration Type: External Standard
Analysis Method: 504.1

Calibration Date: 11/22/2006
Calibration ID: CAL5812
Analysis Lot: KWG0621440
Units: ppb

File ID: J:\GC24\DATA\121406\12140015.D\12140015C.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2-Dibromoethane (EDB)	5.0	4.1	3180000	2590000	-19	NA	± 30 %	AverageRF
1,2-Dibromo-3-chloropropane (DBCP	5.0	4.7	4440000	4190000	-6	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280

Analysis Run Log
EPA Method 504.1

Analysis Method: 504.1

Analysis Lot: KWG0621440
Instrument ID: GC24
Column: DB-35MS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
12140003.D	Continuing Calibration Verification	KWG0621440-1	12/14/06	18:07		12/14/06	18:24
12140004.D	Lab Control Sample	KWG0621335-3	12/14/06	18:31		12/14/06	18:48
12140005.D	Method Blank	KWG0621335-4	12/14/06	18:55		12/14/06	19:12
12140006.D	Batch QC	P0600267-017	12/14/06	19:20		12/14/06	19:37
12140007.D	ZZZZZZ	ZZZZZZ	12/14/06	19:44		12/14/06	20:01
12140008.D	MW-10	P0600280-009	12/14/06	20:08		12/14/06	20:25
12140009.D	TB-26-12/7/06	P0600280-010	12/14/06	20:32		12/14/06	20:49
12140010.D	DUPE-8-4Q06	P0600280-011	12/14/06	20:57		12/14/06	21:14
12140011.D	ZZZZZZ	ZZZZZZ	12/14/06	21:21		12/14/06	21:38
12140012.D	ZZZZZZ	ZZZZZZ	12/14/06	21:45		12/14/06	22:02
12140013.D	Batch QCMS	KWG0621335-1	12/14/06	22:09		12/14/06	22:26
12140014.D	Batch QCDMS	KWG0621335-2	12/14/06	22:33		12/14/06	22:50
12140015.D	Continuing Calibration Verification	KWG0621440-2	12/14/06	22:57		12/14/06	23:14

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280
Date Extracted: 12/14/2006

Extraction Prep Log
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Extraction Lot: KWG0621335
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-10	P0600280-009	12/07/06	12/07/06	34.37ml	2ml	NA	
TB-26-12/7/06	P0600280-010	12/07/06	12/07/06	34.81ml	2ml	NA	
DUPE-8-4Q06	P0600280-011	12/07/06	12/07/06	34.57ml	2ml	NA	
Method Blank	KWG0621335-4	NA	NA	35ml	2ml	NA	
Batch QCMS	KWG0621335-1	NA	NA	34.16ml	2ml	NA	
Batch QCDMS	KWG0621335-2	NA	NA	34.87ml	2ml	NA	
Batch QC	P0600267-017	NA	NA	35.61ml	2ml	NA	
Lab Control Sample	KWG0621335-3	NA	NA	35ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Nitrosamines by EPA 521

Organic Analysis:
Nitrosamines by EPA 521

Summary Package

Sample and QC Results

200

COLUMBIA ANALYTICAL SERVICES, INC.

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280

Cover Page - Organic Analysis Data Package
Nitrosamines by EPA 521

Sample Name	Lab Code	Date Collected	Date Received
DUPE-8-4Q06MS	KWG0700418-1	12/07/2006	12/07/2006
DUPE-8-4Q06DMS	KWG0700418-2	12/07/2006	12/07/2006
MW-10	P0600280-009	12/07/2006	12/07/2006
DUPE-8-4Q06	P0600280-011	12/07/2006	12/07/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: Gin Smith

Date: 1/10/07 Title: Ops Manager

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/07/2006
Sample Matrix:	Water	**Date Received:**	12/07/2006

Nitrosamines by EPA 521

Sample Name:	MW-10	**Units:**	ng/L
Lab Code:	P0600280-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodiethylamine	**1.0**	J	2.0	0.89	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	12/12/06	01/09/07	KWG0700418	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	73	70-130	01/09/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/07/2006
Sample Matrix:	Water	**Date Received:**	12/07/2006

Nitrosamines by EPA 521

Sample Name:	DUPE-8-4Q06	**Units:**	ng/L
Lab Code:	P0600280-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodiethylamine	**1.3**	J	2.0	0.89	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodi-n-butylamine	**0.98**	J	2.0	0.93	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	12/12/06	01/09/07	KWG0700418	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	88	70-130	01/09/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Nitrosamines by EPA 521

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0700418-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
N-Nitrosodimethylamine	ND	U	2.0	1.4	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosomethylethylamine	ND	U	2.0	0.64	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodiethylamine	ND	U	2.0	0.89	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosopyrrolidine	ND	U	2.0	0.82	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodi-n-propylamine	ND	U	2.0	0.92	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosopiperidine	ND	U	2.0	0.79	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodi-n-butylamine	ND	U	2.0	0.93	1	12/12/06	01/09/07	KWG0700418	
N-Nitrosodiphenylamine	ND	U	2.0	1.1	1	12/12/06	01/09/07	KWG0700418	*

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
N-Nitrosodimethylamine-d6	91	70-130	01/09/07	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280

Surrogate Recovery Summary
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Units: ng/L
Level: Low

Sample Name	Lab Code	Sur1
MW-10	P0600280-009	73
DUPE-8-4Q06	P0600280-011	88
Method Blank	KWG0700418-4	91
DUPE-8-4Q06MS	KWG0700418-1	73
DUPE-8-4Q06DMS	KWG0700418-2	74
Lab Control Sample	KWG0700418-3	86

Surrogate Recovery Control Limits (%)

Sur1 = N-Nitrosodimethylamine-d6 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	01/09/2007
		Time Analyzed:	08:53

Internal Standard Area and RT Summary
Nitrosamines by EPA 521

File ID:	J:\MS16\DATA\010907\0109001.D	**Lab Code:**	KWG0700417-2
Instrument ID:	MS16	**Analysis Lot:**	KWG0700417
Analysis Method:	521		

		N-Nitrosodiethylamine-d	
		Area	**RT**
	ICAL Average ==>	373,284	14.31
	Upper Limit ==>	559,927	14.71
	Lower Limit ==>	186,642	13.91
Associated Analyses			
Continuing Calibration Verificatio	KWG0700417-2	386,869	14.38
Lab Control Sample	KWG0700418-3	402,788	14.37
Method Blank	KWG0700418-4	378,738	14.37
MW-10	P0600280-009	437,835	14.35
DUPE-8-4Q06	P0600280-011	456,949	14.37
DUPE-8-4Q06MS	KWG0700418-1	446,274	14.38
DUPE-8-4Q06DMS	KWG0700418-2	445,235	14.40

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Analyzed:**	01/09/2007
		Time Analyzed:	13:26

Internal Standard Area and RT Summary
Nitrosamines by EPA 521

File ID:	J:\MS16\DATA\010907\0109008.D	**Lab Code:**	KWG0700417-3
Instrument ID:	MS16	**Analysis Lot:**	KWG0700417
Analysis Method:	521		

		N-Nitrosodiethylamine-d	
		Area	**RT**
	ICAL Average ==>	373,284	14.31
	Upper Limit ==>	559,927	14.71
	Lower Limit ==>	186,642	13.91
Associated Analyses			
Continuing Calibration Verificatio	KWG0700417-3	487,339	14.39

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/12/2006
Sample Matrix:	Water	**Date Analyzed:**	01/09/2007

Matrix Spike/Duplicate Matrix Spike Summary
Nitrosamines by EPA 521

Sample Name:	DUPE-8-4Q06	**Units:**	ng/L
Lab Code:	P0600280-011	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0700418

		DUPE-8-4Q06MS KWG0700418-1 Matrix Spike			DUPE-8-4Q06DMS KWG0700418-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
N-Nitrosodimethylamine	ND	26.8	40.0	67 *	25.3	40.0	63 *	70-130	6	30
N-Nitrosomethylethylamine	ND	28.9	40.0	72	28.3	40.0	71	70-130	2	30
N-Nitrosodiethylamine	1.3	34.7	40.0	83	33.9	40.0	82	70-130	2	30
N-Nitrosopyrrolidine	ND	37.3	40.0	93	39.1	40.0	98	70-130	5	30
N-Nitrosodi-n-propylamine	ND	33.2	40.0	83	33.9	40.0	85	70-130	2	30
N-Nitrosopiperidine	ND	29.1	40.0	73	31.6	40.0	79	70-130	8	30
N-Nitrosodi-n-butylamine	0.98	33.1	40.0	80	42.0	40.0	103	70-130	24	30
N-Nitrosodiphenylamine	ND	9.52	40.0	24 *	10.9	40.0	27 *	70-130	13	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/12/2006
Sample Matrix:	Water	**Date Analyzed:**	01/09/2007

Lab Control Spike Summary
Nitrosamines by EPA 521

Extraction Method:	METHOD	**Units:**	ng/L
Analysis Method:	521	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG0700418

	Lab Control Sample KWG0700418-3 Lab Control Spike				
Analyte Name	**Result**	**Expected**	**%Rec**		**%Rec Limits**
N-Nitrosodimethylamine	36.6	40.0	92		70-130
N-Nitrosomethylethylamine	35.0	40.0	88		70-130
N-Nitrosodiethylamine	34.5	40.0	86		70-130
N-Nitrosopyrrolidine	42.7	40.0	107		70-130
N-Nitrosodi-n-propylamine	35.8	40.0	90		70-130
N-Nitrosopiperidine	34.1	40.0	85		70-130
N-Nitrosodi-n-butylamine	37.9	40.0	95		70-130
N-Nitrosodiphenylamine	11.3	40.0	28	*	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/12/2006
Sample Matrix:	Water	**Date Analyzed:**	01/09/2007
		Time Analyzed:	10:11

Method Blank Summary
Nitrosamines by EPA 521

Sample Name:	Method Blank	**File ID:**	J:\MS16\DATA\010907\0109003.D
Lab Code:	KWG0700418-4	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0700418

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0700418-3	J:\MS16\DATA\010907\0109002.D	01/09/07	09:32
MW-10	P0600280-009	J:\MS16\DATA\010907\0109004.D	01/09/07	10:50
DUPE-8-4Q06	P0600280-011	J:\MS16\DATA\010907\0109005.D	01/09/07	11:29
DUPE-8-4Q06MS	KWG0700418-1	J:\MS16\DATA\010907\0109006.D	01/09/07	12:08
DUPE-8-4Q06DMS	KWG0700418-2	J:\MS16\DATA\010907\0109007.D	01/09/07	12:47

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/12/2006
Sample Matrix:	Water	**Date Analyzed:**	01/09/2007
		Time Analyzed:	09:32

Lab Control Sample Summary
Nitrosamines by EPA 521

Sample Name:	Lab Control Sample	**File ID:**	J:\MS16\DATA\010907\0109002.D
Lab Code:	KWG0700418-3	**Instrument ID:**	MS16
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	521	**Extraction Lot:**	KWG0700418

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0700418-4	J:\MS16\DATA\010907\0109003.D	01/09/07	10:11
MW-10	P0600280-009	J:\MS16\DATA\010907\0109004.D	01/09/07	10:50
DUPE-8-4Q06	P0600280-011	J:\MS16\DATA\010907\0109005.D	01/09/07	11:29
DUPE-8-4Q06MS	KWG0700418-1	J:\MS16\DATA\010907\0109006.D	01/09/07	12:08
DUPE-8-4Q06DMS	KWG0700418-2	J:\MS16\DATA\010907\0109007.D	01/09/07	12:47

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 01/08/2007

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5921
Instrument ID: MS16

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS16\DATA\010807\0108001.D	D	J:\MS16\DATA\010807\0108004.D
B	J:\MS16\DATA\010807\0108002.D	E	J:\MS16\DATA\010807\0108005.D
C	J:\MS16\DATA\010807\0108003.D	F	J:\MS16\DATA\010807\0108006.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
N-Nitrosopiperidine	A	1.0	9.48	B	2.0	10.0	C	5.0	10.7	D	10	14.1	E	20	13.6
	F	50	13.2												
N-Nitrosomethylethylamine	A	1.0	4.63	B	2.0	5.05	C	5.0	5.72	D	10	6.02	E	20	5.71
	F	50	7.28												
N-Nitrosodimethylamine-d6	A	20	1.08	B	20	0.930	C	20	0.949	D	20	1.06	E	20	1.13
	F	20	1.20												
N-Nitrosodiethylamine	A	1.0	1.25	B	2.0	1.38	C	5.0	1.50	D	10	1.59	E	20	1.40
	F	50	1.67												
N-Nitrosodimethylamine	A	1.0	1.21	B	2.0	0.825	C	5.0	0.913	D	10	0.837	E	20	0.801
	F	50	1.14												
N-Nitrosodi-n-propylamine	A	1.0	0.752	B	2.0	0.753	C	5.0	0.752	D	10	0.953	E	20	0.851
	F	50	0.908												
N-Nitrosodiphenylamine	A	1.0	5.90	B	2.0	5.49	C	5.0	5.24	D	10	6.83	E	20	6.48
	F	50	6.33												
N-Nitrosodi-n-butylamine	A	1.0	3.87	B	2.0	3.58	C	5.0	3.67	D	10	4.47	E	20	4.81
	F	50	4.44												
N-Nitrosopyrrolidine	A	1.0	1.39	B	2.0	1.34	C	5.0	1.44	D	10	1.86	E	20	2.05
	F	50	1.86												

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 01/08/2007

Initial Calibration Summary
Nitrosamines by EPA 521

Calibration ID: CAL5921
Instrument ID: MS16

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
N-Nitrosopiperidine	MS	AverageRF	% RSD	16.9		≤ 30	11.8		
N-Nitrosomethylethylamine	MS	AverageRF	% RSD	15.9		≤ 30	5.73		
N-Nitrosodimethylamine-d6	SURR	AverageRF	% RSD	9.7		≤ 30	1.06		
N-Nitrosodiethylamine	MS	AverageRF	% RSD	10.3		≤ 30	1.47		
N-Nitrosodimethylamine	MS	AverageRF	% RSD	18.5		≤ 30	0.954		
N-Nitrosodi-n-propylamine	MS	AverageRF	% RSD	10.8		≤ 30	0.828		
N-Nitrosodiphenylamine	MS	AverageRF	% RSD	10.1		≤ 30	6.05		
N-Nitrosodi-n-butylamine	MS	AverageRF	% RSD	12.1		≤ 30	4.14		
N-Nitrosopyrrolidine	MS	AverageRF	% RSD	18.2		≤ 30	1.66		

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 01/08/2007
Date Analyzed: 01/08/2007

Second Source Calibration Verification
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration ID: CAL5921
Units: ug/l

File ID: J:\MS16\DATA\010807\0108007.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodi-n-butylamine	20	18	4.14	3.82	-8	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	20	21	0.828	0.875	6	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	20	21	1.47	1.56	6	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	20	18	0.954	0.863	-10	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	20	16	6.05	4.87	-19	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	20	21	5.73	6.08	6	NA	± 30 %	AverageRF
N-Nitrosopiperidine	20	17	11.8	10.2	-14	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	20	18	1.66	1.51	-9	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 01/09/2007

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 01/08/2007
Calibration ID: CAL5921
Analysis Lot: KWG0700417
Units: ug/l

File ID: J:\MS16\DATA\010907\0109001.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosopyrrolidine	1.0	0.91		1.66	1.51	-9	NA	± 50 %	AverageRF
N-Nitrosodi-n-propylamine	1.0	0.92		0.828	0.758	-8	NA	± 50 %	AverageRF
N-Nitrosopiperidine	1.0	0.89		11.8	10.5	-11	NA	± 50 %	AverageRF
N-Nitrosodimethylamine-d6	20	22		1.06	1.17	11	NA	± 50 %	AverageRF
N-Nitrosodimethylamine	1.0	1.5		0.954	1.43	50	NA	± 50 %	AverageRF
N-Nitrosomethylethylamine	1.0	0.92		5.73	5.25	-8	NA	± 50 %	AverageRF
N-Nitrosodiethylamine	1.0	1.0		1.47	1.50	3	NA	± 50 %	AverageRF
N-Nitrosodi-n-butylamine	1.0	0.95		4.14	3.93	-5	NA	± 50 %	AverageRF
N-Nitrosodiphenylamine	1.0	0.94		6.05	5.71	-6	NA	± 50 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound

‡ CCC Compound

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 01/09/2007

Continuing Calibration Verification Summary
Nitrosamines by EPA 521

Calibration Type: Internal Standard
Analysis Method: 521

Calibration Date: 01/08/2007
Calibration ID: CAL5921
Analysis Lot: KWG0700417
Units: ug/l

File ID: J:\MS16\DATA\010907\0109008.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
N-Nitrosodimethylamine-d6	20	19		1.06	0.995	-6	NA	± 30 %	AverageRF
N-Nitrosodimethylamine	10	10		0.954	0.983	3	NA	± 30 %	AverageRF
N-Nitrosomethylethylamine	10	10		5.73	5.86	2	NA	± 30 %	AverageRF
N-Nitrosodiethylamine	10	8.4		1.47	1.23	-16	NA	± 30 %	AverageRF
N-Nitrosopyrrolidine	10	9.6		1.66	1.59	-4	NA	± 30 %	AverageRF
N-Nitrosodi-n-propylamine	10	9.8		0.828	0.812	-2	NA	± 30 %	AverageRF
N-Nitrosopiperidine	10	9.0		11.8	10.6	-10	NA	± 30 %	AverageRF
N-Nitrosodi-n-butylamine	10	9.0		4.14	3.73	-10	NA	± 30 %	AverageRF
N-Nitrosodiphenylamine	10	8.0		6.05	4.85	-20	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280

Analysis Run Log
Nitrosamines by EPA 521

Analysis Method: 521

Analysis Lot: KWG0700417
Instrument ID: MS16

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
907\0109.D	GC/MS Tuning - Decafluorotriphenyl	KWG0700417-1	1/9/07	08:14		1/9/07	08:47
\0109001.D	Continuing Calibration Verification	KWG0700417-2	1/9/07	08:53		1/9/07	09:26
\0109002.D	Lab Control Sample	KWG0700418-3	1/9/07	09:32		1/9/07	10:05
\0109003.D	Method Blank	KWG0700418-4	1/9/07	10:11		1/9/07	10:44
\0109004.D	MW-10	P0600280-009	1/9/07	10:50		1/9/07	11:23
\0109005.D	DUPE-8-4Q06	P0600280-011	1/9/07	11:29		1/9/07	12:02
\0109006.D	DUPE-8-4Q06MS	KWG0700418-1	1/9/07	12:08		1/9/07	12:41
\0109007.D	DUPE-8-4Q06DMS	KWG0700418-2	1/9/07	12:47		1/9/07	13:20
\0109008.D	Continuing Calibration Verification	KWG0700417-3	1/9/07	13:26		1/9/07	13:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280
Date Extracted: 12/12/2006

Extraction Prep Log
Nitrosamines by EPA 521

Extraction Method: METHOD
Analysis Method: 521

Extraction Lot: KWG0700418
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-10	P0600280-009	12/07/06	12/07/06	500ml	1ml	NA	
DUPE-8-4Q06	P0600280-011	12/07/06	12/07/06	500ml	1ml	NA	
Method Blank	KWG0700418-4	NA	NA	500ml	1ml	NA	
DUPE-8-4Q06MS	KWG0700418-1	12/07/06	12/07/06	500ml	1ml	NA	
DUPE-8-4Q06DMS	KWG0700418-2	12/07/06	12/07/06	500ml	1ml	NA	
Lab Control Sample	KWG0700418-3	NA	NA	500ml	1ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Semi-Volatile Organic Compounds
EPA Method 8270C

Organic Analysis:
Semivolatile Organic Compounds by GC/MS SIM
Summary Package

Sample and QC Results

312

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280

Cover Page - Organic Analysis Data Package
Semivolatile Organic Compounds by GC/MS SIM

Sample Name	Lab Code	Date Collected	Date Received
MW-10	P0600280-009	12/07/2006	12/07/2006
DUPE-8-4Q06	P0600280-011	12/07/2006	12/07/2006

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Carl Degner

Name: Carl Degner

Date: 12/26/06

Title: SVM Supervisor

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/07/2006
Sample Matrix:	Water	**Date Received:**	12/07/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	MW-10	**Units:**	ng/L
Lab Code:	P0600280-009	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	12/14/06	12/21/06	KWG0621258	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	79	70-130	12/21/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	12/07/2006
Sample Matrix:	Water	**Date Received:**	12/07/2006

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	DUPE-8-4Q06	**Units:**	ng/L
Lab Code:	P0600280-011	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	12/14/06	12/21/06	KWG0621258	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	84	70-130	12/21/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Results

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**Units:**	ng/L
Lab Code:	KWG0621258-3	**Basis:**	NA
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2,3-Trichloropropane	ND	U	4.9	2.3	1	12/14/06	12/21/06	KWG0621258	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,2,3-Trichloropropane-d5	83	70-130	12/21/06	Acceptable

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280

Surrogate Recovery Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
MW-10	P0600280-009	79
DUPE-8-4Q06	P0600280-011	84
Method Blank	KWG0621258-3	83
Lab Control Sample	KWG0621258-1	82
Duplicate Lab Control Sample	KWG0621258-2	78

Surrogate Recovery Control Limits (%)

Sur1 = 1,2,3-Trichloropropane-d5 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 12/21/2006
Time Analyzed: 12:16

Internal Standard Area and RT Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID: J:\MS17\DATA\122106\1221F002.D
Instrument ID: MS17
Analysis Method: 8270C SIM

Lab Code: KWG0621733-2
Analysis Lot: KWG0621733

		1,4-Dichlorobenzene-d4	
		Area	**RT**
	Results ==>	51,221	6.58
	Upper Limit ==>	102,442	7.08
	Lower Limit ==>	25,611	6.08
	ICAL Result ==>	47,297	6.57
Associated Analyses			
Method Blank	KWG0621258-3	51,988	6.56
Lab Control Sample	KWG0621258-1	51,180	6.57
Duplicate Lab Control Sample	KWG0621258-2	53,732	6.56
MW-10	P0600280-009	50,671	6.56
DUPE-8-4Q06	P0600280-011	50,679	6.57

Results flagged with an asterisk (*) indicate values outside control criteria.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280
Date Extracted: 12/14/2006
Date Analyzed: 12/21/2006

Lab Control Spike/Duplicate Lab Control Spike Summary
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Units: ng/L
Basis: NA
Level: Low
Extraction Lot: KWG0621258

	Lab Control Sample KWG0621258-1 Lab Control Spike			Duplicate Lab Control Sample KWG0621258-2 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2,3-Trichloropropane	145	200	73	144	200	72	70-130	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Battelle	**Service Request:**	P0600280
Project:	JPL Groundwater Monitoring 4Q06/G486090/204142	**Date Extracted:**	12/14/2006
Sample Matrix:	Water	**Date Analyzed:**	12/21/2006
		Time Analyzed:	16:00

Method Blank Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Method Blank	**File ID:**	J:\MS17\DATA\122106\1221F014.D
Lab Code:	KWG0621258-3	**Instrument ID:**	MS17
Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0621258

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG0621258-1	J:\MS17\DATA\122106\1221F015.D	12/21/06	16:18
Duplicate Lab Control Sample	KWG0621258-2	J:\MS17\DATA\122106\1221F016.D	12/21/06	16:37
MW-10	P0600280-009	J:\MS17\DATA\122106\1221F017.D	12/21/06	16:55
DUPE-8-4Q06	P0600280-011	J:\MS17\DATA\122106\1221F018.D	12/21/06	17:14

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280

Lab Control Sample/Duplicate Lab Control Sample Summary
Semivolatile Organic Compounds by GC/MS SIM

Sample Name:	Lab Control Sample	**Sample Name:**	Duplicate Lab Control Sample
Lab Code:	KWG0621258-1	**Lab Code:**	KWG0621258-2
File ID:	J:\MS17\DATA\122106\1221F015.D	**File ID:**	J:\MS17\DATA\122106\1221F016.D
Instrument ID:	MS17	**Instrument ID:**	MS17
Date Extracted:	12/14/2006	**Date Extracted:**	12/14/2006
Date Analyzed:	12/21/2006	**Date Analyzed:**	12/21/2006
Time Analyzed:	16:18	**Time Analyzed:**	16:37

Extraction Method:	EPA 3520C	**Level:**	Low
Analysis Method:	8270C SIM	**Extraction Lot:**	KWG0621258

These Lab Control Samples apply to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG0621258-3	J:\MS17\DATA\122106\1221F014.D	12/21/06	16:00
MW-10	P0600280-009	J:\MS17\DATA\122106\1221F017.D	12/21/06	16:55
DUPE-8-4Q06	P0600280-011	J:\MS17\DATA\122106\1221F018.D	12/21/06	17:14

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 12/21/2006
Time Analyzed: 11:58

Tune Summary
Semivolatile Organic Compounds by GC/MS SIM

File ID: J:\MS17\DATA\122106\1221F001.D
Instrument ID: MS17
Column:

Analysis Method: 8270C SIM
Analysis Lot: KWG0621733

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
51	198	10	80	18.0	186836	PASS
68	69	0	2	1.4	3178	PASS
69	198	0	100	21.3	220617	PASS
70	69	0	2	0.5	1020	PASS
127	198	10	80	35.6	368567	PASS
197	198	0	2	0.2	2039	PASS
198	442	30	100	49.0	1035541	PASS
199	198	5	9	6.6	68480	PASS
275	198	10	60	33.4	345664	PASS
365	442	1	50	2.2	45802	PASS
441	443	0	100	74.2	308480	PASS
442	442	100	100	100.0	2114730	PASS
443	442	15	24	19.7	415658	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG0621733-2	J:\MS17\DATA\122106\1221F002.D	12/21/2006	12:16	
Method Blank	KWG0621258-3	J:\MS17\DATA\122106\1221F014.D	12/21/2006	16:00	
Lab Control Sample	KWG0621258-1	J:\MS17\DATA\122106\1221F015.D	12/21/2006	16:18	
Duplicate Lab Control Sample	KWG0621258-2	J:\MS17\DATA\122106\1221F016.D	12/21/2006	16:37	
MW-10	P0600280-009	J:\MS17\DATA\122106\1221F017.D	12/21/2006	16:55	
DUPE-8-4Q06	P0600280-011	J:\MS17\DATA\122106\1221F018.D	12/21/2006	17:14	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 12/20/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5886
Instrument ID: MS17

Column: MS

Level ID	File ID	Level ID	File ID
A	J:\MS17\DATA\122006\1220F003.D	E	J:\MS17\DATA\122006\1220F007.D
B	J:\MS17\DATA\122006\1220F004.D	F	J:\MS17\DATA\122006\1220F008.D
C	J:\MS17\DATA\122006\1220F005.D	G	J:\MS17\DATA\122006\1220F009.D
D	J:\MS17\DATA\122006\1220F006.D	H	J:\MS17\DATA\122006\1220F010.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2,3-Trichloropropane-d5	A	2.0	0.742	B	5.0	0.723	C	10	0.700	D	20	0.678	E	50	0.673
	F	100	0.697	G	500	0.688	H	1000	0.686						
1,2,3-Trichloropropane	A	2.0	0.998	B	5.0	0.846	C	10	0.761	D	20	0.714	E	50	0.692
	F	100	0.714	G	500	0.701	H	1000	0.701						

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 12/20/2006

Initial Calibration Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration ID: CAL5886
Instrument ID: MS17

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
1,2,3-Trichloropropane-d5	SURR	AverageRF	% RSD	3.4		≤ 30	0.698		0.01
1,2,3-Trichloropropane	MS	AverageRF	% RSD	13.9		≤ 30	0.766		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Calibration Date: 12/20/2006
Date Analyzed: 12/20/2006

Second Source Calibration Verification
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration ID: CAL5886
Units: ng/ml

File ID: J:\MS17\DATA\122006\1220F011.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane	100	88	0.766	0.675	-12	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280
Date Analyzed: 12/21/2006

Continuing Calibration Verification Summary
Semivolatile Organic Compounds by GC/MS SIM

Calibration Type: Internal Standard
Analysis Method: 8270C SIM

Calibration Date: 12/20/2006
Calibration ID: CAL5886
Analysis Lot: KWG0621733
Units: ng/ml

File ID: J:\MS17\DATA\122106\1221F002.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
1,2,3-Trichloropropane-d5	20	20	0.01	0.698	0.682	-2	NA	± 20 %	AverageRF
1,2,3-Trichloropropane	20	18	0.01	0.766	0.696	-9	NA	± 20 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142

Service Request: P0600280

Analysis Run Log
Semivolatile Organic Compounds by GC/MS SIM

Analysis Method: 8270C SIM

Analysis Lot: KWG0621733
Instrument ID: MS17

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
1221F001.D	GC/MS Tuning - Decafluorotripheny	KWG0621733-1	12/21/2006	11:58		12/21/2006	12:10
1221F002.D	Continuing Calibration Verification	KWG0621733-2	12/21/2006	12:16		12/21/2006	12:28
1221F014.D	Method Blank	KWG0621258-3	12/21/2006	16:00		12/21/2006	16:12
1221F015.D	Lab Control Sample	KWG0621258-1	12/21/2006	16:18		12/21/2006	16:30
1221F016.D	Duplicate Lab Control Sample	KWG0621258-2	12/21/2006	16:37		12/21/2006	16:49
1221F017.D	MW-10	P0600280-009	12/21/2006	16:55		12/21/2006	17:07
1221F018.D	DUPE-8-4Q06	P0600280-011	12/21/2006	17:14		12/21/2006	17:26
1221F019.D	ZZZZZZ	ZZZZZZ	12/21/2006	17:33		12/21/2006	17:45
1221F020.D	ZZZZZZ	ZZZZZZ	12/21/2006	17:51		12/21/2006	18:03
1221F021.D	ZZZZZZ	ZZZZZZ	12/21/2006	18:10		12/21/2006	18:22
1221F022.D	ZZZZZZ	ZZZZZZ	12/21/2006	18:28		12/21/2006	18:40
1221F023.D	ZZZZZZ	ZZZZZZ	12/21/2006	18:47		12/21/2006	18:59

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Results

Client: Battelle
Project: JPL Groundwater Monitoring 4Q06/G486090/204142
Sample Matrix: Water

Service Request: P0600280
Date Extracted: 12/14/2006

Extraction Prep Log
Semivolatile Organic Compounds by GC/MS SIM

Extraction Method: EPA 3520C
Analysis Method: 8270C SIM

Extraction Lot: KWG0621258
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-10	P0600280-009	12/07/06	12/07/06	1030ml	2ml	NA	
DUPE-8-4Q06	P0600280-011	12/07/06	12/07/06	1030ml	2ml	NA	
Method Blank	KWG0621258-3	NA	NA	1030ml	2ml	NA	
Lab Control Sample	KWG0621258-1	NA	NA	1000ml	2ml	NA	
Duplicate Lab Control Sample	KWG0621258-2	NA	NA	1000ml	2ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis