ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

This attachment contains the laboratory analytical reports prepared by BC Laboratories, Inc., of Bakersfield, California.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/07/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1301880
Invoice ID:	B139512

Enclosed are the results of analyses for samples received by the laboratory on 1/28/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

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BC Laboratories, Inc.

Chain of Custody Form

*Required Fields

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Report To: Client:* Battelle MHTS		Project Description:* JPL-GW Monitoring	
Attn:* David Conner			
Street Address:* 505 King Ave.		Project Code:* 1Q13	
City:* Columbus	State:* OH Zip:* 43201		
Phone#:* (614) 424 - 5489	Fax#: (614) 458 - 5489	Sampler (s):* Blaine Tech	
Email Address: connerd@battelle.org			
Submission #: 13-01880			

Analysis Requested

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2	Notes
-1	TB-1-1/28/13	1-28-13	0700	AQ	X							
-2	SB-1-1/28/13	↓	0800	↓	X	X	X	X	X	X	X	
-3	EB-1-1/28/13	↓	0815	↓	X	X	X	X				
-4	MW-20-5	↓	0855	↓	X	X	X	X				
-5	MW-20-4	↓	0930	↓	X	X	X	X				
-6	MW-20-3	↓	1000	↓	X	X	X	X				
-7	MW-20-2	↓	1030	↓	X	X	X	X				
-8	MW-20-1	↓	1100	↓	X	X	X	X				
-9	MW-19-5	↓	1150	↓	X		X					
-10	MW-19-4	↓	1215	↓	X		X					MS/MSD
-11	MW-19-3	↓	1245	↓	X		X					

Billing

Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*

Are there any tests with holding times? less than or equal to 48 hours? ☑ Yes ☐ No

*Standard Turnaround = 10

Notes:
CHK BY DISTRIBUTION
SUB-OUT ☐
SHORT HOLDING TIME
Cr+6 NO2 NO3 OP SS
DO Cl2 BOD MBAS COT

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: ____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) ____

Cost Center: ____ Global ID: ____

Relinquished By	Date	Time	Received By	Date	Time
1. [illegible]	1-28-13	1515	1. Nicole (SC)	1/28/13	1515
2. Nicole (SC)	1/28/13	1635	2. [illegible]	1/28/13	1635
3. [illegible]	1/28/13	2000	3. [illegible]	1-28-13	2000

BC Laboratories, Inc. 4100 Atlas Court – Bakersfield CA 93308 (661) 327 – 4911 Fax: (661) 327 – 1918 www.bclabs.com

BC Laboratories, Inc.

Chain of Custody Form

Page 2 of 2

*Required Fields

Report To: Client:* Battelle MHTS
Attn:* David Conner
Street Address:* 505 King Ave.
City:* Columbus State:* OH Zip:* 43201
Phone#:* (614) 424 - 5489 Fax#: (614) 458 - 5489
Email Address: connerd@battelle.org
Submission #: 1301880

Project Description:* JPL-GW Monitoring
Project Code:* 1Q13
Sampler (s):* Blaine Tech

Billing
Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*
Are there any tests with holding times less than or equal to 48 hours?
☑ Yes ☐ No
*Standard Turnaround = 10

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2	Notes
-12	MW-19-2	1-28-13	1315	AQ	X		X					
-13	MW-19-1	↓	1345	↓	X		X					
-14	DUP-1-1Q13	↓	1345	↓	X		X					

Analysis Requested

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Relinquished By:	Date	Time	Received By:	Date	Time
1.		1-28-13	1515		1/28/13	1515
2.		1/28/13	1635		1/28/13	1635
3.		1/28/13	2000		1-28-13	2000

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Chain of Custody and Cooler Receipt Form for 1301880 Page 3 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 2

Submission #: 1301880

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 207 Date/Time 1-28-13 2000

Temperature: (A) 3.7 °C / (C) 3.8 °C Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL		B	B	B	B	B	B	B	B	B
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS		C	C	C	C	C	C	C		
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A1									
40ml VOA VIAL		A3	A3	A3	A3	A3	A3	A3	A3	A4
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:
Sample Numbering Completed By: JNW Date/Time: 1/28/13 2030
A = Actual / C = Corrected

Chain of Custody and Cooler Receipt Form for 1301880 Page 4 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 2 Of 2

Submission #: 13-01880

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 207 Date/Time 1-28-13

Temperature: (A) 3.7 °C / (C) 3.8 °C Analyst Init JNW 2000

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL	B	B	B	B						
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A;3	A;3	A;3	A;3	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:_____
Sample Numbering Completed By: JNW Date/Time: 1/28/13 2000
A = Actual / C = Corrected

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Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1301880-01	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 07:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB-1-1/28/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Trip Blank
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): TB-1-1/28/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301880-02	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 08:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SB-1-1/28/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): SB-1-1/28/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301880-03	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 08:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	EB-1-1/28/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): EB-1-1/28/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1301880-04	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 08:55
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-20-5	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-20-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301880-05	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 09:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-20-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-20-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301880-06	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 10:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-20-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-20-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1301880-07	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 10:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-20-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-20-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301880-08	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 11:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-20-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-20-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301880-09	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 11:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-19-5	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-19-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1301880-10	**COC Number:**	---	**Receive Date:** 01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:** 01/28/2013 12:15
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-19-4	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): MW-19-4
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1301880-11	**COC Number:**	---	**Receive Date:** 01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:** 01/28/2013 12:45
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-19-3	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): MW-19-3
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1301880-12	**COC Number:**	---	**Receive Date:** 01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:** 01/28/2013 13:15
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-19-2	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): MW-19-2
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1301880-13	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 13:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-19-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-19-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301880-14	**COC Number:**	---	**Receive Date:**	01/28/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/28/2013 13:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	DUP-1-1Q13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): DUP-1-1Q13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-01 | **Client Sample Name:** JPL-GW, TB-1-1/28/13, 1/28/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-01 | **Client Sample Name:** JPL-GW, TB-1-1/28/13, 1/28/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-01 | **Client Sample Name:** JPL-GW, TB-1-1/28/13, 1/28/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	01/31/13 23:09	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-01 | **Client Sample Name:** JPL-GW, TB-1-1/28/13, 1/28/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	01/31/13 23:09	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-02 | **Client Sample Name:** JPL-GW, SB-1-1/28/13, 1/28/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-02 | **Client Sample Name:** JPL-GW, SB-1-1/28/13, 1/28/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	**0.49**	**ug/L**	**0.50**	**0.48**	**EPA-524.2**	ND	**J**	1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	**0.12**	**ug/L**	**0.50**	**0.093**	**EPA-524.2**	ND	**J**	1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	**7.3**	**ug/L**	**10**	**4.6**	**EPA-524.2**	ND	**J**	1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-02 | **Client Sample Name:** JPL-GW, SB-1-1/28/13, 1/28/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	01/31/13 23:32	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-02 | **Client Sample Name:** JPL-GW, SB-1-1/28/13, 1/28/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	01/31/13 23:32	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-02 | **Client Sample Name:** JPL-GW, SB-1-1/28/13, 1/28/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 21:09	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301880-02 | **Client Sample Name:** JPL-GW, SB-1-1/28/13, 1/28/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/28/13	01/28/13 22:27	LD1	KONE-1	1	BWA1933
2	EPA-200.8	02/01/13	02/04/13 13:43	JSS	PE-EL1	1	BWB0045

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-03 | **Client Sample Name:** JPL-GW, EB-1-1/28/13, 1/28/2013 8:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-03 | **Client Sample Name:** JPL-GW, EB-1-1/28/13, 1/28/2013 8:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	**0.53**	**ug/L**	**0.50**	**0.48**	**EPA-524.2**	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	**0.13**	**ug/L**	**0.50**	**0.093**	**EPA-524.2**	ND	**J**	1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	**7.5**	**ug/L**	**10**	**4.6**	**EPA-524.2**	ND	**J**	1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-03 | **Client Sample Name:** JPL-GW, EB-1-1/28/13, 1/28/2013 8:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	01/31/13 23:54	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-03 | **Client Sample Name:** JPL-GW, EB-1-1/28/13, 1/28/2013 8:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	01/31/13 23:54	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-03 | **Client Sample Name:** JPL-GW, EB-1-1/28/13, 1/28/2013 8:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 21:22	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301880-03 | **Client Sample Name:** JPL-GW, EB-1-1/28/13, 1/28/2013 8:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**2.0**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/28/13	01/28/13 22:27	LD1	KONE-1	1	BWA1933
2	EPA-200.8	02/01/13	02/04/13 14:22	JSS	PE-EL1	1	BWB0045

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-04 | **Client Sample Name:** JPL-GW, MW-20-5, 1/28/2013 8:55:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-04 | **Client Sample Name:** JPL-GW, MW-20-5, 1/28/2013 8:55:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.30**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-04 | **Client Sample Name:** JPL-GW, MW-20-5, 1/28/2013 8:55:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 00:16	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-04 | **Client Sample Name:** JPL-GW, MW-20-5, 1/28/2013 8:55:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 00:16	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-04 | **Client Sample Name:** JPL-GW, MW-20-5, 1/28/2013 8:55:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 22:02	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301880-04 | **Client Sample Name:** JPL-GW, MW-20-5, 1/28/2013 8:55:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/28/13	01/28/13 22:27	LD1	KONE-1	1	BWA1933
2	EPA-200.8	02/01/13	02/04/13 14:26	JSS	PE-EL1	1	BWB0045

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-05 | **Client Sample Name:** JPL-GW, MW-20-4, 1/28/2013 9:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-05 | **Client Sample Name:** JPL-GW, MW-20-4, 1/28/2013 9:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.080**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-05 | **Client Sample Name:** JPL-GW, MW-20-4, 1/28/2013 9:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 00:39	MGC	MS-V5	1	BWA2108

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-05 | **Client Sample Name:** JPL-GW, MW-20-4, 1/28/2013 9:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 00:39	MGC	MS-V5	1	BWA2108

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-05 | **Client Sample Name:** JPL-GW, MW-20-4, 1/28/2013 9:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 22:16	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301880-05 | **Client Sample Name:** JPL-GW, MW-20-4, 1/28/2013 9:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/28/13	01/28/13 22:27	LD1	KONE-1	1	BWA1933
2	EPA-200.8	02/01/13	02/04/13 14:29	JSS	PE-EL1	1	BWB0045

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-06 | **Client Sample Name:** JPL-GW, MW-20-3, 1/28/2013 10:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-06 | **Client Sample Name:** JPL-GW, MW-20-3, 1/28/2013 10:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	**0.13**	**ug/L**	**0.50**	**0.098**	**EPA-524.2**	ND	**J**	1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.47**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.19**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	**0.10**	**ug/L**	**0.50**	**0.093**	**EPA-524.2**	ND	**J**	1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.25**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	**2.2**	**ug/L**	**5.0**	**1.2**	**EPA-524.2**	ND	**J**	1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-06 | **Client Sample Name:** JPL-GW, MW-20-3, 1/28/2013 10:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 01:02	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-06 | **Client Sample Name:** JPL-GW, MW-20-3, 1/28/2013 10:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 01:02	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-06 | **Client Sample Name:** JPL-GW, MW-20-3, 1/28/2013 10:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 22:29	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301880-06 | **Client Sample Name:** JPL-GW, MW-20-3, 1/28/2013 10:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/28/13	01/28/13 22:27	LD1	KONE-1	1	BWA1933
2	EPA-200.8	02/01/13	02/04/13 14:32	JSS	PE-EL1	1	BWB0045

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-07 | **Client Sample Name:** JPL-GW, MW-20-2, 1/28/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.12**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-07 | **Client Sample Name:** JPL-GW, MW-20-2, 1/28/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.080**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.40**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-07 | **Client Sample Name:** JPL-GW, MW-20-2, 1/28/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 01:24	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-07 | **Client Sample Name:** JPL-GW, MW-20-2, 1/28/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 01:24	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-07 | **Client Sample Name:** JPL-GW, MW-20-2, 1/28/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.4**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 22:42	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301880-07 | **Client Sample Name:** JPL-GW, MW-20-2, 1/28/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.64**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/28/13	01/28/13 22:30	LD1	KONE-1	1	BWA1933
2	EPA-200.8	02/01/13	02/04/13 14:35	JSS	PE-EL1	1	BWB0045

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-08 | **Client Sample Name:** JPL-GW, MW-20-1, 1/28/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.19**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-08 | **Client Sample Name:** JPL-GW, MW-20-1, 1/28/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	**0.20**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-08 | **Client Sample Name:** JPL-GW, MW-20-1, 1/28/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 01:47	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-08 | **Client Sample Name:** JPL-GW, MW-20-1, 1/28/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 01:47	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-08 | **Client Sample Name:** JPL-GW, MW-20-1, 1/28/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 22:55	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301880-08 | **Client Sample Name:** JPL-GW, MW-20-1, 1/28/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/28/13	01/28/13 22:30	LD1	KONE-1	1	BWA1933
2	EPA-200.8	02/01/13	02/04/13 14:38	JSS	PE-EL1	1	BWB0045

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-09 | **Client Sample Name:** JPL-GW, MW-19-5, 1/28/2013 11:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.21**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-09 | **Client Sample Name:** JPL-GW, MW-19-5, 1/28/2013 11:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.89**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.14**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-09 | **Client Sample Name:** JPL-GW, MW-19-5, 1/28/2013 11:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 02:09	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-09 | **Client Sample Name:** JPL-GW, MW-19-5, 1/28/2013 11:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 02:09	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-09 | **Client Sample Name:** JPL-GW, MW-19-5, 1/28/2013 11:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**2.6**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 23:09	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-10 | **Client Sample Name:** JPL-GW, MW-19-4, 1/28/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.25**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	**0.080**	**ug/L**	**0.50**	**0.072**	**EPA-524.2**	ND	**J**	1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-10 | **Client Sample Name:** JPL-GW, MW-19-4, 1/28/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.49**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.18**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-10 | **Client Sample Name:** JPL-GW, MW-19-4, 1/28/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	01/31/13 20:54	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-10 | **Client Sample Name:** JPL-GW, MW-19-4, 1/28/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	01/31/13 20:54	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-10 | **Client Sample Name:** JPL-GW, MW-19-4, 1/28/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.3**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 20:16	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-11 | **Client Sample Name:** JPL-GW, MW-19-3, 1/28/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.17**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-11 | **Client Sample Name:** JPL-GW, MW-19-3, 1/28/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.46**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-11 | **Client Sample Name:** JPL-GW, MW-19-3, 1/28/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 02:32	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-11 | **Client Sample Name:** JPL-GW, MW-19-3, 1/28/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 02:32	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-11 | **Client Sample Name:** JPL-GW, MW-19-3, 1/28/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**2.4**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/05/13 23:22	LS1	IC6	1	BWB0300

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-12 | **Client Sample Name:** JPL-GW, MW-19-2, 1/28/2013 1:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**0.22**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND	**J**	1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.68**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	**0.090**	**ug/L**	**0.50**	**0.072**	**EPA-524.2**	ND	**J**	1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.29**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	**0.26**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-12 | **Client Sample Name:** JPL-GW, MW-19-2, 1/28/2013 1:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.83**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**1.2**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-12 | **Client Sample Name:** JPL-GW, MW-19-2, 1/28/2013 1:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 02:54	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-12 | **Client Sample Name:** JPL-GW, MW-19-2, 1/28/2013 1:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 02:54	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-12 | **Client Sample Name:** JPL-GW, MW-19-2, 1/28/2013 1:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**6.2**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/06/13 00:02	LD1	IC6	1	BWB0301

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-13 | **Client Sample Name:** JPL-GW, MW-19-1, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-13 | **Client Sample Name:** JPL-GW, MW-19-1, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-13 | **Client Sample Name:** JPL-GW, MW-19-1, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 03:17	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-13 | **Client Sample Name:** JPL-GW, MW-19-1, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 03:17	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-13 | **Client Sample Name:** JPL-GW, MW-19-1, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/06/13 01:22	LD1	IC6	1	BWB0301

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-14 | **Client Sample Name:** JPL-GW, DUP-1-1Q13, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-14 | **Client Sample Name:** JPL-GW, DUP-1-1Q13, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301880-14 | **Client Sample Name:** JPL-GW, DUP-1-1Q13, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 03:39	MGC	MS-V5	1	BWA2108

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301880-14 | **Client Sample Name:** JPL-GW, DUP-1-1Q13, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 03:39	MGC	MS-V5	1	BWA2108

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301880-14 | **Client Sample Name:** JPL-GW, DUP-1-1Q13, 1/28/2013 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/05/13	02/06/13 01:35	LD1	IC6	1	BWB0301

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Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2108						
Benzene	BWA2108-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWA2108-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWA2108-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWA2108-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWA2108-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWA2108-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWA2108-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWA2108-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWA2108-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWA2108-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWA2108-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWA2108-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWA2108-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWA2108-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWA2108-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWA2108-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWA2108-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWA2108-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWA2108-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWA2108-BLK1	ND	ug/L	0.50	0.14	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2108						
trans-1,3-Dichloropropene	BWA2108-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWA2108-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWA2108-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWA2108-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWA2108-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWA2108-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWA2108-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWA2108-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWA2108-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWA2108-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWA2108-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWA2108-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWA2108-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWA2108-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWA2108-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWA2108-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWA2108-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWA2108-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWA2108-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWA2108-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWA2108-BLK1	ND	ug/L	4.0	0.97	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2108						
Ethyl t-butyl ether	BWA2108-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWA2108-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWA2108-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWA2108-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWA2108-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWA2108-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWA2108-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWA2108-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWA2108-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWA2108-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWA2108-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWA2108-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWA2108-BLK1	106	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWA2108-BLK1	99.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWA2108-BLK1	101	%	80 - 120 (LCL - UCL)		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWA2108										
Benzene	BWA2108-BS1	LCS	24.460	25.000	ug/L	97.8		70 - 130		
Bromodichloromethane	BWA2108-BS1	LCS	24.500	25.000	ug/L	98.0		70 - 130		
Chlorobenzene	BWA2108-BS1	LCS	23.590	25.000	ug/L	94.4		70 - 130		
Chloroethane	BWA2108-BS1	LCS	27.700	25.000	ug/L	111		70 - 130		
1,4-Dichlorobenzene	BWA2108-BS1	LCS	23.170	25.000	ug/L	92.7		70 - 130		
1,1-Dichloroethane	BWA2108-BS1	LCS	23.780	25.000	ug/L	95.1		70 - 130		
1,1-Dichloroethene	BWA2108-BS1	LCS	24.780	25.000	ug/L	99.1		70 - 130		
Toluene	BWA2108-BS1	LCS	24.000	25.000	ug/L	96.0		70 - 130		
Trichloroethene	BWA2108-BS1	LCS	24.230	25.000	ug/L	96.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWA2108-BS1	LCS	10.220	10.000	ug/L	102		75 - 125		
Toluene-d8 (Surrogate)	BWA2108-BS1	LCS	9.9000	10.000	ug/L	99.0		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWA2108-BS1	LCS	10.160	10.000	ug/L	102		80 - 120		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWA2108	Used client sample: Y - Description: MW-19-4, 01/28/2013 12:15										
Benzene	MS	1301880-10	ND	25.190	25.000	ug/L		101		70 - 130	
	MSD	1301880-10	ND	24.880	25.000	ug/L	1.2	99.5	20	70 - 130	
Bromodichloromethane	MS	1301880-10	ND	24.990	25.000	ug/L		100		70 - 130	
	MSD	1301880-10	ND	25.300	25.000	ug/L	1.2	101	20	70 - 130	
Chlorobenzene	MS	1301880-10	ND	23.450	25.000	ug/L		93.8		70 - 130	
	MSD	1301880-10	ND	23.060	25.000	ug/L	1.7	92.2	20	70 - 130	
Chloroethane	MS	1301880-10	ND	28.570	25.000	ug/L		114		70 - 130	
	MSD	1301880-10	ND	28.050	25.000	ug/L	1.8	112	20	70 - 130	
1,4-Dichlorobenzene	MS	1301880-10	ND	23.430	25.000	ug/L		93.7		70 - 130	
	MSD	1301880-10	ND	23.310	25.000	ug/L	0.5	93.2	20	70 - 130	
1,1-Dichloroethane	MS	1301880-10	ND	24.170	25.000	ug/L		96.7		70 - 130	
	MSD	1301880-10	ND	23.630	25.000	ug/L	2.3	94.5	20	70 - 130	
1,1-Dichloroethene	MS	1301880-10	ND	25.000	25.000	ug/L		100		70 - 130	
	MSD	1301880-10	ND	24.600	25.000	ug/L	1.6	98.4	20	70 - 130	
Toluene	MS	1301880-10	ND	24.300	25.000	ug/L		97.2		70 - 130	
	MSD	1301880-10	ND	24.320	25.000	ug/L	0.1	97.3	20	70 - 130	
Trichloroethene	MS	1301880-10	0.18000	23.370	25.000	ug/L		92.8		70 - 130	
	MSD	1301880-10	0.18000	23.180	25.000	ug/L	0.8	92.0	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1301880-10	ND	10.130	10.000	ug/L		101		75 - 125	
	MSD	1301880-10	ND	10.290	10.000	ug/L	1.6	103		75 - 125	
Toluene-d8 (Surrogate)	MS	1301880-10	ND	9.9600	10.000	ug/L		99.6		80 - 120	
	MSD	1301880-10	ND	10.060	10.000	ug/L	1.0	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1301880-10	ND	10.050	10.000	ug/L		100		80 - 120	
	MSD	1301880-10	ND	9.9600	10.000	ug/L	0.9	99.6		80 - 120	

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Project: JPL- GW Monitoring Wells
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Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2108						
Chloroacetonitrile	BWA2108-BLK1	0	ug/L			
1-Chlorobutane	BWA2108-BLK1	0	ug/L			
1,1-Dichloropropanone	BWA2108-BLK1	0	ug/L			
Methyl acrylate	BWA2108-BLK1	0	ug/L			
Nitrobenzene	BWA2108-BLK1	0	ug/L			
2-Nitropropane	BWA2108-BLK1	0	ug/L			

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Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0300						
Perchlorate	BWB0300-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0301						
Perchlorate	BWB0301-BLK1	ND	ug/L	4.0	0.81	

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Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0300										
Perchlorate	BWB0300-BS1	LCS	10.778	10.000	ug/L	108		85 - 115		
QC Batch ID: BWB0301										
Perchlorate	BWB0301-BS1	LCS	10.670	10.000	ug/L	107		85 - 115		

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Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0300	Used client sample: Y - Description: MW-19-4, 01/28/2013 12:15										
Perchlorate	DUP	1301880-10	3.2940	3.4672		ug/L	5.1		15		J
	MS	1301880-10	3.2940	13.640	10.101	ug/L		102		80 - 120	
	MSD	1301880-10	3.2940	14.659	10.101	ug/L	7.2	113	15	80 - 120	
QC Batch ID: BWB0301	Used client sample: Y - Description: MW-19-2, 01/28/2013 13:15										
Perchlorate	DUP	1301880-12	6.2014	6.4506		ug/L	3.9		15		
	MS	1301880-12	6.2014	16.598	10.101	ug/L		103		80 - 120	
	MSD	1301880-12	6.2014	16.811	10.101	ug/L	1.3	105	15	80 - 120	

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Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA1933						
Hexavalent Chromium	BWA1933-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB0045						
Total Recoverable Chromium	BWB0045-BLK1	ND	ug/L	3.0	0.50	

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Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWA1933										
Hexavalent Chromium	BWA1933-BS1	LCS	0.049472	0.050000	mg/L	98.9		85 - 115		
QC Batch ID: BWB0045										
Total Recoverable Chromium	BWB0045-BS1	LCS	40.353	40.000	ug/L	101		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWA1933	Used client sample: Y - Description: SB-1-1/28/13, 01/28/2013 08:00										
Hexavalent Chromium	DUP	1301880-02	ND	ND		mg/L			10		
	MS	1301880-02	ND	0.052257	0.052632	mg/L		99.3		85 - 115	
	MSD	1301880-02	ND	0.052664	0.052632	mg/L	0.8	100	10	85 - 115	
QC Batch ID: BWB0045	Used client sample: Y - Description: SB-1-1/28/13, 01/28/2013 08:00										
Total Recoverable Chromium	DUP	1301880-02	ND	ND		ug/L			20		
	MS	1301880-02	ND	39.987	40.000	ug/L		100		70 - 130	
	MSD	1301880-02	ND	40.289	40.000	ug/L	0.8	101	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/07/2013 16:13
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/11/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1301977
Invoice ID:	B139711

Enclosed are the results of analyses for samples received by the laboratory on 1/29/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

Table of Contents

Table of Contents

BC Laboratories, Inc. — Chain of Custody Form

Page 1 of 2

*Required Fields

Report To: Client:* Battelle MHTS	Project Description:* JPL-GW Monitoring
Attn:* David Conner	
Street Address:* 505 King Ave.	Project Code:* 1Q13
City:* Columbus State:* OH Zip:* 43201	
Phone#:* (614) 424 - 5489 Fax#: (614) 458 - 5489	Sampler (s):* Blaine Tech
Email Address: connerd@battelle.org	
Submission #: 3-01977	

Billing
Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*
Are there any tests with holding times? less than or equal to 48 hours? ☑ Yes ☐ No
*Standard Turnaround = 10

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2
-1	TB-2-1/29/13	1-29-13	0800	AQ	X						
-2	EB-2-1/29/13		0810		X	X	X	X			
-3	MW-14-5		0850		X		X				
-4	MW-14-4		0920		X		X				
-5	MW-14-3		0950		X	X	X	X			
-6	MW-14-2		1020		X	X	X	X			
-7	MW-14-1		1050		X	X	X	X			
-8	MW-25-5		1200		X	X	X	X			
-9	MW-25-4		1235		X	X	X	X			
-10	DUP-2-1Q13		1235		X	X	X	X			
-11	MW-25-3	↓	1325	↓	X	X	X	X			

Analysis Requested

CHK BY DISTRIBUTION
WHITE
SUB-OUT

Level IV

SHORT HOLDING TIME
Cr^{+6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Date	Time		Date	Time
1. Relinquished By:	1-29-13	1540	1.Received By: NICOLE(SAC)	1/29/13	1540
2. Relinquished By: NICOLE(SAC)	1/29/13	1640	2.Received By:	1/29/13	1640
3. Relinquished By:	1/29/13	1935	3.Received By: KOR	1-29-13	1935

BC Laboratories, Inc. 4100 Atlas Court – Bakersfield CA 93308 (661) 327 – 4911 Fax: (661) 327 – 1918 www.bclabs.com

BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 2

*Required Fields

Report To: Client:* Battelle MHTS	Project Description:* JPL-GW Monitoring	Billing: Client:* SAME
Attn:* David Conner		Attn:*
Street Address:* 505 King Ave.	Project Code:* 1Q13	Address:*
City:* Columbus State:* OH Zip:* 43201		City:* State:* Zip:*
Phone#:* (614) 424 - 5489 Fax#: (614) 458 - 5489	Sampler (s):* Blaine Tech	Are there any tests with holding times less than or equal to 48 hours? ☑ Yes ☐ No
Email Address: connerd@battelle.org		*Standard Turnaround = 10
Submission #: 13-01977		

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2			Notes
-12	MW-25-2	1-29-13	1355	AQ	X	X	X	X						Level IV
-13	MW-25-1	↓	1425	↓	X	X	X	X						

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Date	Time		Date	Time
1. Relinquished By:	1-29-13	1540	1.Received By:	1/29/13	1540
2. Relinquished By:	1/29/13	1640	2.Received By:	1/29/13	1640
3. Relinquished By:	1/29/13	1935	3.Received By:	1/29/13	1935

Chain of Custody and Cooler Receipt Form for 1301977 Page 3 of 6

: LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 4

ubmission #: 13-01977

SHIPPING INFORMATION	SHIPPING CONTAINER
deral Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
; Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

efrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

istody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 207

Temperature: (A) 2.1 °C / (C) 2.2 °C

Date/Time 1-29-13 1935

Analyst Init KIQ

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
GENERAL MINERAL/ GENERAL PHYSICAL										
PE UNPRESERVED										
INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS										
CYANIDE										
NITROGEN FORMS										
TOTAL SULFIDE										
. NITRATE / NITRITE										
TOTAL ORGANIC CARBON										
TOX										
CHEMICAL OXYGEN DEMAND										
PHENOLICS										
ml VOA VIAL TRAVEL BLANK	A(1)									
ml VOA VIAL		A-3	A-3	A-3	A-3	A-3	A-3	A-3	A-3	A-3
EPA 413.1, 413.2, 418.1										
ODOR										
BIOLOGICAL										
CTERIOLOGICAL										
ml VOA VIAL-504										
EPA 508/608/8080										
EPA 515.1/8150										
EPA 525										
EPA 525 TRAVEL BLANK										
ml EPA 547										
ml EPA 531.1										
EPA 548										
EPA 549										
EPA 632										
EPA 8015M										
AMBER										
Z JAR										
OZ JAR										
L SLEEVE										
B VIAL										
ASTIC BAG										
RROUS IRON										
CORE										
ART KIT										

mments:_____

ple Numbering Completed By: KIQ Date/Time: 1-29-13@2030

Actual / C = Corrected

Chain of Custody and Cooler Receipt Form for 1301977 Page 4 of 6

LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 2 of 4

ubmission #: 13-01977

SHIPPING INFORMATION
deral Express ☐ UPS ☐ Hand Delivery ☐
Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

efrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

stody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 207

Temperature: (A) 2.1 °C / (C) 2.2 °C

Date/Time 1-29-13

Analyst Init KIQ 1935

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
GENERAL MINERAL/ GENERAL PHYSICAL										
PE UNPRESERVED										
INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS										
CYANIDE										
NITROGEN FORMS										
TOTAL SULFIDE										
NITRATE / NITRITE										
TOTAL ORGANIC CARBON										
TOX										
CHEMICAL OXYGEN DEMAND										
PHENOLICS										
ml VOA VIAL TRAVEL BLANK										
ml VOA VIAL	A-3	A-3	A-3							
EPA 413.1, 413.2, 418.1										
ODOR										
BIOLOGICAL										
CTERIOLOGICAL										
ml VOA VIAL 504										
EPA 508/608/8080										
EPA 515.1/8150										
EPA 525										
EPA 525 TRAVEL BLANK										
ml EPA 547										
ml EPA 531.1										
EPA 548										
EPA 549										
EPA 632										
EPA 8015M										
AMBER										
OZ. JAR										
OZ. JAR										
L SLEEVE										
B VIAL										
ASTIC BAG										
RROUS IRON										
CORE										
ART KIT										

KIQ Date/Time 1-29-13 @ 2030

Chain of Custody and Cooler Receipt Form for 1301977 Page 5 of 6

C LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 3 Of 4

Submission #: 1301977

SHIPPING INFORMATION	SHIPPING CONTAINER
ederal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
3C Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Other Thermometer ID: 207

Temperature: (A) 2.0 °C / (C) 2.3 °C

Date/Time 1-29-13 1935

Analyst Init KIQ

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
T GENERAL MINERAL/ GENERAL PHYSICAL		B	B	B	B	B	B	B	B	B
T PE UNPRESERVED										
T INORGANIC CHEMICAL METALS										
T INORGANIC CHEMICAL METALS		C	C	C	C	C	C	C	C	C
T CYANIDE										
T NITROGEN FORMS										
T TOTAL SULFIDE										
oz. NITRATE / NITRITE										
T TOTAL ORGANIC CARBON										
T TOX										
T CHEMICAL OXYGEN DEMAND										
LA PHENOLICS										
0ml VOA VIAL TRAVEL BLANK										
0ml VOA VIAL										
QT EPA 413.1, 413.2, 418.1										
T ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
0 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:_____

Sample Numbering Completed By: KIQ Date/Time: 1-29-13 @ 2030

A = Actual / C = Corrected

Chain of Custody and Cooler Receipt Form for 1301977 Page 6 of 6

C LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 4 of 4

ubmission #: 1301977

SHIPPING INFORMATION	SHIPPING CONTAINER
ederal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
C Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

ustody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

ll samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Opee Thermometer ID: 207 Date/Time 1-29-13

Temperature: (A) 2.0 °C / (C) 2.3 °C Analyst Init KIQ 1935

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
T GENERAL MINERAL/ GENERAL PHYSICAL	B	B	B							
T PE UNPRESERVED										
T INORGANIC CHEMICAL METALS										
T INORGANIC CHEMICAL METALS	C	C	C							
T CYANIDE										
T NITROGEN FORMS										
T TOTAL SULFIDE										
02. NITRATE / NITRITE										
T TOTAL ORGANIC CARBON										
T TOX										
T CHEMICAL OXYGEN DEMAND										
A PHENOLICS										
0ml VOA VIAL TRAVEL BLANK										
0ml VOA VIAL										
OT EPA 413.1, 413.2, 418.1										
T ODOR										
A DIOLOGICAL										
A CTERIOLOGICAL										
0 ml VOA VIAL- 504										
OT EPA 508/608/8080										
OT EPA 515.1/8150										
OT EPA 525										
OT EPA 525 TRAVEL BLANK										
00ml EPA 547										
00ml EPA 531.1										
OT EPA 548										
OT EPA 549										
OT EPA 632										
OT EPA 8015M										
OT AMBER										
1 OZ. JAR										
2 OZ. JAR										
OIL SLEEVE										
CB VIAL										
LASTIC BAG										
ERROUS IRON										
NCORE										
MART KIT										

Comments:

Sample Numbers Completed By: KIQ Date/Time: 1-29-13 @ 2030

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1301977-01	**COC Number:**	---	**Receive Date:** 01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:** 01/29/2013 08:00
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	TB-2-1/29/13	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Trip Blank
			Delivery Work Order:
			Global ID: 000000000000
			Location ID (FieldPoint): TB-2-1/29/13
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1301977-02	**COC Number:**	---	**Receive Date:** 01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:** 01/29/2013 08:10
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	EB-2-1/29/13	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 000000000000
			Location ID (FieldPoint): EB-2-1/29/13
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1301977-03	**COC Number:**	---	**Receive Date:** 01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:** 01/29/2013 08:50
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-14-5	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 000000000000
			Location ID (FieldPoint): MW-14-5
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1301977-04	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 09:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-14-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): MW-14-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301977-05	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 09:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-14-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): MW-14-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301977-06	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 10:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-14-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): MW-14-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1301977-07	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 10:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-14-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): MW-14-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301977-08	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 12:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-25-5	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): MW-25-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301977-09	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 12:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-25-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): MW-25-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1301977-10	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 12:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	DUP-2-1Q13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): DUP-2-1Q13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301977-11	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 13:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-25-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): MW-25-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1301977-12	**COC Number:**	---	**Receive Date:**	01/29/2013 19:35
	Project Number:	JPL-GW	**Sampling Date:**	01/29/2013 13:55
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-25-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 000000000000	
			Location ID (FieldPoint): MW-25-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information

1301977-13

COC Number: ---
Project Number: JPL-GW
Sampling Location: ---
Sampling Point: MW-25-1
Sampled By: Blaine Tech of BAT

Receive Date: 01/29/2013 19:35
Sampling Date: 01/29/2013 14:25
Sample Depth: ---
Lab Matrix: Water
Sample Type: Aqueous
Delivery Work Order:
Global ID: 000000000000
Location ID (FieldPoint): MW-25-1
Matrix: W
Sample QC Type (SACode): CS
Cooler ID:

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-01 | **Client Sample Name:** JPL-GW, TB-2-1/29/13, 1/29/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-01 | **Client Sample Name:** JPL-GW, TB-2-1/29/13, 1/29/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-01 | **Client Sample Name:** JPL-GW, TB-2-1/29/13, 1/29/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 04:02	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-01 | **Client Sample Name:** JPL-GW, TB-2-1/29/13, 1/29/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 04:02	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-02 | **Client Sample Name:** JPL-GW, EB-2-1/29/13, 1/29/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-02 | **Client Sample Name:** JPL-GW, EB-2-1/29/13, 1/29/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	**8.6**	**ug/L**	**10**	**4.6**	**EPA-524.2**	ND	**J**	1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-02 | **Client Sample Name:** JPL-GW, EB-2-1/29/13, 1/29/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 04:24	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-02 | **Client Sample Name:** JPL-GW, EB-2-1/29/13, 1/29/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 04:24	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-02 | **Client Sample Name:** JPL-GW, EB-2-1/29/13, 1/29/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 14:09	LD1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-02 | **Client Sample Name:** JPL-GW, EB-2-1/29/13, 1/29/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.1**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:18	TDC	KONE-1	1	BWA2088
2	EPA-200.8	02/05/13	02/05/13 19:46	SRM	PE-EL1	1	BWB0217

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505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-03 | **Client Sample Name:** JPL-GW, MW-14-5, 1/29/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-03 | **Client Sample Name:** JPL-GW, MW-14-5, 1/29/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-03 | **Client Sample Name:** JPL-GW, MW-14-5, 1/29/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 04:47	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-03 | **Client Sample Name:** JPL-GW, MW-14-5, 1/29/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 04:47	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-03 | **Client Sample Name:** JPL-GW, MW-14-5, 1/29/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 14:23	LD1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-04 | **Client Sample Name:** JPL-GW, MW-14-4, 1/29/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.29**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	**0.11**	**ug/L**	**0.50**	**0.072**	**EPA-524.2**	ND	**J**	1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	**0.070**	**ug/L**	**0.50**	**0.062**	**EPA-524.2**	ND	**J**	1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.14**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	**0.16**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-04 | **Client Sample Name:** JPL-GW, MW-14-4, 1/29/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.31**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.33**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-04 | **Client Sample Name:** JPL-GW, MW-14-4, 1/29/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 05:09	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-04 | **Client Sample Name:** JPL-GW, MW-14-4, 1/29/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 05:09	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-04 | **Client Sample Name:** JPL-GW, MW-14-4, 1/29/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.6**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 17:02	LS1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-05 | **Client Sample Name:** JPL-GW, MW-14-3, 1/29/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.50**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.26**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	**0.13**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-05 | **Client Sample Name:** JPL-GW, MW-14-3, 1/29/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.44**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**1.8**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-05 | **Client Sample Name:** JPL-GW, MW-14-3, 1/29/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 05:32	MGC	MS-V5	1	BWA2108

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-05 | **Client Sample Name:** JPL-GW, MW-14-3, 1/29/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 05:32	MGC	MS-V5	1	BWA2108

Battelle MHTS
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-05 | **Client Sample Name:** JPL-GW, MW-14-3, 1/29/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**6.1**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 14:49	LD1	IC6	1	BWB0542

Battelle MHTS
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-05 | **Client Sample Name:** JPL-GW, MW-14-3, 1/29/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.2**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:18	TDC	KONE-1	1	BWA2088
2	EPA-200.8	02/05/13	02/05/13 19:49	SRM	PE-EL1	1	BWB0217

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-06 | **Client Sample Name:** JPL-GW, MW-14-2, 1/29/2013 10:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.46**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.13**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	**0.21**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
trans-1,2-Dichloroethene	**0.15**	**ug/L**	**0.50**	**0.15**	**EPA-524.2**	ND	**J**	1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-06 | **Client Sample Name:** JPL-GW, MW-14-2, 1/29/2013 10:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.35**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**4.1**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-06 | **Client Sample Name:** JPL-GW, MW-14-2, 1/29/2013 10:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 05:54	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-06 | **Client Sample Name:** JPL-GW, MW-14-2, 1/29/2013 10:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	01/31/13	02/01/13 05:54	MGC	MS-V5	1	BWA2108

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-06 | **Client Sample Name:** JPL-GW, MW-14-2, 1/29/2013 10:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**2.8**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 15:03	LD1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-06 | **Client Sample Name:** JPL-GW, MW-14-2, 1/29/2013 10:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.74**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:18	TDC	KONE-1	1	BWA2088
2	EPA-200.8	02/05/13	02/05/13 21:41	SRM	PE-EL1	1	BWB0217

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-07 | **Client Sample Name:** JPL-GW, MW-14-1, 1/29/2013 10:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.43**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-07 | **Client Sample Name:** JPL-GW, MW-14-1, 1/29/2013 10:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	**0.85**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.22**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**1.7**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-07 | **Client Sample Name:** JPL-GW, MW-14-1, 1/29/2013 10:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 10:49	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-07 | **Client Sample Name:** JPL-GW, MW-14-1, 1/29/2013 10:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 10:49	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-07 | **Client Sample Name:** JPL-GW, MW-14-1, 1/29/2013 10:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.9**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 15:16	LD1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-07 | **Client Sample Name:** JPL-GW, MW-14-1, 1/29/2013 10:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.3**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:18	TDC	KONE-1	1	BWA2088
2	EPA-200.8	02/05/13	02/05/13 21:45	SRM	PE-EL1	1	BWB0217

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-08 | **Client Sample Name:** JPL-GW, MW-25-5, 1/29/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-08 | **Client Sample Name:** JPL-GW, MW-25-5, 1/29/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-08 | **Client Sample Name:** JPL-GW, MW-25-5, 1/29/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 11:12	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-08 | **Client Sample Name:** JPL-GW, MW-25-5, 1/29/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 11:12	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-08 | **Client Sample Name:** JPL-GW, MW-25-5, 1/29/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 19:02	LS1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-08 | **Client Sample Name:** JPL-GW, MW-25-5, 1/29/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:18	TDC	KONE-1	1	BWA2088
2	EPA-200.8	02/05/13	02/05/13 21:48	SRM	PE-EL1	1	BWB0217

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-09 | **Client Sample Name:** JPL-GW, MW-25-4, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-09 | **Client Sample Name:** JPL-GW, MW-25-4, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-09 | **Client Sample Name:** JPL-GW, MW-25-4, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 11:34	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-09 | **Client Sample Name:** JPL-GW, MW-25-4, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 11:34	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-09 | **Client Sample Name:** JPL-GW, MW-25-4, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**19**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 19:15	LS1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-09 | **Client Sample Name:** JPL-GW, MW-25-4, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**2.0**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:25	TDC	KONE-1	1	BWA2088
2	EPA-200.8	02/05/13	02/05/13 21:52	SRM	PE-EL1	1	BWB0217

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-10 | **Client Sample Name:** JPL-GW, DUP-2-1Q13, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-10 | **Client Sample Name:** JPL-GW, DUP-2-1Q13, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-10 | **Client Sample Name:** JPL-GW, DUP-2-1Q13, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 11:57	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-10 | **Client Sample Name:** JPL-GW, DUP-2-1Q13, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 11:57	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-10 | **Client Sample Name:** JPL-GW, DUP-2-1Q13, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**9.9**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 19:29	LS1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-10 | **Client Sample Name:** JPL-GW, DUP-2-1Q13, 1/29/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.8**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:25	TDC	KONE-1	1	BWA2088
2	EPA-200.8	02/05/13	02/05/13 21:55	SRM	PE-EL1	1	BWB0217

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-11 | **Client Sample Name:** JPL-GW, MW-25-3, 1/29/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.74**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-11 | **Client Sample Name:** JPL-GW, MW-25-3, 1/29/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.16**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-11 | **Client Sample Name:** JPL-GW, MW-25-3, 1/29/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 12:19	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-11 | **Client Sample Name:** JPL-GW, MW-25-3, 1/29/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 12:19	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-11 | **Client Sample Name:** JPL-GW, MW-25-3, 1/29/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**11**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 19:42	LS1	IC6	1	BWB0542

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-11 | **Client Sample Name:** JPL-GW, MW-25-3, 1/29/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0014**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND	**J**	1
Total Recoverable Chromium	**3.5**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:25	TDC	KONE-1	1	BWA2088
2	EPA-200.8	02/05/13	02/05/13 21:58	SRM	PE-EL1	1	BWB0217

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-12 | **Client Sample Name:** JPL-GW, MW-25-2, 1/29/2013 1:55:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-12 | **Client Sample Name:** JPL-GW, MW-25-2, 1/29/2013 1:55:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.13**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-12 | **Client Sample Name:** JPL-GW, MW-25-2, 1/29/2013 1:55:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 12:42	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-12 | **Client Sample Name:** JPL-GW, MW-25-2, 1/29/2013 1:55:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 12:42	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-12 | **Client Sample Name:** JPL-GW, MW-25-2, 1/29/2013 1:55:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**15**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 19:55	LS1	IC6	1	BWB0543

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505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-12 | **Client Sample Name:** JPL-GW, MW-25-2, 1/29/2013 1:55:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0040	0.0014	EPA-7196	ND	A10	1
Total Recoverable Chromium	**3.7**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:25	TDC	KONE-1	1	BWA2092
2	EPA-200.8	02/05/13	02/05/13 22:01	SRM	PE-EL1	1	BWB0217

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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-13 | **Client Sample Name:** JPL-GW, MW-25-1, 1/29/2013 2:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.57**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-13 | **Client Sample Name:** JPL-GW, MW-25-1, 1/29/2013 2:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	**0.19**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**2.5**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1301977-13 | **Client Sample Name:** JPL-GW, MW-25-1, 1/29/2013 2:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 13:04	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1301977-13 | **Client Sample Name:** JPL-GW, MW-25-1, 1/29/2013 2:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 13:04	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1301977-13 | **Client Sample Name:** JPL-GW, MW-25-1, 1/29/2013 2:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**9.3**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/07/13	02/07/13 20:48	LS1	IC6	1	BWB0543

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1301977-13 | **Client Sample Name:** JPL-GW, MW-25-1, 1/29/2013 2:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0040	0.0014	EPA-7196	ND	A10	1
Total Recoverable Chromium	**2.1**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/29/13	01/29/13 21:54	TDC	KONE-1	1	BWA2092
2	EPA-200.8	02/06/13	02/06/13 23:29	JSS	PE-EL1	1	BWB0306

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2108						
Benzene	BWA2108-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWA2108-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWA2108-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWA2108-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWA2108-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWA2108-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWA2108-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWA2108-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWA2108-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWA2108-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWA2108-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWA2108-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWA2108-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWA2108-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWA2108-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWA2108-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWA2108-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWA2108-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWA2108-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWA2108-BLK1	ND	ug/L	0.50	0.14	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2108						
trans-1,3-Dichloropropene	BWA2108-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWA2108-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWA2108-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWA2108-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWA2108-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWA2108-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWA2108-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWA2108-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWA2108-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWA2108-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWA2108-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWA2108-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWA2108-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWA2108-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWA2108-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWA2108-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWA2108-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWA2108-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWA2108-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWA2108-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWA2108-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWA2108-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWA2108-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWA2108-BLK1	ND	ug/L	4.0	0.97	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2108						
Ethyl t-butyl ether	BWA2108-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWA2108-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWA2108-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWA2108-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWA2108-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWA2108-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWA2108-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWA2108-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWA2108-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWA2108-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWA2108-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWA2108-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWA2108-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWA2108-BLK1	106	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWA2108-BLK1	99.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWA2108-BLK1	101	%	80 - 120 (LCL - UCL)		
QC Batch ID: BWB0007						
Benzene	BWB0007-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0007-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0007-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0007-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0007-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0007-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0007-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0007-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0007-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0007-BLK1	ND	ug/L	0.50	0.15	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0007						
Dibromochloromethane	BWB0007-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0007-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0007-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0007-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0007-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0007-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0007-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0007-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0007-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0007-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BWB0007-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0007-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0007-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0007-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0007-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0007-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0007-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0007-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.19	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0007						
1,1,1-Trichloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0007-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0007-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0007-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0007-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0007-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0007-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0007-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0007-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0007-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0007-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0007-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0007-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0007-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BWB0007-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0007-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0007-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0007-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0007-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0007-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0007-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0007-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0007-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0007-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0007-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0007-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0007-BLK1	107	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0007-BLK1	98.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0007-BLK1	96.7	%	80 - 120 (LCL - UCL)		

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Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWA2108										
Benzene	BWA2108-BS1	LCS	24.460	25.000	ug/L	97.8		70 - 130		
Bromodichloromethane	BWA2108-BS1	LCS	24.500	25.000	ug/L	98.0		70 - 130		
Chlorobenzene	BWA2108-BS1	LCS	23.590	25.000	ug/L	94.4		70 - 130		
Chloroethane	BWA2108-BS1	LCS	27.700	25.000	ug/L	111		70 - 130		
1,4-Dichlorobenzene	BWA2108-BS1	LCS	23.170	25.000	ug/L	92.7		70 - 130		
1,1-Dichloroethane	BWA2108-BS1	LCS	23.780	25.000	ug/L	95.1		70 - 130		
1,1-Dichloroethene	BWA2108-BS1	LCS	24.780	25.000	ug/L	99.1		70 - 130		
Toluene	BWA2108-BS1	LCS	24.000	25.000	ug/L	96.0		70 - 130		
Trichloroethene	BWA2108-BS1	LCS	24.230	25.000	ug/L	96.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWA2108-BS1	LCS	10.220	10.000	ug/L	102		75 - 125		
Toluene-d8 (Surrogate)	BWA2108-BS1	LCS	9.9000	10.000	ug/L	99.0		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWA2108-BS1	LCS	10.160	10.000	ug/L	102		80 - 120		
QC Batch ID: BWB0007										
Benzene	BWB0007-BS1	LCS	24.190	25.000	ug/L	96.8		70 - 130		
Bromodichloromethane	BWB0007-BS1	LCS	24.770	25.000	ug/L	99.1		70 - 130		
Chlorobenzene	BWB0007-BS1	LCS	22.870	25.000	ug/L	91.5		70 - 130		
Chloroethane	BWB0007-BS1	LCS	26.730	25.000	ug/L	107		70 - 130		
1,4-Dichlorobenzene	BWB0007-BS1	LCS	23.370	25.000	ug/L	93.5		70 - 130		
1,1-Dichloroethane	BWB0007-BS1	LCS	23.450	25.000	ug/L	93.8		70 - 130		
1,1-Dichloroethene	BWB0007-BS1	LCS	24.820	25.000	ug/L	99.3		70 - 130		
Toluene	BWB0007-BS1	LCS	23.310	25.000	ug/L	93.2		70 - 130		
Trichloroethene	BWB0007-BS1	LCS	22.720	25.000	ug/L	90.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0007-BS1	LCS	10.690	10.000	ug/L	107		75 - 125		
Toluene-d8 (Surrogate)	BWB0007-BS1	LCS	9.8000	10.000	ug/L	98.0		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0007-BS1	LCS	9.9000	10.000	ug/L	99.0		80 - 120		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWA2108	Used client sample: Y - Description: MW-19-4, 01/28/2013 12:15										
Benzene	MS	1301880-10	ND	25.190	25.000	ug/L		101		70 - 130	
	MSD	1301880-10	ND	24.880	25.000	ug/L	1.2	99.5	20	70 - 130	
Bromodichloromethane	MS	1301880-10	ND	24.990	25.000	ug/L		100		70 - 130	
	MSD	1301880-10	ND	25.300	25.000	ug/L	1.2	101	20	70 - 130	
Chlorobenzene	MS	1301880-10	ND	23.450	25.000	ug/L		93.8		70 - 130	
	MSD	1301880-10	ND	23.060	25.000	ug/L	1.7	92.2	20	70 - 130	
Chloroethane	MS	1301880-10	ND	28.570	25.000	ug/L		114		70 - 130	
	MSD	1301880-10	ND	28.050	25.000	ug/L	1.8	112	20	70 - 130	
1,4-Dichlorobenzene	MS	1301880-10	ND	23.430	25.000	ug/L		93.7		70 - 130	
	MSD	1301880-10	ND	23.310	25.000	ug/L	0.5	93.2	20	70 - 130	
1,1-Dichloroethane	MS	1301880-10	ND	24.170	25.000	ug/L		96.7		70 - 130	
	MSD	1301880-10	ND	23.630	25.000	ug/L	2.3	94.5	20	70 - 130	
1,1-Dichloroethene	MS	1301880-10	ND	25.000	25.000	ug/L		100		70 - 130	
	MSD	1301880-10	ND	24.600	25.000	ug/L	1.6	98.4	20	70 - 130	
Toluene	MS	1301880-10	ND	24.300	25.000	ug/L		97.2		70 - 130	
	MSD	1301880-10	ND	24.320	25.000	ug/L	0.1	97.3	20	70 - 130	
Trichloroethene	MS	1301880-10	0.18000	23.370	25.000	ug/L		92.8		70 - 130	
	MSD	1301880-10	0.18000	23.180	25.000	ug/L	0.8	92.0	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1301880-10	ND	10.130	10.000	ug/L		101		75 - 125	
	MSD	1301880-10	ND	10.290	10.000	ug/L	1.6	103		75 - 125	
Toluene-d8 (Surrogate)	MS	1301880-10	ND	9.9600	10.000	ug/L		99.6		80 - 120	
	MSD	1301880-10	ND	10.060	10.000	ug/L	1.0	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1301880-10	ND	10.050	10.000	ug/L		100		80 - 120	
	MSD	1301880-10	ND	9.9600	10.000	ug/L	0.9	99.6		80 - 120	
QC Batch ID: BWB0007	Used client sample: Y - Description: MW-18-3, 01/30/2013 11:15										
Benzene	MS	1302075-08	ND	25.020	25.000	ug/L		100		70 - 130	
	MSD	1302075-08	ND	23.870	25.000	ug/L	4.7	95.5	20	70 - 130	
Bromodichloromethane	MS	1302075-08	ND	25.690	25.000	ug/L		103		70 - 130	
	MSD	1302075-08	ND	24.760	25.000	ug/L	3.7	99.0	20	70 - 130	
Chlorobenzene	MS	1302075-08	ND	23.730	25.000	ug/L		94.9		70 - 130	
	MSD	1302075-08	ND	22.550	25.000	ug/L	5.1	90.2	20	70 - 130	
Chloroethane	MS	1302075-08	ND	27.830	25.000	ug/L		111		70 - 130	
	MSD	1302075-08	ND	26.900	25.000	ug/L	3.4	108	20	70 - 130	
1,4-Dichlorobenzene	MS	1302075-08	ND	23.900	25.000	ug/L		95.6		70 - 130	
	MSD	1302075-08	ND	22.360	25.000	ug/L	6.7	89.4	20	70 - 130	
1,1-Dichloroethane	MS	1302075-08	ND	24.250	25.000	ug/L		97.0		70 - 130	
	MSD	1302075-08	ND	22.920	25.000	ug/L	5.6	91.7	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0007	Used client sample: Y - Description: MW-18-3, 01/30/2013 11:15										
1,1-Dichloroethene	MS	1302075-08	ND	25.800	25.000	ug/L		103		70 - 130	
	MSD	1302075-08	ND	24.390	25.000	ug/L	5.6	97.6	20	70 - 130	
Toluene	MS	1302075-08	ND	24.330	25.000	ug/L		97.3		70 - 130	
	MSD	1302075-08	ND	23.200	25.000	ug/L	4.8	92.8	20	70 - 130	
Trichloroethene	MS	1302075-08	0.71000	24.210	25.000	ug/L		94.0		70 - 130	
	MSD	1302075-08	0.71000	23.230	25.000	ug/L	4.1	90.1	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302075-08	ND	10.530	10.000	ug/L		105		75 - 125	
	MSD	1302075-08	ND	10.410	10.000	ug/L	1.1	104		75 - 125	
Toluene-d8 (Surrogate)	MS	1302075-08	ND	9.8500	10.000	ug/L		98.5		80 - 120	
	MSD	1302075-08	ND	9.9100	10.000	ug/L	0.6	99.1		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302075-08	ND	10.070	10.000	ug/L		101		80 - 120	
	MSD	1302075-08	ND	9.8800	10.000	ug/L	1.9	98.8		80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2108						
Chloroacetonitrile	BWA2108-BLK1	0	ug/L			
1-Chlorobutane	BWA2108-BLK1	0	ug/L			
1,1-Dichloropropanone	BWA2108-BLK1	0	ug/L			
Methyl acrylate	BWA2108-BLK1	0	ug/L			
Nitrobenzene	BWA2108-BLK1	0	ug/L			
2-Nitropropane	BWA2108-BLK1	0	ug/L			
QC Batch ID: BWB0007						
Chloroacetonitrile	BWB0007-BLK1	0	ug/L			
1-Chlorobutane	BWB0007-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0007-BLK1	0	ug/L			
Methyl acrylate	BWB0007-BLK1	0	ug/L			
Nitrobenzene	BWB0007-BLK1	0	ug/L			
2-Nitropropane	BWB0007-BLK1	0	ug/L			

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0542						
Perchlorate	BWB0542-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0543						
Perchlorate	BWB0543-BLK1	ND	ug/L	4.0	0.81	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0542										
Perchlorate	BWB0542-BS1	LCS	10.658	10.000	ug/L	107		85 - 115		
QC Batch ID: BWB0543										
Perchlorate	BWB0543-BS1	LCS	10.115	10.000	ug/L	101		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0542	Used client sample: Y - Description: MW-14-1, 01/29/2013 10:50										
Perchlorate	DUP	1301977-07	3.9088	3.1663		ug/L	21.0		15		J,A02
	MS	1301977-07	3.9088	14.021	10.101	ug/L		100		80 - 120	
	MSD	1301977-07	3.9088	14.104	10.101	ug/L	0.6	101	15	80 - 120	
QC Batch ID: BWB0543	Used client sample: Y - Description: MW-25-2, 01/29/2013 13:55										
Perchlorate	DUP	1301977-12	14.912	15.097		ug/L	1.2		15		
	MS	1301977-12	14.912	24.861	10.101	ug/L		98.5		80 - 120	
	MSD	1301977-12	14.912	24.991	10.101	ug/L	0.5	99.8	15	80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2088						
Hexavalent Chromium	BWA2088-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWA2092						
Hexavalent Chromium	BWA2092-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB0217						
Total Recoverable Chromium	BWB0217-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: BWB0306						
Total Recoverable Chromium	BWB0306-BLK1	ND	ug/L	3.0	0.50	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWA2088										
Hexavalent Chromium	BWA2088-BS1	LCS	0.050370	0.050000	mg/L	101		85 - 115		
QC Batch ID: BWA2092										
Hexavalent Chromium	BWA2092-BS1	LCS	0.050467	0.050000	mg/L	101		85 - 115		
QC Batch ID: BWB0217										
Total Recoverable Chromium	BWB0217-BS1	LCS	43.629	40.000	ug/L	109		85 - 115		
QC Batch ID: BWB0306										
Total Recoverable Chromium	BWB0306-BS1	LCS	39.486	40.000	ug/L	98.7		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWA2088	Used client sample: Y - Description: MW-14-1, 01/29/2013 10:50										
Hexavalent Chromium	DUP	1301977-07	ND	ND		mg/L			10		
	MS	1301977-07	ND	0.050736	0.052632	mg/L		96.4		85 - 115	
	MSD	1301977-07	ND	0.050626	0.052632	mg/L	0.2	96.2	10	85 - 115	
QC Batch ID: BWA2092	Used client sample: Y - Description: MW-25-2, 01/29/2013 13:55										
Hexavalent Chromium	DUP	1301977-12	ND	ND		mg/L			10		
	MS	1301977-12	ND	0.052233	0.052632	mg/L		99.2		85 - 115	
	MSD	1301977-12	ND	0.051589	0.052632	mg/L	1.2	98.0	10	85 - 115	
QC Batch ID: BWB0217	Used client sample: N										
Total Recoverable Chromium	DUP	1302290-02	5.2940	2.9050		ug/L	58.3		20		J,A02
	MS	1302290-02	5.2940	45.764	40.000	ug/L		101		70 - 130	
	MSD	1302290-02	5.2940	47.372	40.000	ug/L	3.5	105	20	70 - 130	
QC Batch ID: BWB0306	Used client sample: N										
Total Recoverable Chromium	DUP	1302422-01	ND	ND		ug/L			20		
	MS	1302422-01	ND	36.756	40.000	ug/L		91.9		70 - 130	
	MSD	1302422-01	ND	37.939	40.000	ug/L	3.2	94.8	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:39
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A02	The difference between duplicate readings is less than the PQL.
A10	PQL's and MDL's were raised due to matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/11/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1302075
Invoice ID:	B139712

Enclosed are the results of analyses for samples received by the laboratory on 1/30/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

Table of Contents

Table of Contents

BC Laboratories, Inc. — Chain of Custody Form

*Required Fields

Page 1 of 2

Report To: Client:* Battelle MHTS	Project Description:* JPL-GW Monitoring
Attn:* David Conner	
Street Address:* 505 King Ave.	Project Code:* 1Q13
City:* Columbus State:* OH Zip:* 43201	
Phone#:* (614) 424 - 5489 Fax#: (614) 458 - 5489	Sampler (s):* Blaine Tech
Email Address: connerd@battelle.org	
Submission #: 13020075	

Billing
Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*
Are there any tests with holding times less than or equal to 48 hours? ☑ Yes ☐ No
*Standard Turnaround = 10

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2				Notes
1	TB-3-1/30/13	1-30-13	0730	AQ	X										
2	EB-3-1/30/13		0800		X	X	X	X							
3	MW-17-4		0820		X	X	X	X							Level IV
4	MW-17-3		0850		X	X	X	X							
5	MW-17-2		0920		X	X	X	X							
6	MW-18-5		1015		X		X								
7	MW-18-4		1045		X	X	X	X							
8	MW-18-3		1115		X	X	X	X							
9	MW-3-4		1235		X	X	X	X							MS/MSD
10	MW-3-3		1305		X	X	X	X							MS/MSD
11	MW-3-2	↓	1335	↓	X	X	X	X							

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other:

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Date	Time		Date	Time
1. Relinquished By:	1-30-13	1530	1.Received By: Nicole (SC)	1/30/13	1530
2. Relinquished By: Nicole (SC)	1/30/13	1635	2.Received By:	1/30/13	1635
3. Relinquished By:	1/30/13	1940	3.Received By:	1-30-13	1940

BC Laboratories, Inc. 4100 Atlas Court – Bakersfield CA 93308 (661) 327 – 4911 Fax: (661) 327 – 1918 www.bclabs.com

Chain of Custody Form

BC Laboratories, Inc.

*Required Fields

Page 2 of 2

Report To: Client:* Battelle MHTS	Project Description:* JPL-GW Monitoring
Attn:* David Conner	
Street Address:* 505 King Ave.	Project Code:* 1Q13
City:* Columbus State:* OH Zip:* 43201	
Phone#:* (614) 424 - 5489 Fax#: (614) 458 - 5489	Sampler (s):* Blaine Tech
Email Address: connerd@battelle.org	
Submission #: 1302075	

Analysis Requested

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2			
-12	MW-18-2	1-30-13	1145	AQ	X	X	X	X						

Billing

Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*
Are there any tests with holding times? less than or equal to 48 hours?
☑ Yes ☐ No
*Standard Turnaround = 10

Notes

CHK BY: K12
DISTRIBUTION: WHITE ☑ YELLOW ☐ SUB-OUT ☐

SHORT HOLDING TIME
Cr^{+6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Relinquished By:	Date	Time	Received By:	Date	Time
1.	[signature]	1-30-13	1530	Nicole(SC)	1/30/13	1570
2.	Nicole(SC)	1/30/13	1635	[signature]	1/30/13	1635
3.	[signature]	1/30/13	1940 1440	[signature]	1-30-13	1940

Chain of Custody and Cooler Receipt Form for 1302075 Page 3 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 2

Submission #: 1302075

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

☑ COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Other Thermometer ID: 207 Date/Time 1-30-13

Temperature: (A) 4.8 °C / (C) 5.1 °C Analyst Init JNW 1940

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL		B	B	B	B	B	B	B	B	B
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS		C	C	C	C		C	C	C	C
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A1									
40ml VOA VIAL		A3	A3	A3	A3	A3	A3	A4	A4	A3
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL-504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:
Sample Numbering Completed By: JNW Date/Time: 1-30-13 8000
A = Actual / C = Corrected

Chain of Custody and Cooler Receipt Form for 1302075 Page 4 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 2 of 2

Submission #: 1302075

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

☑ COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Qtpp Thermometer ID: 207

Temperature: (A) 4.8 °C / (C) 5.1 °C

Date/Time 1-30-13

Analyst Init JNW 1940

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL	B	B								
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	C	C								
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A,3	A,3								
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL-504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:

Sample Numbering Completed By: JNW Date/Time: 1-30-13 2000

A = Actual / C = Corrected

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302075-01	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 07:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB-3-1/30/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Trip Blank
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): TB-3-1/30/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302075-02	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 08:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	EB-3-1/30/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): EB-3-1/30/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302075-03	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 08:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-17-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-17-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302075-04	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 08:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-17-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-17-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302075-05	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 09:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-17-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-17-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302075-06	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 10:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-18-5	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-18-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302075-07	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 10:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-18-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-18-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302075-08	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 11:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-18-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-18-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302075-09	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 12:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-3-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-3-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302075-10	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 13:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-3-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-3-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302075-11	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 13:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-3-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-3-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302075-12	**COC Number:**	---	**Receive Date:**	01/30/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	01/30/2013 11:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-18-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Water
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-18-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-01 | **Client Sample Name:** JPL-GW, TB-3-1/30/13, 1/30/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-01 | **Client Sample Name:** JPL-GW, TB-3-1/30/13, 1/30/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-01 | **Client Sample Name:** JPL-GW, TB-3-1/30/13, 1/30/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 13:27	MGC	MS-V5	1	BWB0007

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-01 | **Client Sample Name:** JPL-GW, TB-3-1/30/13, 1/30/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 13:27	MGC	MS-V5	1	BWB0007

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-02 | **Client Sample Name:** JPL-GW, EB-3-1/30/13, 1/30/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-02 | **Client Sample Name:** JPL-GW, EB-3-1/30/13, 1/30/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	**0.48**	**ug/L**	**0.50**	**0.48**	**EPA-524.2**	ND	**J**	1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	**0.19**	**ug/L**	**0.50**	**0.093**	**EPA-524.2**	ND	**J**	1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-02 | **Client Sample Name:** JPL-GW, EB-3-1/30/13, 1/30/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 13:49	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-02 | **Client Sample Name:** JPL-GW, EB-3-1/30/13, 1/30/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 13:49	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-02 | **Client Sample Name:** JPL-GW, EB-3-1/30/13, 1/30/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 12:46	LD1	IC6	1	BWB0605

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-02 | **Client Sample Name:** JPL-GW, EB-3-1/30/13, 1/30/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 21:48	TDC	KONE-1	1	BWA2097
2	EPA-200.8	02/06/13	02/07/13 20:05	JSS	PE-EL1	1	BWB0310

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-03 | **Client Sample Name:** JPL-GW, MW-17-4, 1/30/2013 8:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.40**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND	**J**	1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.33**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-03 | **Client Sample Name:** JPL-GW, MW-17-4, 1/30/2013 8:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.14**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.76**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-03 | **Client Sample Name:** JPL-GW, MW-17-4, 1/30/2013 8:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	110	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 14:12	MGC	MS-V5	1	BWB0007

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505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-03 | **Client Sample Name:** JPL-GW, MW-17-4, 1/30/2013 8:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 14:12	MGC	MS-V5	1	BWB0007

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Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-03 | **Client Sample Name:** JPL-GW, MW-17-4, 1/30/2013 8:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**10**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 12:59	LD1	IC6	1	BWB0605

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-03 | **Client Sample Name:** JPL-GW, MW-17-4, 1/30/2013 8:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.8**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 21:48	TDC	KONE-1	1	BWA2097
2	EPA-200.8	02/06/13	02/07/13 20:08	JSS	PE-EL1	1	BWB0310

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-04 | **Client Sample Name:** JPL-GW, MW-17-3, 1/30/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.20**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-04 | **Client Sample Name:** JPL-GW, MW-17-3, 1/30/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.18**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-04 | **Client Sample Name:** JPL-GW, MW-17-3, 1/30/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 14:34	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-04 | **Client Sample Name:** JPL-GW, MW-17-3, 1/30/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 14:34	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-04 | **Client Sample Name:** JPL-GW, MW-17-3, 1/30/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**5.5**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 14:59	LD1	IC6	1	BWB0605

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-04 | **Client Sample Name:** JPL-GW, MW-17-3, 1/30/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 21:48	TDC	KONE-1	1	BWA2097
2	EPA-200.8	02/06/13	02/07/13 20:11	JSS	PE-EL1	1	BWB0310

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-05 | **Client Sample Name:** JPL-GW, MW-17-2, 1/30/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.26**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-05 | **Client Sample Name:** JPL-GW, MW-17-2, 1/30/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.19**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-05 | **Client Sample Name:** JPL-GW, MW-17-2, 1/30/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 14:57	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-05 | **Client Sample Name:** JPL-GW, MW-17-2, 1/30/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 14:57	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-05 | **Client Sample Name:** JPL-GW, MW-17-2, 1/30/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**22**	**ug/L**	**8.0**	**1.6**	**EPA-314.0**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 23:51	LS1	IC6	2	BWB0605

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-05 | **Client Sample Name:** JPL-GW, MW-17-2, 1/30/2013 9:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.58**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 21:48	TDC	KONE-1	1	BWA2097
2	EPA-200.8	02/06/13	02/07/13 20:14	JSS	PE-EL1	1	BWB0310

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-06 | **Client Sample Name:** JPL-GW, MW-18-5, 1/30/2013 10:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-06 | **Client Sample Name:** JPL-GW, MW-18-5, 1/30/2013 10:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-06 | **Client Sample Name:** JPL-GW, MW-18-5, 1/30/2013 10:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 15:19	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-06 | **Client Sample Name:** JPL-GW, MW-18-5, 1/30/2013 10:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 15:19	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-06 | **Client Sample Name:** JPL-GW, MW-18-5, 1/30/2013 10:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 15:26	LD1	IC6	1	BWB0605

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-07 | **Client Sample Name:** JPL-GW, MW-18-4, 1/30/2013 10:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**1.4**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.57**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-07 | **Client Sample Name:** JPL-GW, MW-18-4, 1/30/2013 10:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.61**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.65**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-07 | **Client Sample Name:** JPL-GW, MW-18-4, 1/30/2013 10:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 15:41	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-07 | **Client Sample Name:** JPL-GW, MW-18-4, 1/30/2013 10:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 15:41	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-07 | **Client Sample Name:** JPL-GW, MW-18-4, 1/30/2013 10:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**12**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 15:39	LD1	IC6	1	BWB0605

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-07 | **Client Sample Name:** JPL-GW, MW-18-4, 1/30/2013 10:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**2.2**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 21:48	TDC	KONE-1	1	BWA2097
2	EPA-200.8	02/06/13	02/07/13 20:17	JSS	PE-EL1	1	BWB0310

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-08 | **Client Sample Name:** JPL-GW, MW-18-3, 1/30/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**7.2**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**1.5**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-08 | **Client Sample Name:** JPL-GW, MW-18-3, 1/30/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.14**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.71**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	**0.15**	**ug/L**	**0.50**	**0.15**	**EPA-524.2**	ND	**J**	1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-08 | **Client Sample Name:** JPL-GW, MW-18-3, 1/30/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 08:34	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-08 | **Client Sample Name:** JPL-GW, MW-18-3, 1/30/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 08:34	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-08 | **Client Sample Name:** JPL-GW, MW-18-3, 1/30/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**46**	**ug/L**	**20**	**4.0**	**EPA-314.0**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/09/13 00:18	LS1	IC6	5	BWB0606

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-08 | **Client Sample Name:** JPL-GW, MW-18-3, 1/30/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**2.1**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 21:55	TDC	KONE-1	1	BWA2100
2	EPA-200.8	02/06/13	02/07/13 17:46	JSS	PE-EL1	1	BWB0310

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-09 | **Client Sample Name:** JPL-GW, MW-3-4, 1/30/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-09 | **Client Sample Name:** JPL-GW, MW-3-4, 1/30/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-09 | **Client Sample Name:** JPL-GW, MW-3-4, 1/30/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 16:49	MGC	MS-V5	1	BWB0008

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-09 | **Client Sample Name:** JPL-GW, MW-3-4, 1/30/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 16:49	MGC	MS-V5	1	BWB0008

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-09 | **Client Sample Name:** JPL-GW, MW-3-4, 1/30/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 18:58	LS1	IC6	1	BWB0607

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-09 | **Client Sample Name:** JPL-GW, MW-3-4, 1/30/2013 12:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0050	0.0018	EPA-7196	ND	A10	1
Total Recoverable Chromium	**10**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 21:55	TDC	KONE-1	1	BWA2101
2	EPA-200.8	02/06/13	02/07/13 20:31	JSS	PE-EL1	1	BWB0310

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505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-10 | **Client Sample Name:** JPL-GW, MW-3-3, 1/30/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-10 | **Client Sample Name:** JPL-GW, MW-3-3, 1/30/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-10 | **Client Sample Name:** JPL-GW, MW-3-3, 1/30/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	115	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 16:04	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-10 | **Client Sample Name:** JPL-GW, MW-3-3, 1/30/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 16:04	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-10 | **Client Sample Name:** JPL-GW, MW-3-3, 1/30/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 20:18	LS1	IC6	1	BWB0607

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-10 | **Client Sample Name:** JPL-GW, MW-3-3, 1/30/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**2.5**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 22:01	TDC	KONE-1	1	BWA2101
2	EPA-200.8	02/06/13	02/07/13 20:34	JSS	PE-EL1	1	BWB0310

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-11 | **Client Sample Name:** JPL-GW, MW-3-2, 1/30/2013 1:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-11 | **Client Sample Name:** JPL-GW, MW-3-2, 1/30/2013 1:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.070**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-11 | **Client Sample Name:** JPL-GW, MW-3-2, 1/30/2013 1:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 20:12	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-11 | **Client Sample Name:** JPL-GW, MW-3-2, 1/30/2013 1:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 20:12	MGC	MS-V5	1	BWB0007

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-11 | **Client Sample Name:** JPL-GW, MW-3-2, 1/30/2013 1:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 20:32	LS1	IC6	1	BWB0607

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-11 | **Client Sample Name:** JPL-GW, MW-3-2, 1/30/2013 1:35:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.72**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 22:01	TDC	KONE-1	1	BWA2101
2	EPA-200.8	02/06/13	02/07/13 20:37	JSS	PE-EL1	1	BWB0310

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-12 | **Client Sample Name:** JPL-GW, MW-18-2, 1/30/2013 11:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-12 | **Client Sample Name:** JPL-GW, MW-18-2, 1/30/2013 11:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302075-12 | **Client Sample Name:** JPL-GW, MW-18-2, 1/30/2013 11:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 20:34	MGC	MS-V5	1	BWB0007

Battelle MHTS
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Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302075-12 | **Client Sample Name:** JPL-GW, MW-18-2, 1/30/2013 11:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 20:34	MGC	MS-V5	1	BWB0007

Battelle MHTS
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Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302075-12 | **Client Sample Name:** JPL-GW, MW-18-2, 1/30/2013 11:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/08/13	02/08/13 20:45	LS1	IC6	1	BWB0607

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302075-12 | **Client Sample Name:** JPL-GW, MW-18-2, 1/30/2013 11:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0040	0.0014	EPA-7196	ND	A10	1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/30/13	01/30/13 22:17	TDC	KONE-1	1	BWA2101
2	EPA-200.8	02/06/13	02/07/13 20:41	JSS	PE-EL1	1	BWB0310

Battelle MHTS
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0007						
Benzene	BWB0007-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0007-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0007-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0007-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0007-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0007-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0007-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0007-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0007-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0007-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWB0007-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0007-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0007-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0007-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0007-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0007-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0007-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0007-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0007-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0007-BLK1	ND	ug/L	0.50	0.14	

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Project: JPL- GW Monitoring Wells
Project Number: 1Q13
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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0007						
trans-1,3-Dichloropropene	BWB0007-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0007-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0007-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0007-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0007-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0007-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0007-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0007-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0007-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0007-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0007-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0007-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0007-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0007-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0007-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0007-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0007-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0007-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0007-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0007-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0007-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0007-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0007-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0007-BLK1	ND	ug/L	4.0	0.97	

Battelle MHTS
505 King Ave.
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Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0007						
Ethyl t-butyl ether	BWB0007-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0007-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0007-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0007-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0007-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0007-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0007-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0007-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0007-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0007-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0007-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0007-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0007-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0007-BLK1	107	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0007-BLK1	98.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0007-BLK1	96.7	%	80 - 120 (LCL - UCL)		
QC Batch ID: BWB0008						
Benzene	BWB0008-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0008-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0008-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0008-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0008-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0008-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0008-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0008-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0008-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0008-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0008-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0008-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0008-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0008-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0008-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0008-BLK1	ND	ug/L	0.50	0.15	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0008						
Dibromochloromethane	BWB0008-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0008-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0008-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0008-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0008-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0008-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0008-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0008-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0008-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0008-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0008-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0008-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0008-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0008-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0008-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0008-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0008-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0008-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BWB0008-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0008-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0008-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0008-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0008-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0008-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0008-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0008-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0008-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0008-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0008-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0008-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0008-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0008-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0008-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0008-BLK1	ND	ug/L	0.50	0.19	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0008						
1,1,1-Trichloroethane	BWB0008-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0008-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0008-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0008-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0008-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0008-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0008-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0008-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0008-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0008-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0008-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0008-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0008-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0008-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0008-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0008-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0008-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0008-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BWB0008-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0008-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0008-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0008-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0008-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0008-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0008-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0008-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0008-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0008-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0008-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0008-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0008-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0008-BLK1	112	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0008-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0008-BLK1	98.2	%	80 - 120 (LCL - UCL)		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0007										
Benzene	BWB0007-BS1	LCS	24.190	25.000	ug/L	96.8		70 - 130		
Bromodichloromethane	BWB0007-BS1	LCS	24.770	25.000	ug/L	99.1		70 - 130		
Chlorobenzene	BWB0007-BS1	LCS	22.870	25.000	ug/L	91.5		70 - 130		
Chloroethane	BWB0007-BS1	LCS	26.730	25.000	ug/L	107		70 - 130		
1,4-Dichlorobenzene	BWB0007-BS1	LCS	23.370	25.000	ug/L	93.5		70 - 130		
1,1-Dichloroethane	BWB0007-BS1	LCS	23.450	25.000	ug/L	93.8		70 - 130		
1,1-Dichloroethene	BWB0007-BS1	LCS	24.820	25.000	ug/L	99.3		70 - 130		
Toluene	BWB0007-BS1	LCS	23.310	25.000	ug/L	93.2		70 - 130		
Trichloroethene	BWB0007-BS1	LCS	22.720	25.000	ug/L	90.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0007-BS1	LCS	10.690	10.000	ug/L	107		75 - 125		
Toluene-d8 (Surrogate)	BWB0007-BS1	LCS	9.8000	10.000	ug/L	98.0		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0007-BS1	LCS	9.9000	10.000	ug/L	99.0		80 - 120		
QC Batch ID: BWB0008										
Benzene	BWB0008-BS1	LCS	23.360	25.000	ug/L	93.4		70 - 130		
Bromodichloromethane	BWB0008-BS1	LCS	25.210	25.000	ug/L	101		70 - 130		
Chlorobenzene	BWB0008-BS1	LCS	23.300	25.000	ug/L	93.2		70 - 130		
Chloroethane	BWB0008-BS1	LCS	26.140	25.000	ug/L	105		70 - 130		
1,4-Dichlorobenzene	BWB0008-BS1	LCS	23.590	25.000	ug/L	94.4		70 - 130		
1,1-Dichloroethane	BWB0008-BS1	LCS	22.610	25.000	ug/L	90.4		70 - 130		
1,1-Dichloroethene	BWB0008-BS1	LCS	24.310	25.000	ug/L	97.2		70 - 130		
Toluene	BWB0008-BS1	LCS	23.730	25.000	ug/L	94.9		70 - 130		
Trichloroethene	BWB0008-BS1	LCS	24.270	25.000	ug/L	97.1		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0008-BS1	LCS	10.520	10.000	ug/L	105		75 - 125		
Toluene-d8 (Surrogate)	BWB0008-BS1	LCS	10.010	10.000	ug/L	100		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0008-BS1	LCS	10.220	10.000	ug/L	102		80 - 120		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0007	Used client sample: Y - Description: MW-18-3, 01/30/2013 11:15										
Benzene	MS	1302075-08	ND	25.020	25.000	ug/L		100		70 - 130	
	MSD	1302075-08	ND	23.870	25.000	ug/L	4.7	95.5	20	70 - 130	
Bromodichloromethane	MS	1302075-08	ND	25.690	25.000	ug/L		103		70 - 130	
	MSD	1302075-08	ND	24.760	25.000	ug/L	3.7	99.0	20	70 - 130	
Chlorobenzene	MS	1302075-08	ND	23.730	25.000	ug/L		94.9		70 - 130	
	MSD	1302075-08	ND	22.550	25.000	ug/L	5.1	90.2	20	70 - 130	
Chloroethane	MS	1302075-08	ND	27.830	25.000	ug/L		111		70 - 130	
	MSD	1302075-08	ND	26.900	25.000	ug/L	3.4	108	20	70 - 130	
1,4-Dichlorobenzene	MS	1302075-08	ND	23.900	25.000	ug/L		95.6		70 - 130	
	MSD	1302075-08	ND	22.360	25.000	ug/L	6.7	89.4	20	70 - 130	
1,1-Dichloroethane	MS	1302075-08	ND	24.250	25.000	ug/L		97.0		70 - 130	
	MSD	1302075-08	ND	22.920	25.000	ug/L	5.6	91.7	20	70 - 130	
1,1-Dichloroethene	MS	1302075-08	ND	25.800	25.000	ug/L		103		70 - 130	
	MSD	1302075-08	ND	24.390	25.000	ug/L	5.6	97.6	20	70 - 130	
Toluene	MS	1302075-08	ND	24.330	25.000	ug/L		97.3		70 - 130	
	MSD	1302075-08	ND	23.200	25.000	ug/L	4.8	92.8	20	70 - 130	
Trichloroethene	MS	1302075-08	0.71000	24.210	25.000	ug/L		94.0		70 - 130	
	MSD	1302075-08	0.71000	23.230	25.000	ug/L	4.1	90.1	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302075-08	ND	10.530	10.000	ug/L		105		75 - 125	
	MSD	1302075-08	ND	10.410	10.000	ug/L	1.1	104		75 - 125	
Toluene-d8 (Surrogate)	MS	1302075-08	ND	9.8500	10.000	ug/L		98.5		80 - 120	
	MSD	1302075-08	ND	9.9100	10.000	ug/L	0.6	99.1		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302075-08	ND	10.070	10.000	ug/L		101		80 - 120	
	MSD	1302075-08	ND	9.8800	10.000	ug/L	1.9	98.8		80 - 120	
QC Batch ID: BWB0008	Used client sample: Y - Description: MW-3-4, 01/30/2013 12:35										
Benzene	MS	1302075-09	ND	24.460	25.000	ug/L		97.8		70 - 130	
	MSD	1302075-09	ND	23.710	25.000	ug/L	3.1	94.8	20	70 - 130	
Bromodichloromethane	MS	1302075-09	ND	26.100	25.000	ug/L		104		70 - 130	
	MSD	1302075-09	ND	25.330	25.000	ug/L	3.0	101	20	70 - 130	
Chlorobenzene	MS	1302075-09	ND	23.450	25.000	ug/L		93.8		70 - 130	
	MSD	1302075-09	ND	23.350	25.000	ug/L	0.4	93.4	20	70 - 130	
Chloroethane	MS	1302075-09	ND	27.740	25.000	ug/L		111		70 - 130	
	MSD	1302075-09	ND	26.790	25.000	ug/L	3.5	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1302075-09	ND	23.160	25.000	ug/L		92.6		70 - 130	
	MSD	1302075-09	ND	23.250	25.000	ug/L	0.4	93.0	20	70 - 130	
1,1-Dichloroethane	MS	1302075-09	ND	24.020	25.000	ug/L		96.1		70 - 130	
	MSD	1302075-09	ND	23.370	25.000	ug/L	2.7	93.5	20	70 - 130	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0008	Used client sample: Y - Description: MW-3-4, 01/30/2013 12:35										
1,1-Dichloroethene	MS	1302075-09	ND	25.380	25.000	ug/L		102		70 - 130	
	MSD	1302075-09	ND	24.570	25.000	ug/L	3.2	98.3	20	70 - 130	
Toluene	MS	1302075-09	ND	24.350	25.000	ug/L		97.4		70 - 130	
	MSD	1302075-09	ND	23.970	25.000	ug/L	1.6	95.9	20	70 - 130	
Trichloroethene	MS	1302075-09	ND	23.410	25.000	ug/L		93.6		70 - 130	
	MSD	1302075-09	ND	22.780	25.000	ug/L	2.7	91.1	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302075-09	ND	10.940	10.000	ug/L		109		75 - 125	
	MSD	1302075-09	ND	10.480	10.000	ug/L	4.3	105		75 - 125	
Toluene-d8 (Surrogate)	MS	1302075-09	ND	9.9900	10.000	ug/L		99.9		80 - 120	
	MSD	1302075-09	ND	10.060	10.000	ug/L	0.7	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302075-09	ND	10.130	10.000	ug/L		101		80 - 120	
	MSD	1302075-09	ND	10.230	10.000	ug/L	1.0	102		80 - 120	

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Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0007						
Chloroacetonitrile	BWB0007-BLK1	0	ug/L			
1-Chlorobutane	BWB0007-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0007-BLK1	0	ug/L			
Methyl acrylate	BWB0007-BLK1	0	ug/L			
Nitrobenzene	BWB0007-BLK1	0	ug/L			
2-Nitropropane	BWB0007-BLK1	0	ug/L			
QC Batch ID: BWB0008						
Chloroacetonitrile	BWB0008-BLK1	0	ug/L			
1-Chlorobutane	BWB0008-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0008-BLK1	0	ug/L			
Methyl acrylate	BWB0008-BLK1	0	ug/L			
Nitrobenzene	BWB0008-BLK1	0	ug/L			
2-Nitropropane	BWB0008-BLK1	0	ug/L			

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Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0605						
Perchlorate	BWB0605-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0606						
Perchlorate	BWB0606-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0607						
Perchlorate	BWB0607-BLK1	ND	ug/L	4.0	0.81	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0605										
Perchlorate	BWB0605-BS1	LCS	10.709	10.000	ug/L	107		85 - 115		
QC Batch ID: BWB0606										
Perchlorate	BWB0606-BS1	LCS	10.952	10.000	ug/L	110		85 - 115		
QC Batch ID: BWB0607										
Perchlorate	BWB0607-BS1	LCS	10.668	10.000	ug/L	107		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0605	Used client sample: Y - Description: MW-17-4, 01/30/2013 08:20										
Perchlorate	DUP	1302075-03	9.9640	8.6341		ug/L	14.3		15		
	MS	1302075-03	9.9640	20.049	10.101	ug/L		99.8		80 - 120	
	MSD	1302075-03	9.9640	19.924	10.101	ug/L	0.6	98.6	15	80 - 120	
QC Batch ID: BWB0606	Used client sample: Y - Description: MW-18-3, 01/30/2013 11:15										
Perchlorate	DUP	1302075-08	46.332	46.158		ug/L	0.4		15		
	MS	1302075-08	46.332	100.45	50.505	ug/L		107		80 - 120	
	MSD	1302075-08	46.332	103.60	50.505	ug/L	3.1	113	15	80 - 120	
QC Batch ID: BWB0607	Used client sample: Y - Description: MW-3-4, 01/30/2013 12:35										
Perchlorate	DUP	1302075-09	ND	ND		ug/L			15		
	MS	1302075-09	ND	10.603	10.101	ug/L		105		80 - 120	
	MSD	1302075-09	ND	11.014	10.101	ug/L	3.8	109	15	80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWA2097						
Hexavalent Chromium	BWA2097-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWA2100						
Hexavalent Chromium	BWA2100-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWA2101						
Hexavalent Chromium	BWA2101-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB0310						
Total Recoverable Chromium	BWB0310-BLK1	ND	ug/L	3.0	0.50	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWA2097										
Hexavalent Chromium	BWA2097-BS1	LCS	0.049358	0.050000	mg/L	98.7		85 - 115		
QC Batch ID: BWA2100										
Hexavalent Chromium	BWA2100-BS1	LCS	0.049963	0.050000	mg/L	99.9		85 - 115		
QC Batch ID: BWA2101										
Hexavalent Chromium	BWA2101-BS1	LCS	0.049807	0.050000	mg/L	99.6		85 - 115		
QC Batch ID: BWB0310										
Total Recoverable Chromium	BWB0310-BS1	LCS	41.777	40.000	ug/L	104		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWA2097	Used client sample: Y - Description: MW-17-4, 01/30/2013 08:20										
Hexavalent Chromium	DUP	1302075-03	ND	ND		mg/L			10		
	MS	1302075-03	ND	0.053797	0.052632	mg/L		102		85 - 115	
	MSD	1302075-03	ND	0.053708	0.052632	mg/L	0.2	102	10	85 - 115	
QC Batch ID: BWA2100	Used client sample: Y - Description: MW-18-3, 01/30/2013 11:15										
Hexavalent Chromium	DUP	1302075-08	ND	ND		mg/L			10		
	MS	1302075-08	ND	0.054124	0.052632	mg/L		103		85 - 115	
	MSD	1302075-08	ND	0.053697	0.052632	mg/L	0.8	102	10	85 - 115	
QC Batch ID: BWA2101	Used client sample: Y - Description: MW-3-4, 01/30/2013 12:35										
Hexavalent Chromium	DUP	1302075-09	ND	ND		mg/L			10		
	MS	1302075-09	ND	0.050261	0.052632	mg/L		95.5		85 - 115	
	MSD	1302075-09	ND	0.050276	0.052632	mg/L	0.0	95.5	10	85 - 115	
QC Batch ID: BWB0310	Used client sample: Y - Description: MW-18-3, 01/30/2013 11:15										
Total Recoverable Chromium	DUP	1302075-08	2.1040	2.5140		ug/L	17.8		20		J
	MS	1302075-08	2.1040	44.769	40.000	ug/L		107		70 - 130	
	MSD	1302075-08	2.1040	45.538	40.000	ug/L	1.7	109	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/11/2013 16:45
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A10	PQL's and MDL's were raised due to matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/25/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1302177
Invoice ID:	B139959

Enclosed are the results of analyses for samples received by the laboratory on 1/31/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

Table of Contents

Table of Contents

Chain of Custody Form

BC Laboratories, Inc.

Page 1 of 1

*Required Fields

Report To: Client:* Battelle MHTS
Attn:* David Conner
Street Address:* 505 King Ave.
City:* Columbus State:* OH Zip:* 43201
Phone#:*(614) 424 - 5489 Fax#: (614) 458 - 5489
Email Address: connerd@battelle.org
Submission #: 1302177

Project Description:* JPL-GW Monitoring
Project Code:* 1Q13
Sampler (s):* Blaine Tech

Billing
Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*
Are there any tests with holding times less than or equal to 48 hours? ☑ Yes ☐ No
*Standard Turnaround = 10

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6-7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2	Notes
-1	TB-4-1/31/13	1-31-13	0630	AQ	X							
-2	SB-2-1/31/13		0640		X	X	X	X				
-3	EB-4-1/31/13		0650		X	X	X	X				
-4	MW-22-3		0740		X	X	X	X				
-5	MW-22-2		0810		X	X	X	X				Level IV
-6	MW-22-1		0840		X	X	X	X				
-7	MW-24-4		1040			X		X				Level IV
-8	MW-24-3		1115		X	X	X	X				
-9	MW-24-2		1200		X	X	X	X				
-10	MW-24-1	↓	1250	↓	X	X	X	X	X	X	X	MS/MSD*

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Relinquished By:	Date	Time	Received By:	Date	Time
1.		1-31-13	1500	MA SG	1-31-13	1500
2.	MA SG	1-31-13	1645		1-31-13	1645
3.		1-31-13	2000	KOM	1-31-13	2000

BC Laboratories, Inc. 4100 Atlas Court – Bakersfield CA 93308 (661) 327 – 4911 Fax: (661) 327 – 1918 www.bclabs.com

* MS/MSD sample for VOC's, Total Cr, Perchlorate and Hex Cr ONLY.

Chain of Custody and Cooler Receipt Form for 1302177 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 1

Submission #: 1302177

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals | Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Otpe Thermometer ID: 207 Date/Time 1-31-13 2000

Temperature: (A) 2.5 °C / (C) 2.8 °C Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL		B	B	B	B	B	A	B	B	B
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS		C	C	C	C	C	B	C	C	C
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A1									
40ml VOA VIAL		A3	A3	A3	A3	A3		A3	A3	AM
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL-504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

CHK BY KIQ

DISTRIBUTION Ice WA MH SUB-OUT ☐

SHORT HOLDING Cr^{+6} NO_2 NO_3 DO Cl_2 BOD MBAS

Comments:

Sample Numbering Completed By: JDW Date/Time: 1-31-13 2150

A = Actual / C = Corrected

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302177-01	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 06:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB-4-1/31/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Trip Blank
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): TB-4-1/31/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302177-02	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 06:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	SB-2-1/31/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): SB-2-1/31/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302177-03	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 06:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	EB-4-1/31/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): EB-2-1/31/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302177-04	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 07:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-22-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-22-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302177-05	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 08:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-22-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-22-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302177-06	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 08:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-22-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-22-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302177-07	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 10:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-24-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-24-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302177-08	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 11:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-24-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-24-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302177-09	**COC Number:**	---	**Receive Date:**	01/31/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	01/31/2013 12:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-24-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-24-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information

1302177-10

COC Number: ---
Project Number: JPL-GW
Sampling Location: ---
Sampling Point: MW-24-1
Sampled By: Blaine Tech of BAT

Receive Date: 01/31/2013 20:00
Sampling Date: 01/31/2013 12:50
Sample Depth: ---
Lab Matrix: Water
Sample Type: Aqueous
Delivery Work Order:
Global ID: 00000000000
Location ID (FieldPoint): MW-24-1
Matrix: W
Sample QC Type (SACode): CS
Cooler ID:

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-01 | **Client Sample Name:** JPL-GW, TB-4-1/31/13, 1/31/2013 6:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-01 | **Client Sample Name:** JPL-GW, TB-4-1/31/13, 1/31/2013 6:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-01 | **Client Sample Name:** JPL-GW, TB-4-1/31/13, 1/31/2013 6:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 02:11	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-01 | **Client Sample Name:** JPL-GW, TB-4-1/31/13, 1/31/2013 6:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 02:11	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-02 | **Client Sample Name:** JPL-GW, SB-2-1/31/13, 1/31/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-02 | **Client Sample Name:** JPL-GW, SB-2-1/31/13, 1/31/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-02 | **Client Sample Name:** JPL-GW, SB-2-1/31/13, 1/31/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 02:34	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-02 | **Client Sample Name:** JPL-GW, SB-2-1/31/13, 1/31/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 02:34	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302177-02 | **Client Sample Name:** JPL-GW, SB-2-1/31/13, 1/31/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 11:25	LS1	IC6	1	BWB0635

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-02 | **Client Sample Name:** JPL-GW, SB-2-1/31/13, 1/31/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	01/31/13 22:49	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 16:56	JSS	PE-EL1	1	BWB0344

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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-03 | **Client Sample Name:** JPL-GW, EB-4-1/31/13, 1/31/2013 6:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-03 | **Client Sample Name:** JPL-GW, EB-4-1/31/13, 1/31/2013 6:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-03 | **Client Sample Name:** JPL-GW, EB-4-1/31/13, 1/31/2013 6:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 02:56	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-03 | **Client Sample Name:** JPL-GW, EB-4-1/31/13, 1/31/2013 6:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 02:56	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302177-03 | **Client Sample Name:** JPL-GW, EB-4-1/31/13, 1/31/2013 6:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 11:38	LS1	IC6	1	BWB0635

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-03 | **Client Sample Name:** JPL-GW, EB-4-1/31/13, 1/31/2013 6:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	01/31/13 22:49	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 16:59	JSS	PE-EL1	1	BWB0344

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-04 | **Client Sample Name:** JPL-GW, MW-22-3, 1/31/2013 7:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-04 | **Client Sample Name:** JPL-GW, MW-22-3, 1/31/2013 7:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-04 | **Client Sample Name:** JPL-GW, MW-22-3, 1/31/2013 7:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 03:19	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-04 | **Client Sample Name:** JPL-GW, MW-22-3, 1/31/2013 7:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 03:19	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302177-04 | **Client Sample Name:** JPL-GW, MW-22-3, 1/31/2013 7:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**5.0**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 20:04	LD1	IC6	1	BWB0635

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-04 | **Client Sample Name:** JPL-GW, MW-22-3, 1/31/2013 7:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0010**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND	**J**	1
Total Recoverable Chromium	**2.5**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	01/31/13 22:49	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 17:02	JSS	PE-EL1	1	BWB0344

Battelle MHTS
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-05 | **Client Sample Name:** JPL-GW, MW-22-2, 1/31/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.17**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-05 | **Client Sample Name:** JPL-GW, MW-22-2, 1/31/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.15**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.19**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-05 | **Client Sample Name:** JPL-GW, MW-22-2, 1/31/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 03:41	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-05 | **Client Sample Name:** JPL-GW, MW-22-2, 1/31/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 03:41	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302177-05 | **Client Sample Name:** JPL-GW, MW-22-2, 1/31/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.2**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 12:05	LS1	IC6	1	BWB0635

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-05 | **Client Sample Name:** JPL-GW, MW-22-2, 1/31/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**2.0**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	01/31/13 22:49	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 17:05	JSS	PE-EL1	1	BWB0344

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-06 | **Client Sample Name:** JPL-GW, MW-22-1, 1/31/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.40**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.13**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-06 | **Client Sample Name:** JPL-GW, MW-22-1, 1/31/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.37**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**1.2**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-06 | **Client Sample Name:** JPL-GW, MW-22-1, 1/31/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 04:04	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-06 | **Client Sample Name:** JPL-GW, MW-22-1, 1/31/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 04:04	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302177-06 | **Client Sample Name:** JPL-GW, MW-22-1, 1/31/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**4.5**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 12:18	LS1	IC6	1	BWB0635

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-06 | **Client Sample Name:** JPL-GW, MW-22-1, 1/31/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0040	0.0014	EPA-7196	ND	A10	1
Total Recoverable Chromium	**1.7**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	02/01/13 00:47	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 17:09	JSS	PE-EL1	1	BWB0344

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-07 | **Client Sample Name:** JPL-GW, MW-24-4, 1/31/2013 10:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	01/31/13 22:54	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 17:12	JSS	PE-EL1	1	BWB0344

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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-08 | **Client Sample Name:** JPL-GW, MW-24-3, 1/31/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.14**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-08 | **Client Sample Name:** JPL-GW, MW-24-3, 1/31/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.13**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-08 | **Client Sample Name:** JPL-GW, MW-24-3, 1/31/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	116	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 04:26	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-08 | **Client Sample Name:** JPL-GW, MW-24-3, 1/31/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 04:26	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302177-08 | **Client Sample Name:** JPL-GW, MW-24-3, 1/31/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 12:31	LS1	IC6	1	BWB0635

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-08 | **Client Sample Name:** JPL-GW, MW-24-3, 1/31/2013 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.73**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	01/31/13 22:54	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 17:15	JSS	PE-EL1	1	BWB0344

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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-09 | **Client Sample Name:** JPL-GW, MW-24-2, 1/31/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**0.21**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND	**J**	1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.22**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND	**J**	1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.39**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.12**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-09 | **Client Sample Name:** JPL-GW, MW-24-2, 1/31/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.16**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-09 | **Client Sample Name:** JPL-GW, MW-24-2, 1/31/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	112	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 04:49	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-09 | **Client Sample Name:** JPL-GW, MW-24-2, 1/31/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/02/13 04:49	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302177-09 | **Client Sample Name:** JPL-GW, MW-24-2, 1/31/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**9.9**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 12:45	LS1	IC6	1	BWB0635

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-09 | **Client Sample Name:** JPL-GW, MW-24-2, 1/31/2013 12:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.00091**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND	**J**	1
Total Recoverable Chromium	**2.9**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	02/01/13 00:47	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 17:18	JSS	PE-EL1	1	BWB0344

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-10 | **Client Sample Name:** JPL-GW, MW-24-1, 1/31/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	**0.13**	**ug/L**	**0.50**	**0.083**	**EPA-524.2**	ND	**J**	1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**2.6**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**7.2**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-10 | **Client Sample Name:** JPL-GW, MW-24-1, 1/31/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	**0.62**	**ug/L**	**0.50**	**0.48**	**EPA-524.2**	ND		1
Methyl t-butyl ether	**0.16**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.16**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302177-10 | **Client Sample Name:** JPL-GW, MW-24-1, 1/31/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 23:56	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302177-10 | **Client Sample Name:** JPL-GW, MW-24-1, 1/31/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/01/13	02/01/13 23:56	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302177-10 | **Client Sample Name:** JPL-GW, MW-24-1, 1/31/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**77**	**mg/L**	**0.50**	**0.068**	**EPA-300.0**	0.16		1
Nitrate as N	**0.93**	**mg/L**	**0.10**	**0.021**	**EPA-300.0**	ND		1
Sulfate	**34**	**mg/L**	**1.0**	**0.13**	**EPA-300.0**	ND		1
Nitrite as N	**0.012**	**mg/L**	**0.050**	**0.012**	**EPA-353.2**	ND	**J**	2
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		3
ortho-Phosphate as P	ND	mg/L	0.020	0.0038	EPA-365.1	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	01/31/13	02/01/13 05:21	LD1	IC1	1	BWB0025
2	EPA-353.2	02/01/13	02/01/13 08:16	TDC	KONE-1	1	BWB0080
3	EPA-314.0	02/09/13	02/09/13 12:58	LS1	IC6	1	BWB0636
4	EPA-365.1	02/01/13	02/01/13 08:02	TDC	KONE-1	1	BWB0083

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302177-10 | **Client Sample Name:** JPL-GW, MW-24-1, 1/31/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**19**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	01/31/13	01/31/13 22:48	TDC	KONE-1	1	BWB0085
2	EPA-200.8	02/06/13	02/07/13 16:24	JSS	PE-EL1	1	BWB0344

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505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0058						
Benzene	BWB0058-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0058-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0058-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0058-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0058-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0058-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0058-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0058-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0058-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0058-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWB0058-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0058-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0058-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0058-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0058-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0058-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0058-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0058-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0058-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0058-BLK1	ND	ug/L	0.50	0.14	

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505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0058						
trans-1,3-Dichloropropene	BWB0058-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0058-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0058-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0058-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0058-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0058-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0058-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0058-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0058-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0058-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0058-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0058-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0058-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0058-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0058-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0058-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0058-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0058-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0058-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0058-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0058-BLK1	ND	ug/L	4.0	0.97	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0058						
Ethyl t-butyl ether	BWB0058-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0058-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0058-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0058-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0058-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0058-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0058-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0058-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0058-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0058-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0058-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0058-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0058-BLK1	111	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0058-BLK1	98.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0058-BLK1	97.2	%	80 - 120 (LCL - UCL)		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0058										
Benzene	BWB0058-BS1	LCS	24.300	25.000	ug/L	97.2		70 - 130		
Bromodichloromethane	BWB0058-BS1	LCS	25.620	25.000	ug/L	102		70 - 130		
Chlorobenzene	BWB0058-BS1	LCS	23.110	25.000	ug/L	92.4		70 - 130		
Chloroethane	BWB0058-BS1	LCS	26.520	25.000	ug/L	106		70 - 130		
1,4-Dichlorobenzene	BWB0058-BS1	LCS	23.550	25.000	ug/L	94.2		70 - 130		
1,1-Dichloroethane	BWB0058-BS1	LCS	23.440	25.000	ug/L	93.8		70 - 130		
1,1-Dichloroethene	BWB0058-BS1	LCS	25.030	25.000	ug/L	100		70 - 130		
Toluene	BWB0058-BS1	LCS	23.680	25.000	ug/L	94.7		70 - 130		
Trichloroethene	BWB0058-BS1	LCS	25.360	25.000	ug/L	101		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0058-BS1	LCS	10.980	10.000	ug/L	110		75 - 125		
Toluene-d8 (Surrogate)	BWB0058-BS1	LCS	9.8100	10.000	ug/L	98.1		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0058-BS1	LCS	10.230	10.000	ug/L	102		80 - 120		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0058	Used client sample: Y - Description: MW-24-1, 01/31/2013 12:50										
Benzene	MS	1302177-10	0.13000	24.110	25.000	ug/L		95.9		70 - 130	
	MSD	1302177-10	0.13000	23.930	25.000	ug/L	0.7	95.2	20	70 - 130	
Bromodichloromethane	MS	1302177-10	2.5600	28.360	25.000	ug/L		103		70 - 130	
	MSD	1302177-10	2.5600	28.380	25.000	ug/L	0.1	103	20	70 - 130	
Chlorobenzene	MS	1302177-10	ND	23.460	25.000	ug/L		93.8		70 - 130	
	MSD	1302177-10	ND	23.040	25.000	ug/L	1.8	92.2	20	70 - 130	
Chloroethane	MS	1302177-10	ND	27.280	25.000	ug/L		109		70 - 130	
	MSD	1302177-10	ND	26.490	25.000	ug/L	2.9	106	20	70 - 130	
1,4-Dichlorobenzene	MS	1302177-10	ND	23.400	25.000	ug/L		93.6		70 - 130	
	MSD	1302177-10	ND	22.620	25.000	ug/L	3.4	90.5	20	70 - 130	
1,1-Dichloroethane	MS	1302177-10	ND	23.100	25.000	ug/L		92.4		70 - 130	
	MSD	1302177-10	ND	23.160	25.000	ug/L	0.3	92.6	20	70 - 130	
1,1-Dichloroethene	MS	1302177-10	ND	25.230	25.000	ug/L		101		70 - 130	
	MSD	1302177-10	ND	24.760	25.000	ug/L	1.9	99.0	20	70 - 130	
Toluene	MS	1302177-10	ND	24.060	25.000	ug/L		96.2		70 - 130	
	MSD	1302177-10	ND	23.800	25.000	ug/L	1.1	95.2	20	70 - 130	
Trichloroethene	MS	1302177-10	ND	23.280	25.000	ug/L		93.1		70 - 130	
	MSD	1302177-10	ND	23.210	25.000	ug/L	0.3	92.8	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302177-10	ND	10.940	10.000	ug/L		109		75 - 125	
	MSD	1302177-10	ND	10.940	10.000	ug/L	0	109		75 - 125	
Toluene-d8 (Surrogate)	MS	1302177-10	ND	9.9900	10.000	ug/L		99.9		80 - 120	
	MSD	1302177-10	ND	9.9900	10.000	ug/L	0	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302177-10	ND	10.360	10.000	ug/L		104		80 - 120	
	MSD	1302177-10	ND	10.040	10.000	ug/L	3.1	100		80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0058						
Chloroacetonitrile	BWB0058-BLK1	0	ug/L			
1-Chlorobutane	BWB0058-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0058-BLK1	0	ug/L			
Methyl acrylate	BWB0058-BLK1	0	ug/L			
Nitrobenzene	BWB0058-BLK1	0	ug/L			
2-Nitropropane	BWB0058-BLK1	0	ug/L			

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
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Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0025						
Chloride	BWB0025-BLK1	0.16100	mg/L	0.50	0.068	J
Nitrate as N	BWB0025-BLK1	ND	mg/L	0.10	0.021	
Sulfate	BWB0025-BLK1	ND	mg/L	1.0	0.13	
QC Batch ID: BWB0080						
Nitrite as N	BWB0080-BLK1	ND	mg/L	0.050	0.012	
QC Batch ID: BWB0083						
ortho-Phosphate as P	BWB0083-BLK1	ND	mg/L	0.020	0.0038	
QC Batch ID: BWB0635						
Perchlorate	BWB0635-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0636						
Perchlorate	BWB0636-BLK1	ND	ug/L	4.0	0.81	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0025										
Chloride	BWB0025-BS1	LCS	53.161	50.000	mg/L	106		90 - 110		
Nitrate as N	BWB0025-BS1	LCS	5.2010	5.0000	mg/L	104		90 - 110		
Sulfate	BWB0025-BS1	LCS	104.57	100.00	mg/L	105		90 - 110		
QC Batch ID: BWB0080										
Nitrite as N	BWB0080-BS1	LCS	0.50299	0.50000	mg/L	101		90 - 110		
QC Batch ID: BWB0083										
ortho-Phosphate as P	BWB0083-BS1	LCS	0.19653	0.20000	mg/L	98.3		90 - 110		
QC Batch ID: BWB0635										
Perchlorate	BWB0635-BS1	LCS	10.581	10.000	ug/L	106		85 - 115		
QC Batch ID: BWB0636										
Perchlorate	BWB0636-BS1	LCS	11.471	10.000	ug/L	115		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0025	Used client sample: N										
Chloride	DUP	302174-06RE1	56.938	56.920		mg/L	0.0		10		
	MS	302174-06RE1	56.938	111.25	50.505	mg/L		108		80 - 120	
	MSD	302174-06RE1	56.938	111.33	50.505	mg/L	0.1	108	10	80 - 120	
Nitrate as N	DUP	302174-06RE1	3.0850	3.0460		mg/L	1.3		10		
	MS	302174-06RE1	3.0850	8.3788	5.0505	mg/L		105		80 - 120	
	MSD	302174-06RE1	3.0850	8.4030	5.0505	mg/L	0.3	105	10	80 - 120	
Sulfate	DUP	302174-06RE1	123.96	123.95		mg/L	0.0		10		
	MS	302174-06RE1	123.96	234.15	101.01	mg/L		109		80 - 120	
	MSD	302174-06RE1	123.96	234.15	101.01	mg/L	0.0	109	10	80 - 120	
QC Batch ID: BWB0080	Used client sample: Y - Description: MW-24-1, 01/31/2013 12:50										
Nitrite as N	DUP	1302177-10	0.012014	ND		mg/L			10		
	MS	1302177-10	0.012014	0.52847	0.52632	mg/L		98.1		90 - 110	
	MSD	1302177-10	0.012014	0.53192	0.52632	mg/L	0.7	98.8	10	90 - 110	
QC Batch ID: BWB0083	Used client sample: Y - Description: MW-24-1, 01/31/2013 12:50										
ortho-Phosphate as P	DUP	1302177-10	ND	ND		mg/L			10		
	MS	1302177-10	ND	0.20408	0.21053	mg/L		96.9		90 - 110	
	MSD	1302177-10	ND	0.20439	0.21053	mg/L	0.2	97.1	10	90 - 110	
QC Batch ID: BWB0635	Used client sample: Y - Description: MW-22-2, 01/31/2013 08:10										
Perchlorate	DUP	1302177-05	3.2401	3.1221		ug/L	3.7		15		J
	MS	1302177-05	3.2401	14.163	10.101	ug/L		108		80 - 120	
	MSD	1302177-05	3.2401	13.840	10.101	ug/L	2.3	105	15	80 - 120	
QC Batch ID: BWB0636	Used client sample: Y - Description: MW-24-1, 01/31/2013 12:50										
Perchlorate	DUP	1302177-10	ND	ND		ug/L			15		
	MS	1302177-10	ND	11.795	10.101	ug/L		117		80 - 120	
	MSD	1302177-10	ND	11.814	10.101	ug/L	0.2	117	15	80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0085						
Hexavalent Chromium	BWB0085-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB0344						
Total Recoverable Chromium	BWB0344-BLK1	ND	ug/L	3.0	0.50	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0085										
Hexavalent Chromium	BWB0085-BS1	LCS	0.050181	0.050000	mg/L	100		85 - 115		
QC Batch ID: BWB0344										
Total Recoverable Chromium	BWB0344-BS1	LCS	43.640	40.000	ug/L	109		85 - 115		

Battelle MHTS
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Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0085	Used client sample: Y - Description: MW-24-1, 01/31/2013 12:50										
Hexavalent Chromium	DUP	1302177-10	ND	ND		mg/L			10		
	MS	1302177-10	ND	0.047993	0.052632	mg/L		91.2		85 - 115	
	MSD	1302177-10	ND	0.047601	0.052632	mg/L	0.8	90.4	10	85 - 115	
QC Batch ID: BWB0344	Used client sample: Y - Description: MW-24-1, 01/31/2013 12:50										
Total Recoverable Chromium	DUP	1302177-10	19.222	19.457		ug/L	1.2		20		
	MS	1302177-10	19.222	57.277	40.000	ug/L		95.1		70 - 130	
	MSD	1302177-10	19.222	59.086	40.000	ug/L	3.1	99.7	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:28
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A10	PQL's and MDL's were raised due to matrix interference.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/14/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1302259
Invoice ID:	B139948

Enclosed are the results of analyses for samples received by the laboratory on 2/1/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

Table of Contents

Table of Contents

BC Laboratories, Inc. — Chain of Custody Form

*Required Fields

Page 1 of 1

Report To: Client:*	Battelle MHTS
Attn:*	David Conner
Street Address:*	505 King Ave.
City:*	Columbus
State:*	OH
Zip:*	43201
Phone#:*	(614) 424 - 5489
Fax#:	(614) 458 - 5489
Email Address:	connerd@battelle.org
Submission #:	1302259
Project Description:*	JPL-GW Monitoring
Project Code:*	1Q13
Sampler (s):*	Blaine Tech

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2
-1	TB-5-2/1/13	2-1-13	0630	AQ	X						
-2	EB-5-2/1/13		0640		X	X	X	X			
-3	MW-23-4		0715			X		X			
-4	DUP-3-1Q13		0715			X		X			
-5	MW-23-3		0810		X	X	X	X			
-6	MW-23-2		0850		X	X	X	X			
-7	MW-23-1		0925		X	X	X	X			
-8	MW-26-2		1030		X	X	X	X			
-9	MW-26-1		1105		X	X	X	X			

Analysis Requested

Billing

Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*

Are there any tests with holding times? (less than or equal to 48 hours?)
☑ Yes ☐ No

*Standard Turnaround = 10

Notes

CHK BY: KH

DISTRIBUTION: WP MA MK

SUB-OUT ☐

Level IV

SHORT HOLDING TIME
Cr^{+6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Relinquished By:	Date	Time	Received By:	Date	Time
1.		2-1-13	1230	MA(SC)	2.1.13	1230
2.	MA(SC)	2.1.13	1635		2/1/13	1635
3.		2/1/13	1940		2-1-13	1940

BC Laboratories, Inc. 4100 Atlas Court – Bakersfield CA 93308 (661) 327 – 4911 Fax: (661) 327 – 1918 www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1302259 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 1

Submission #: 1302259

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Qtpe Thermometer ID: 207 Date/Time 2-1-13 1935

Temperature: (A) 1.8 °C / (C) 2.1 °C Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL		B	A	A	B	B	B	B	B	
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS		C	B	B	C	C	C	C	C	
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A1									
40ml VOA VIAL	"	A3	"	"	A3	A3	A3	A3	A3	"
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL-504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:

Sample Numbering Completed By: JNW Date/Time: 2-1-13 2010

A = Actual / C = Corrected

I:\MyDOCS\WordPerfect\LAB_DOCS\FORMS\SAMRECR13I

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302259-01	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 06:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB-5-2/1/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Trip Blank
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): TB-5-2/1/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302259-02	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 06:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	EB-5-2/1/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): EB-5-2/1/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302259-03	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 07:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-23-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): MW-23-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302259-04	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 07:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	DUP-3-1Q13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): DUP-3-1Q13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302259-05	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 08:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-23-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): MW-23-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302259-06	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 08:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-23-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): MW-23-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302259-07	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 09:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-23-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): MW-23-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302259-08	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 10:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-26-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): MW-26-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302259-09	**COC Number:**	---	**Receive Date:**	02/01/2013 19:40
	Project Number:	JPL-GW	**Sampling Date:**	02/01/2013 11:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-26-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 0000000000	
			Location ID (FieldPoint): MW-26-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-01 | **Client Sample Name:** JPL-GW, TB-5-2/1/13, 2/1/2013 6:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-01 | **Client Sample Name:** JPL-GW, TB-5-2/1/13, 2/1/2013 6:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-01 | **Client Sample Name:** JPL-GW, TB-5-2/1/13, 2/1/2013 6:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 07:57	MGC	MS-V5	1	BWB0058

Battelle MHTS
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Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302259-01 | **Client Sample Name:** JPL-GW, TB-5-2/1/13, 2/1/2013 6:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 07:57	MGC	MS-V5	1	BWB0058

Battelle MHTS
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Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-02 | **Client Sample Name:** JPL-GW, EB-5-2/1/13, 2/1/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-02 | **Client Sample Name:** JPL-GW, EB-5-2/1/13, 2/1/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-02 | **Client Sample Name:** JPL-GW, EB-5-2/1/13, 2/1/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 08:20	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302259-02 | **Client Sample Name:** JPL-GW, EB-5-2/1/13, 2/1/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 08:20	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302259-02 | **Client Sample Name:** JPL-GW, EB-5-2/1/13, 2/1/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 16:44	LD1	IC6	1	BWB0637

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302259-02 | **Client Sample Name:** JPL-GW, EB-5-2/1/13, 2/1/2013 6:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/01/13	02/01/13 21:57	TDC	KONE-1	1	BWB0151
2	EPA-200.8	02/07/13	02/07/13 21:27	JSS	PE-EL1	1	BWB0473

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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302259-03 | **Client Sample Name:** JPL-GW, MW-23-4, 2/1/2013 7:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0016**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND	**J**	1
Total Recoverable Chromium	**3.0**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/01/13	02/01/13 21:57	TDC	KONE-1	1	BWB0151
2	EPA-200.8	02/07/13	02/07/13 21:58	JSS	PE-EL1	1	BWB0473

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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302259-04 | **Client Sample Name:** JPL-GW, DUP-3-1Q13, 2/1/2013 7:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0017**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND	**J**	1
Total Recoverable Chromium	**3.1**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/01/13	02/01/13 22:45	TDC	KONE-1	1	BWB0151
2	EPA-200.8	02/07/13	02/07/13 22:01	JSS	PE-EL1	1	BWB0473

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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-05 | **Client Sample Name:** JPL-GW, MW-23-3, 2/1/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-05 | **Client Sample Name:** JPL-GW, MW-23-3, 2/1/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-05 | **Client Sample Name:** JPL-GW, MW-23-3, 2/1/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 08:42	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302259-05 | **Client Sample Name:** JPL-GW, MW-23-3, 2/1/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 08:42	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302259-05 | **Client Sample Name:** JPL-GW, MW-23-3, 2/1/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**2.6**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 16:58	LD1	IC6	1	BWB0637

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302259-05 | **Client Sample Name:** JPL-GW, MW-23-3, 2/1/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0018**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND	**J**	1
Total Recoverable Chromium	**3.2**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/01/13	02/01/13 21:57	TDC	KONE-1	1	BWB0151
2	EPA-200.8	02/07/13	02/07/13 22:04	JSS	PE-EL1	1	BWB0473

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-06 | **Client Sample Name:** JPL-GW, MW-23-2, 2/1/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.44**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.15**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-06 | **Client Sample Name:** JPL-GW, MW-23-2, 2/1/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.28**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.67**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-06 | **Client Sample Name:** JPL-GW, MW-23-2, 2/1/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	111	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 09:05	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302259-06 | **Client Sample Name:** JPL-GW, MW-23-2, 2/1/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 09:05	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302259-06 | **Client Sample Name:** JPL-GW, MW-23-2, 2/1/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.7**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 17:11	LD1	IC6	1	BWB0637

Battelle MHTS
505 King Ave.
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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302259-06 | **Client Sample Name:** JPL-GW, MW-23-2, 2/1/2013 8:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.6**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/01/13	02/01/13 21:57	TDC	KONE-1	1	BWB0151
2	EPA-200.8	02/07/13	02/07/13 22:07	JSS	PE-EL1	1	BWB0473

Battelle MHTS
505 King Ave.
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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-07 | **Client Sample Name:** JPL-GW, MW-23-1, 2/1/2013 9:25:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.37**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.13**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-07 | **Client Sample Name:** JPL-GW, MW-23-1, 2/1/2013 9:25:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.30**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**1.9**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-07 | **Client Sample Name:** JPL-GW, MW-23-1, 2/1/2013 9:25:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 09:27	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302259-07 | **Client Sample Name:** JPL-GW, MW-23-1, 2/1/2013 9:25:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 09:27	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302259-07 | **Client Sample Name:** JPL-GW, MW-23-1, 2/1/2013 9:25:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.8**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 17:24	LD1	IC6	1	BWB0637

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302259-07 | **Client Sample Name:** JPL-GW, MW-23-1, 2/1/2013 9:25:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.6**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/01/13	02/01/13 22:03	TDC	KONE-1	1	BWB0151
2	EPA-200.8	02/07/13	02/07/13 22:11	JSS	PE-EL1	1	BWB0473

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-08 | **Client Sample Name:** JPL-GW, MW-26-2, 2/1/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-08 | **Client Sample Name:** JPL-GW, MW-26-2, 2/1/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-08 | **Client Sample Name:** JPL-GW, MW-26-2, 2/1/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 09:50	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302259-08 | **Client Sample Name:** JPL-GW, MW-26-2, 2/1/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 09:50	MGC	MS-V5	1	BWB0058

Battelle MHTS
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Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302259-08 | **Client Sample Name:** JPL-GW, MW-26-2, 2/1/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/11/13 14:20	LD1	IC6	1	BWB0637

Battelle MHTS
505 King Ave.
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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302259-08 | **Client Sample Name:** JPL-GW, MW-26-2, 2/1/2013 10:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**3.6**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/01/13	02/01/13 22:03	TDC	KONE-1	1	BWB0151
2	EPA-200.8	02/07/13	02/07/13 22:14	JSS	PE-EL1	1	BWB0473

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-09 | **Client Sample Name:** JPL-GW, MW-26-1, 2/1/2013 11:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.34**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-09 | **Client Sample Name:** JPL-GW, MW-26-1, 2/1/2013 11:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**1.0**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.33**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302259-09 | **Client Sample Name:** JPL-GW, MW-26-1, 2/1/2013 11:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	115	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 10:12	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302259-09 | **Client Sample Name:** JPL-GW, MW-26-1, 2/1/2013 11:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/04/13	02/04/13 10:12	MGC	MS-V5	1	BWB0058

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302259-09 | **Client Sample Name:** JPL-GW, MW-26-1, 2/1/2013 11:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**4.6**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/09/13	02/09/13 17:51	LD1	IC6	1	BWB0637

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505 King Ave.
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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302259-09 | **Client Sample Name:** JPL-GW, MW-26-1, 2/1/2013 11:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/01/13	02/01/13 22:03	TDC	KONE-1	1	BWB0151
2	EPA-200.8	02/07/13	02/07/13 22:17	JSS	PE-EL1	1	BWB0473

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0058						
Benzene	BWB0058-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0058-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0058-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0058-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0058-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0058-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0058-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0058-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0058-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0058-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWB0058-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0058-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0058-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0058-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0058-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0058-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0058-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0058-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0058-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0058-BLK1	ND	ug/L	0.50	0.14	

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505 King Ave.
Columbus, OH 43201

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Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0058						
trans-1,3-Dichloropropene	BWB0058-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0058-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0058-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0058-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0058-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0058-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0058-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0058-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0058-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0058-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0058-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0058-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0058-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0058-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0058-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0058-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0058-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0058-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0058-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0058-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0058-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0058-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0058-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0058-BLK1	ND	ug/L	4.0	0.97	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0058						
Ethyl t-butyl ether	BWB0058-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0058-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0058-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0058-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0058-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0058-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0058-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0058-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0058-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0058-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0058-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0058-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0058-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0058-BLK1	111	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0058-BLK1	98.1	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0058-BLK1	97.2	%	80 - 120 (LCL - UCL)		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0058										
Benzene	BWB0058-BS1	LCS	24.300	25.000	ug/L	97.2		70 - 130		
Bromodichloromethane	BWB0058-BS1	LCS	25.620	25.000	ug/L	102		70 - 130		
Chlorobenzene	BWB0058-BS1	LCS	23.110	25.000	ug/L	92.4		70 - 130		
Chloroethane	BWB0058-BS1	LCS	26.520	25.000	ug/L	106		70 - 130		
1,4-Dichlorobenzene	BWB0058-BS1	LCS	23.550	25.000	ug/L	94.2		70 - 130		
1,1-Dichloroethane	BWB0058-BS1	LCS	23.440	25.000	ug/L	93.8		70 - 130		
1,1-Dichloroethene	BWB0058-BS1	LCS	25.030	25.000	ug/L	100		70 - 130		
Toluene	BWB0058-BS1	LCS	23.680	25.000	ug/L	94.7		70 - 130		
Trichloroethene	BWB0058-BS1	LCS	25.360	25.000	ug/L	101		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0058-BS1	LCS	10.980	10.000	ug/L	110		75 - 125		
Toluene-d8 (Surrogate)	BWB0058-BS1	LCS	9.8100	10.000	ug/L	98.1		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0058-BS1	LCS	10.230	10.000	ug/L	102		80 - 120		

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Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0058	Used client sample: Y - Description: MW-24-1, 01/31/2013 12:50										
Benzene	MS	1302177-10	0.13000	24.110	25.000	ug/L		95.9		70 - 130	
	MSD	1302177-10	0.13000	23.930	25.000	ug/L	0.7	95.2	20	70 - 130	
Bromodichloromethane	MS	1302177-10	2.5600	28.360	25.000	ug/L		103		70 - 130	
	MSD	1302177-10	2.5600	28.380	25.000	ug/L	0.1	103	20	70 - 130	
Chlorobenzene	MS	1302177-10	ND	23.460	25.000	ug/L		93.8		70 - 130	
	MSD	1302177-10	ND	23.040	25.000	ug/L	1.8	92.2	20	70 - 130	
Chloroethane	MS	1302177-10	ND	27.280	25.000	ug/L		109		70 - 130	
	MSD	1302177-10	ND	26.490	25.000	ug/L	2.9	106	20	70 - 130	
1,4-Dichlorobenzene	MS	1302177-10	ND	23.400	25.000	ug/L		93.6		70 - 130	
	MSD	1302177-10	ND	22.620	25.000	ug/L	3.4	90.5	20	70 - 130	
1,1-Dichloroethane	MS	1302177-10	ND	23.100	25.000	ug/L		92.4		70 - 130	
	MSD	1302177-10	ND	23.160	25.000	ug/L	0.3	92.6	20	70 - 130	
1,1-Dichloroethene	MS	1302177-10	ND	25.230	25.000	ug/L		101		70 - 130	
	MSD	1302177-10	ND	24.760	25.000	ug/L	1.9	99.0	20	70 - 130	
Toluene	MS	1302177-10	ND	24.060	25.000	ug/L		96.2		70 - 130	
	MSD	1302177-10	ND	23.800	25.000	ug/L	1.1	95.2	20	70 - 130	
Trichloroethene	MS	1302177-10	ND	23.280	25.000	ug/L		93.1		70 - 130	
	MSD	1302177-10	ND	23.210	25.000	ug/L	0.3	92.8	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302177-10	ND	10.940	10.000	ug/L		109		75 - 125	
	MSD	1302177-10	ND	10.940	10.000	ug/L	0	109		75 - 125	
Toluene-d8 (Surrogate)	MS	1302177-10	ND	9.9900	10.000	ug/L		99.9		80 - 120	
	MSD	1302177-10	ND	9.9900	10.000	ug/L	0	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302177-10	ND	10.360	10.000	ug/L		104		80 - 120	
	MSD	1302177-10	ND	10.040	10.000	ug/L	3.1	100		80 - 120	

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Columbus, OH 43201

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Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0058						
Chloroacetonitrile	BWB0058-BLK1	0	ug/L			
1-Chlorobutane	BWB0058-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0058-BLK1	0	ug/L			
Methyl acrylate	BWB0058-BLK1	0	ug/L			
Nitrobenzene	BWB0058-BLK1	0	ug/L			
2-Nitropropane	BWB0058-BLK1	0	ug/L			

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Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0637						
Perchlorate	BWB0637-BLK1	ND	ug/L	4.0	0.81	

Battelle MHTS
505 King Ave.
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Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0637										
Perchlorate	BWB0637-BS1	LCS	11.049	10.000	ug/L	110		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
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Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0637	Used client sample: Y - Description: MW-23-3, 02/01/2013 08:10										
Perchlorate	DUP	1302259-05	2.6091	2.7447		ug/L	5.1		15		J
	MS	1302259-05	2.6091	13.371	10.101	ug/L		107		80 - 120	
	MSD	1302259-05	2.6091	12.675	10.101	ug/L	5.3	99.7	15	80 - 120	

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Columbus, OH 43201

Reported: 02/14/2013 13:24
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Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0151						
Hexavalent Chromium	BWB0151-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB0473						
Total Recoverable Chromium	BWB0473-BLK1	ND	ug/L	3.0	0.50	

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Project: JPL- GW Monitoring Wells
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Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0151										
Hexavalent Chromium	BWB0151-BS1	LCS	0.049091	0.050000	mg/L	98.2		85 - 115		
QC Batch ID: BWB0473										
Total Recoverable Chromium	BWB0473-BS1	LCS	40.692	40.000	ug/L	102		85 - 115		

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505 King Ave.
Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0151	Used client sample: Y - Description: MW-23-3, 02/01/2013 08:10										
Hexavalent Chromium	DUP	1302259-05	0.0017590	0.0015880		mg/L	10.2		10		J,A02
	MS	1302259-05	0.0017590	0.052838	0.052632	mg/L		97.0		85 - 115	
	MSD	1302259-05	0.0017590	0.053046	0.052632	mg/L	0.4	97.4	10	85 - 115	
QC Batch ID: BWB0473	Used client sample: Y - Description: EB-5-2/1/13, 02/01/2013 06:40										
Total Recoverable Chromium	DUP	1302259-02	ND	ND		ug/L			20		
	MS	1302259-02	ND	40.231	40.000	ug/L		101		70 - 130	
	MSD	1302259-02	ND	42.750	40.000	ug/L	6.1	107	20	70 - 130	

Battelle MHTS
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Columbus, OH 43201

Reported: 02/14/2013 13:24
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A02	The difference between duplicate readings is less than the PQL.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/20/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1302331
Invoice ID:	B140221

Enclosed are the results of analyses for samples received by the laboratory on 2/4/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

Table of Contents

Table of Contents

Chain of Custody Form

BC Laboratories, Inc.

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*Required Fields

Report To: Client:* Battelle MHTS	Project Description:* JPL-GW Monitoring
Attn:* David Conner	
Street Address:* 505 King Ave.	Project Code:* 1Q13
City:* Columbus State:* OH Zip:* 43201	
Phone#:* (614) 424 - 5489 Fax#: (614) 458 - 5489	Sampler (s):* Blaine Tech
Email Address: connerd@battelle.org	
Submission #: 1302331	

Billing
Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*
Are there any tests with holding times less than or equal to 48 hours?
☑ Yes ☐ No
*Standard Turnaround = 10

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2	Notes
-1	TB-6-2/4/13	2-4-13	0700	AQ	X							
-2	EB-6-2/4/13		0730		X	X	X	X				
-3	MW-4-3		0805		X	X	X	X				
-4	DUP-4-1013		0805		X	X	X	X				
-5	MW-4-2		0900		X	X	X	X				
-6	MW-4-1		0940		X	X	X	X				
-7	MW-12-5		1100		X		X					
-8	MW-12-4		1135		X		X					MS/MSD
-9	MW-12-3		1215		X	X	X	X				
-10	MW-12-2		1250		X	X	X	X				
-11	MW-12-1	↓	1330	↓	X	X	X	X				

CHK BY DISTRIBUTION
JWD
SUB-OUT ☐

SHORT HOLDING TIME
Cr+6 NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT
O = Other

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Date	Time		Date	Time
1. Relinquished By:	2-4-13	1500	1.Received By:	2/4/13	1500
2. Relinquished By:	2/4/13	1715	2.Received By:	2-4-13	1715
3. Relinquished By:			3.Received By:		

Chain of Custody and Cooler Receipt Form for 1302331 Page 2 of 3

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 2

Submission #: 1302331

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Qtpe Thermometer ID: 207

Temperature: (A) 0.8 °C / (C) 1.1 °C

Date/Time 2-4-13 1715

Analyst Init JDW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL		B	B	B	B	B	B	B	B	B
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS		C	C	C	C	C			C	C
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A(1)									
40ml VOA VIAL		A,3	A,3	A,3	A,3	A,3	A,3	A,4	A,3	A,3
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:_____

Sample Numbering Completed By: KIQ Date/Time: 2-4-13 @ 1725

A = Actual / C = Corrected

I:\MyDOCS\WordPerfect\LAB_DOCS\FORMS\SAMRECR13)

Chain of Custody and Cooler Receipt Form for 1302331 Page 3 of 3

C LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 2 Of 2

ubmission #: 1302331

SHIPPING INFORMATION	SHIPPING CONTAINER
ederal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
C Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

ustody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

ll samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Otpe Thermometer ID: 207

Temperature: (A) 0.8 °C / (C) 1.1 °C

Date/Time 2-4-13

Analyst Init VDW 1715

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
T GENERAL MINERAL/ GENERAL PHYSICAL	B									
T PE UNPRESERVED										
T INORGANIC CHEMICAL METALS										
T INORGANIC CHEMICAL METALS	C									
T CYANIDE										
T NITROGEN FORMS										
T TOTAL SULFIDE										
oz. NITRATE / NITRITE										
T TOTAL ORGANIC CARBON										
T TOX										
T CHEMICAL OXYGEN DEMAND										
TA PHENOLICS										
0ml VOA VIAL TRAVEL BLANK										
0ml VOA VIAL	A 3									
QT EPA 413.1, 413.2, 418.1										
T ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
0 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
00ml EPA 547										
00ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:_____

ample Numbering Completed By: KIQ Date/Time: 2-4-13 @ 1725

= Actual / C = Corrected

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1302331-01	**COC Number:**	---	**Receive Date:** 02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:** 02/04/2013 07:00
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	TB-6-2/4/13	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): TB-6-2/4/13
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1302331-02	**COC Number:**	---	**Receive Date:** 02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:** 02/04/2013 07:30
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	EB-6-2/4/13	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): EB-6-2/4/13
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1302331-03	**COC Number:**	---	**Receive Date:** 02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:** 02/04/2013 08:05
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-4-3	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): MW-4-3
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1302331-04	**COC Number:**	---	**Receive Date:** 02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:** 02/04/2013 08:05
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	DUP-4-1Q13	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): DUP-4-1Q13
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1302331-05	**COC Number:**	---	**Receive Date:** 02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:** 02/04/2013 09:00
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-4-2	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): MW-4-2
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:
1302331-06	**COC Number:**	---	**Receive Date:** 02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:** 02/04/2013 09:40
	Sampling Location:	---	**Sample Depth:** ---
	Sampling Point:	MW-4-1	**Lab Matrix:** Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:** Aqueous
			Delivery Work Order:
			Global ID: 00000000000
			Location ID (FieldPoint): MW-4-1
			Matrix: W
			Sample QC Type (SACode): CS
			Cooler ID:

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302331-07	**COC Number:**	---	**Receive Date:**	02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:**	02/04/2013 11:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-12-5	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-12-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302331-08	**COC Number:**	---	**Receive Date:**	02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:**	02/04/2013 11:35
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-12-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-12-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302331-09	**COC Number:**	---	**Receive Date:**	02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:**	02/04/2013 12:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-12-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-12-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302331-10	**COC Number:**	---	**Receive Date:**	02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:**	02/04/2013 12:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-12-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-12-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302331-11	**COC Number:**	---	**Receive Date:**	02/04/2013 17:15
	Project Number:	JPL-GW	**Sampling Date:**	02/04/2013 13:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-12-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-12-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-01 | **Client Sample Name:** JPL-GW, TB-6-2/4/13, 2/4/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-01 | **Client Sample Name:** JPL-GW, TB-6-2/4/13, 2/4/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-01 | **Client Sample Name:** JPL-GW, TB-6-2/4/13, 2/4/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 10:13	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-01 | **Client Sample Name:** JPL-GW, TB-6-2/4/13, 2/4/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 10:13	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-02 | **Client Sample Name:** JPL-GW, EB-6-2/4/13, 2/4/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-02 | **Client Sample Name:** JPL-GW, EB-6-2/4/13, 2/4/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-02 | **Client Sample Name:** JPL-GW, EB-6-2/4/13, 2/4/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 13:35	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-02 | **Client Sample Name:** JPL-GW, EB-6-2/4/13, 2/4/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 13:35	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-02 | **Client Sample Name:** JPL-GW, EB-6-2/4/13, 2/4/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 17:14	LS1	IC6	1	BWB1169

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302331-02 | **Client Sample Name:** JPL-GW, EB-6-2/4/13, 2/4/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.58**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/04/13	02/04/13 22:00	TDC	KONE-1	1	BWB0233
2	EPA-200.8	02/11/13	02/11/13 16:54	SRM	PE-EL1	1	BWB0679

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-03 | **Client Sample Name:** JPL-GW, MW-4-3, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-03 | **Client Sample Name:** JPL-GW, MW-4-3, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-03 | **Client Sample Name:** JPL-GW, MW-4-3, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 13:57	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-03 | **Client Sample Name:** JPL-GW, MW-4-3, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 13:57	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-03 | **Client Sample Name:** JPL-GW, MW-4-3, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**1.9**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 17:28	LS1	IC6	1	BWB1169

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302331-03 | **Client Sample Name:** JPL-GW, MW-4-3, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0011**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND	**J**	1
Total Recoverable Chromium	**3.5**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/04/13	02/04/13 22:00	TDC	KONE-1	1	BWB0233
2	EPA-200.8	02/11/13	02/11/13 16:57	SRM	PE-EL1	1	BWB0679

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-04 | **Client Sample Name:** JPL-GW, DUP-4-1Q13, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-04 | **Client Sample Name:** JPL-GW, DUP-4-1Q13, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-04 | **Client Sample Name:** JPL-GW, DUP-4-1Q13, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 14:20	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-04 | **Client Sample Name:** JPL-GW, DUP-4-1Q13, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 14:20	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-04 | **Client Sample Name:** JPL-GW, DUP-4-1Q13, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**1.5**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 17:41	LS1	IC6	1	BWB1169

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302331-04 | **Client Sample Name:** JPL-GW, DUP-4-1Q13, 2/4/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0011**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND	**J**	1
Total Recoverable Chromium	**3.4**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/04/13	02/04/13 22:00	TDC	KONE-1	1	BWB0233
2	EPA-200.8	02/11/13	02/11/13 17:00	SRM	PE-EL1	1	BWB0679

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-05 | **Client Sample Name:** JPL-GW, MW-4-2, 2/4/2013 9:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**1.7**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**2.3**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	**1.0**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.14**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-05 | **Client Sample Name:** JPL-GW, MW-4-2, 2/4/2013 9:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.37**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.19**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-05 | **Client Sample Name:** JPL-GW, MW-4-2, 2/4/2013 9:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 14:42	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-05 | **Client Sample Name:** JPL-GW, MW-4-2, 2/4/2013 9:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 14:42	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-05 | **Client Sample Name:** JPL-GW, MW-4-2, 2/4/2013 9:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**220**	**ug/L**	**80**	**16**	**EPA-314.0**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 17:54	LS1	IC6	20	BWB1169

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302331-05 | **Client Sample Name:** JPL-GW, MW-4-2, 2/4/2013 9:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**5.6**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/04/13	02/04/13 22:00	TDC	KONE-1	1	BWB0233
2	EPA-200.8	02/11/13	02/11/13 17:03	SRM	PE-EL1	1	BWB0679

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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-06 | **Client Sample Name:** JPL-GW, MW-4-1, 2/4/2013 9:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-06 | **Client Sample Name:** JPL-GW, MW-4-1, 2/4/2013 9:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-06 | **Client Sample Name:** JPL-GW, MW-4-1, 2/4/2013 9:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 15:05	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-06 | **Client Sample Name:** JPL-GW, MW-4-1, 2/4/2013 9:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 15:05	MGC	MS-V5	1	BWB0215

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Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-06 | **Client Sample Name:** JPL-GW, MW-4-1, 2/4/2013 9:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 18:08	LS1	IC6	1	BWB1169

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302331-06 | **Client Sample Name:** JPL-GW, MW-4-1, 2/4/2013 9:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.68**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/04/13	02/04/13 23:07	TDC	KONE-1	1	BWB0233
2	EPA-200.8	02/11/13	02/11/13 17:06	SRM	PE-EL1	1	BWB0679

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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-07 | **Client Sample Name:** JPL-GW, MW-12-5, 2/4/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.27**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND	**J**	1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.32**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-07 | **Client Sample Name:** JPL-GW, MW-12-5, 2/4/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.11**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-07 | **Client Sample Name:** JPL-GW, MW-12-5, 2/4/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 15:27	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-07 | **Client Sample Name:** JPL-GW, MW-12-5, 2/4/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 15:27	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-07 | **Client Sample Name:** JPL-GW, MW-12-5, 2/4/2013 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**1.9**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 21:27	LS1	IC6	1	BWB1169

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-08 | **Client Sample Name:** JPL-GW, MW-12-4, 2/4/2013 11:35:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.89**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.79**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-08 | **Client Sample Name:** JPL-GW, MW-12-4, 2/4/2013 11:35:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.080**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.35**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-08 | **Client Sample Name:** JPL-GW, MW-12-4, 2/4/2013 11:35:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 10:35	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-08 | **Client Sample Name:** JPL-GW, MW-12-4, 2/4/2013 11:35:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 10:35	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-08 | **Client Sample Name:** JPL-GW, MW-12-4, 2/4/2013 11:35:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**2.7**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 18:34	LS1	IC6	1	BWB1169

Battelle MHTS
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-09 | **Client Sample Name:** JPL-GW, MW-12-3, 2/4/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.76**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.53**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-09 | **Client Sample Name:** JPL-GW, MW-12-3, 2/4/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.090**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-09 | **Client Sample Name:** JPL-GW, MW-12-3, 2/4/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 15:50	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-09 | **Client Sample Name:** JPL-GW, MW-12-3, 2/4/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 15:50	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-09 | **Client Sample Name:** JPL-GW, MW-12-3, 2/4/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.9**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 19:54	LS1	IC6	1	BWB1169

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302331-09 | **Client Sample Name:** JPL-GW, MW-12-3, 2/4/2013 12:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.1**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/04/13	02/04/13 22:03	TDC	KONE-1	1	BWB0233
2	EPA-200.8	02/11/13	02/11/13 17:09	SRM	PE-EL1	1	BWB0679

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505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-10 | **Client Sample Name:** JPL-GW, MW-12-2, 2/4/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-10 | **Client Sample Name:** JPL-GW, MW-12-2, 2/4/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-10 | **Client Sample Name:** JPL-GW, MW-12-2, 2/4/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 16:12	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-10 | **Client Sample Name:** JPL-GW, MW-12-2, 2/4/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 16:12	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-10 | **Client Sample Name:** JPL-GW, MW-12-2, 2/4/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**8.9**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 20:07	LS1	IC6	1	BWB1169

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302331-10 | **Client Sample Name:** JPL-GW, MW-12-2, 2/4/2013 12:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**2.0**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/04/13	02/04/13 22:03	TDC	KONE-1	1	BWB0233
2	EPA-200.8	02/11/13	02/11/13 17:12	SRM	PE-EL1	1	BWB0679

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-11 | **Client Sample Name:** JPL-GW, MW-12-1, 2/4/2013 1:30:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-11 | **Client Sample Name:** JPL-GW, MW-12-1, 2/4/2013 1:30:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302331-11 | **Client Sample Name:** JPL-GW, MW-12-1, 2/4/2013 1:30:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 16:35	MGC	MS-V5	1	BWB0215

Battelle MHTS
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302331-11 | **Client Sample Name:** JPL-GW, MW-12-1, 2/4/2013 1:30:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/05/13	02/05/13 16:35	MGC	MS-V5	1	BWB0215

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302331-11 | **Client Sample Name:** JPL-GW, MW-12-1, 2/4/2013 1:30:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/19/13 20:21	LS1	IC6	1	BWB1169

Battelle MHTS
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302331-11 | **Client Sample Name:** JPL-GW, MW-12-1, 2/4/2013 1:30:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.1**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/04/13	02/05/13 07:42	TDC	KONE-1	1	BWB0233
2	EPA-200.8	02/11/13	02/11/13 17:15	SRM	PE-EL1	1	BWB0679

Battelle MHTS
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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0215						
Benzene	BWB0215-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0215-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0215-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0215-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0215-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0215-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0215-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0215-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0215-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0215-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0215-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0215-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0215-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0215-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0215-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0215-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWB0215-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0215-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0215-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0215-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0215-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0215-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0215-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0215-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0215-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0215-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0215-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0215-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0215-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0215-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0215-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0215-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0215-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0215-BLK1	ND	ug/L	0.50	0.14	

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505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0215						
trans-1,3-Dichloropropene	BWB0215-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0215-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0215-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0215-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0215-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0215-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0215-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0215-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0215-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0215-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0215-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0215-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0215-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0215-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0215-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0215-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWB0215-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0215-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0215-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0215-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0215-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0215-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0215-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0215-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0215-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0215-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0215-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0215-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0215-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0215-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0215-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0215-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0215-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0215-BLK1	ND	ug/L	4.0	0.97	

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Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0215						
Ethyl t-butyl ether	BWB0215-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0215-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0215-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0215-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0215-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0215-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0215-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0215-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0215-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0215-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0215-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0215-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0215-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0215-BLK1	104	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0215-BLK1	99.4	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0215-BLK1	98.2	%	80 - 120 (LCL - UCL)		

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505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0215										
Benzene	BWB0215-BS1	LCS	24.430	25.000	ug/L	97.7		70 - 130		
Bromodichloromethane	BWB0215-BS1	LCS	24.910	25.000	ug/L	99.6		70 - 130		
Chlorobenzene	BWB0215-BS1	LCS	24.080	25.000	ug/L	96.3		70 - 130		
Chloroethane	BWB0215-BS1	LCS	28.260	25.000	ug/L	113		70 - 130		
1,4-Dichlorobenzene	BWB0215-BS1	LCS	23.050	25.000	ug/L	92.2		70 - 130		
1,1-Dichloroethane	BWB0215-BS1	LCS	23.770	25.000	ug/L	95.1		70 - 130		
1,1-Dichloroethene	BWB0215-BS1	LCS	24.890	25.000	ug/L	99.6		70 - 130		
Toluene	BWB0215-BS1	LCS	24.360	25.000	ug/L	97.4		70 - 130		
Trichloroethene	BWB0215-BS1	LCS	23.750	25.000	ug/L	95.0		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0215-BS1	LCS	9.6700	10.000	ug/L	96.7		75 - 125		
Toluene-d8 (Surrogate)	BWB0215-BS1	LCS	9.9400	10.000	ug/L	99.4		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0215-BS1	LCS	9.8300	10.000	ug/L	98.3		80 - 120		

Battelle MHTS
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Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0215	Used client sample: Y - Description: MW-12-4, 02/04/2013 11:35										
Benzene	MS	1302331-08	ND	24.260	25.000	ug/L		97.0		70 - 130	
	MSD	1302331-08	ND	25.980	25.000	ug/L	6.8	104	20	70 - 130	
Bromodichloromethane	MS	1302331-08	ND	24.120	25.000	ug/L		96.5		70 - 130	
	MSD	1302331-08	ND	25.720	25.000	ug/L	6.4	103	20	70 - 130	
Chlorobenzene	MS	1302331-08	ND	23.340	25.000	ug/L		93.4		70 - 130	
	MSD	1302331-08	ND	24.680	25.000	ug/L	5.6	98.7	20	70 - 130	
Chloroethane	MS	1302331-08	ND	26.700	25.000	ug/L		107		70 - 130	
	MSD	1302331-08	ND	28.910	25.000	ug/L	7.9	116	20	70 - 130	
1,4-Dichlorobenzene	MS	1302331-08	ND	22.680	25.000	ug/L		90.7		70 - 130	
	MSD	1302331-08	ND	24.340	25.000	ug/L	7.1	97.4	20	70 - 130	
1,1-Dichloroethane	MS	1302331-08	ND	22.800	25.000	ug/L		91.2		70 - 130	
	MSD	1302331-08	ND	24.490	25.000	ug/L	7.1	98.0	20	70 - 130	
1,1-Dichloroethene	MS	1302331-08	ND	23.730	25.000	ug/L		94.9		70 - 130	
	MSD	1302331-08	ND	25.540	25.000	ug/L	7.3	102	20	70 - 130	
Toluene	MS	1302331-08	ND	24.110	25.000	ug/L		96.4		70 - 130	
	MSD	1302331-08	ND	25.200	25.000	ug/L	4.4	101	20	70 - 130	
Trichloroethene	MS	1302331-08	0.35000	23.570	25.000	ug/L		92.9		70 - 130	
	MSD	1302331-08	0.35000	24.680	25.000	ug/L	4.6	97.3	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302331-08	ND	9.8200	10.000	ug/L		98.2		75 - 125	
	MSD	1302331-08	ND	9.8900	10.000	ug/L	0.7	98.9		75 - 125	
Toluene-d8 (Surrogate)	MS	1302331-08	ND	9.8900	10.000	ug/L		98.9		80 - 120	
	MSD	1302331-08	ND	9.8400	10.000	ug/L	0.5	98.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302331-08	ND	10.020	10.000	ug/L		100		80 - 120	
	MSD	1302331-08	ND	9.8600	10.000	ug/L	1.6	98.6		80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0215						
Chloroacetonitrile	BWB0215-BLK1	0	ug/L			
1-Chlorobutane	BWB0215-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0215-BLK1	0	ug/L			
Methyl acrylate	BWB0215-BLK1	0	ug/L			
Nitrobenzene	BWB0215-BLK1	0	ug/L			
2-Nitropropane	BWB0215-BLK1	0	ug/L			

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB1169						
Perchlorate	BWB1169-BLK1	ND	ug/L	4.0	0.81	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB1169										
Perchlorate	BWB1169-BS1	LCS	10.506	10.000	ug/L	105		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB1169	Used client sample: Y - Description: MW-12-4, 02/04/2013 11:35										
Perchlorate	DUP	302331-08RE1	2.7170	2.8906		ug/L	6.2		15		J
	MS	302331-08RE1	2.7170	13.081	10.101	ug/L		103		80 - 120	
	MSD	302331-08RE1	2.7170	12.486	10.101	ug/L	4.7	96.7	15	80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0233						
Hexavalent Chromium	BWB0233-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB0679						
Total Recoverable Chromium	BWB0679-BLK1	ND	ug/L	3.0	0.50	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0233										
Hexavalent Chromium	BWB0233-BS1	LCS	0.050245	0.050000	mg/L	100		85 - 115		
QC Batch ID: BWB0679										
Total Recoverable Chromium	BWB0679-BS1	LCS	42.120	40.000	ug/L	105		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0233	Used client sample: Y - Description: EB-6-2/4/13, 02/04/2013 07:30										
Hexavalent Chromium	DUP	1302331-02	ND	ND		mg/L			10		
	MS	1302331-02	ND	0.052745	0.052632	mg/L		100		85 - 115	
	MSD	1302331-02	ND	0.053325	0.052632	mg/L	1.1	101	10	85 - 115	
QC Batch ID: BWB0679	Used client sample: N										
Total Recoverable Chromium	DUP	1302673-02	1.3980	1.8110		ug/L	25.7		20		J,A02
	MS	1302673-02	1.3980	41.521	40.000	ug/L		100		70 - 130	
	MSD	1302673-02	1.3980	41.441	40.000	ug/L	0.2	100	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/20/2013 10:29
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/19/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1302480
Invoice ID:	B140198

Enclosed are the results of analyses for samples received by the laboratory on 2/5/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

Table of Contents

Table of Contents

BC Laboratories, Inc. — Chain of Custody Form

*Required Fields

Page 1 of 1

Report To: Client:*	Battelle MHTS
Attn:*	David Conner
Street Address:*	505 King Ave.
City:*	Columbus
State:*	OH
Zip:*	43201
Phone#:*	(614) 424 - 5489
Fax#:	(614) 458 - 5489
Email Address:	connerd@battelle.org
Submission #:	1302480
Project Description:*	JPL-GW Monitoring
Project Code:*	1Q13
Sampler (s):*	Blaine Tech

Analysis Requested

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2				Notes
-1	TB-7-2/5/13	2-5-13	0720	AQ	X										
-2	EB-7-2/5/13		0730		X	X	X	X							
-3	MW-11-4		0800		X		X								
-4	MW-11-3		0840		X	X	X	X							MS/MSD
-5	MW-11-2		0915		X	X	X	X							Level IV
-6	MW-11-1		0950		X	X	X	X							
-7	MW-21-5		1130		X	X	X	X							
-8	MW-21-4		1210		X	X	X	X							
-9	MW-21-3		1245		X	X	X	X							
-10	MW-21-2		1320		X	X	X	X							
-11	MW-21-1	↓	1350	↓	X	X	X	X							MS/MSD

Billing

Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*

Are there any tests with holding times? less than or equal to 48 hours?
☑ Yes ☐ No

*Standard Turnaround = 10

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Date	Time		Date	Time
1. Relinquished By:	2-5-13	1540	1.Received By: Nicole (SG)	2/5/13	1540
2. Relinquished By: Nicole (SG)	2/5/13	1640	2.Received By:	2/5/13	1640
3. Relinquished By: BCL	2/5/13	1945	3.Received By: KOM	2/5/13	1945

BC Laboratories, Inc. 4100 Atlas Court – Bakersfield CA 93308 (661) 327 – 4911 Fax: (661) 327 – 1918 www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1302480 Page 1 of 4

BC Laboratories, Inc. Environmental Testing Laboratory Since 1949

4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 www.bclabs.com

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Chain of Custody and Cooler Receipt Form for 1302480 Page 2 of 4

Submission #: 1302480

SHIPPING INFORMATION
Federal Express ☐ UPS ☐ Hand Delivery ☐
BC Lab Field Service ☑ Other ☐ (Specify)

SHIPPING CONTAINER
Ice Chest ☑ None ☐
Box ☐ Other ☐ (Specify)

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 207
Temperature: (A) 4.3 °C / (C) 4.4 °C

Date/Time 2-5-13 1945
Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS 1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A1									
40ml VOA VIAL		A,3	A,3	A,4	A,3	A,3	A,3	A,3	A,3	A,3
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

CHK BY: KIP | DISTRIBUTION: JKZ MA MH | SUB-OUT ☐

SHORT HOLDING TIME: T – Cr^{+6} (circled) NO_2 NO_3 OP SS DO Cl_2 BOD MBAS COT

Comments:
Sample Numbering Completed By: JNW Date/Time: 2-5-13 2120
A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1302480 Page 3 of 4

Submission #: 1302480

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals | Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Opaque Thermometer ID: 207

Temperature: (A) 3.4 °C / (C) 3.7 °C

Date/Time 2-5-13 1945

Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL	B	B	B	B	B	B	B	B	B	B
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	C	C		C	C	C	C	C	C	C
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	( )	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:

Sample Numbering Completed By: JNW Date/Time: 2-5-13 2120

A = Actual / C = Corrected

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Chain of Custody and Cooler Receipt Form for 1302480 Page 4 of 4

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 3 Of 3

Submission #: 1302480

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

All samples received? Yes ☐ No ☐ All samples containers intact? Yes ☐ No ☐ Description(s) match COC? Yes ☐ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: VOA Thermometer ID: 207

Temperature: (A) 4.3 °C / (C) 4.4 °C

Date/Time 8-5-13 1945

Analyst Init JNW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A-4	( )	( )	( )	( )	( )	( )	( )	( )	( )
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:_____

Sample Numbering Completed By: JNW Date/Time: 8-5-13 2120

A = Actual / C = Corrected

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302480-01	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 07:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB-7-2/5/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Trip Blank
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): TB-7-2/5/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302480-02	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 07:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	EB-7-2/5/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): EB-7-2/5/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302480-03	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 08:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-11-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-11-4	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302480-04	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 08:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-11-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-11-3	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302480-05	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 09:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-11-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-11-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302480-06	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 09:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-11-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-11-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302480-07	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 11:30
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-21-5	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
	Delivery Work Order:			
	Global ID: 00000000000			
	Location ID (FieldPoint): MW-21-5			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1302480-08	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 12:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-21-4	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
	Delivery Work Order:			
	Global ID: 00000000000			
	Location ID (FieldPoint): MW-21-4			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			
1302480-09	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 12:45
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-21-3	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
	Delivery Work Order:			
	Global ID: 00000000000			
	Location ID (FieldPoint): MW-21-3			
	Matrix: W			
	Sample QC Type (SACode): CS			
	Cooler ID:			

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505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302480-10	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 13:20
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-21-2	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-21-2	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302480-11	**COC Number:**	---	**Receive Date:**	02/05/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/05/2013 13:50
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-21-1	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-21-1	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-01 | **Client Sample Name:** JPL-GW, TB-7-2/5/13, 2/5/2013 7:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-01 | **Client Sample Name:** JPL-GW, TB-7-2/5/13, 2/5/2013 7:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-01 | **Client Sample Name:** JPL-GW, TB-7-2/5/13, 2/5/2013 7:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 11:02	MGC	MS-V5	1	BWB0305

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505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-01 | **Client Sample Name:** JPL-GW, TB-7-2/5/13, 2/5/2013 7:20:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 11:02	MGC	MS-V5	1	BWB0305

Battelle MHTS
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-02 | **Client Sample Name:** JPL-GW, EB-7-2/5/13, 2/5/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-02 | **Client Sample Name:** JPL-GW, EB-7-2/5/13, 2/5/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-02 | **Client Sample Name:** JPL-GW, EB-7-2/5/13, 2/5/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 11:25	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-02 | **Client Sample Name:** JPL-GW, EB-7-2/5/13, 2/5/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 11:25	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-02 | **Client Sample Name:** JPL-GW, EB-7-2/5/13, 2/5/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/12/13	02/12/13 09:24	LD1	IC6	1	BWB0763

Battelle MHTS
505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-02 | **Client Sample Name:** JPL-GW, EB-7-2/5/13, 2/5/2013 7:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/05/13 22:30	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/12/13	02/12/13 23:54	SRM	PE-EL1	1	BWB0803

Battelle MHTS
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-03 | **Client Sample Name:** JPL-GW, MW-11-4, 2/5/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-03 | **Client Sample Name:** JPL-GW, MW-11-4, 2/5/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.16**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

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505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-03 | **Client Sample Name:** JPL-GW, MW-11-4, 2/5/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 11:47	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-03 | **Client Sample Name:** JPL-GW, MW-11-4, 2/5/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 11:47	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-03 | **Client Sample Name:** JPL-GW, MW-11-4, 2/5/2013 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/12/13	02/12/13 09:37	LD1	IC6	1	BWB0763

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-04 | **Client Sample Name:** JPL-GW, MW-11-3, 2/5/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-04 | **Client Sample Name:** JPL-GW, MW-11-3, 2/5/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	**0.11**	**ug/L**	**0.50**	**0.068**	**EPA-524.2**	ND	**J**	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

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505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-04 | **Client Sample Name:** JPL-GW, MW-11-3, 2/5/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 08:47	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-04 | **Client Sample Name:** JPL-GW, MW-11-3, 2/5/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 08:47	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-04 | **Client Sample Name:** JPL-GW, MW-11-3, 2/5/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/12/13	02/12/13 09:51	LD1	IC6	1	BWB0763

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-04 | **Client Sample Name:** JPL-GW, MW-11-3, 2/5/2013 8:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/05/13 22:30	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/12/13	02/12/13 23:21	SRM	PE-EL1	1	BWB0803

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-05 | **Client Sample Name:** JPL-GW, MW-11-2, 2/5/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.12**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND	**J**	1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-05 | **Client Sample Name:** JPL-GW, MW-11-2, 2/5/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-05 | **Client Sample Name:** JPL-GW, MW-11-2, 2/5/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 12:10	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-05 | **Client Sample Name:** JPL-GW, MW-11-2, 2/5/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 12:10	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-05 | **Client Sample Name:** JPL-GW, MW-11-2, 2/5/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/12/13 15:36	LD1	IC6	1	BWB0764

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-05 | **Client Sample Name:** JPL-GW, MW-11-2, 2/5/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/06/13 08:01	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/12/13	02/12/13 23:57	SRM	PE-EL1	1	BWB0803

Battelle MHTS
505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-06 | **Client Sample Name:** JPL-GW, MW-11-1, 2/5/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-06 | **Client Sample Name:** JPL-GW, MW-11-1, 2/5/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-06 | **Client Sample Name:** JPL-GW, MW-11-1, 2/5/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 12:32	MGC	MS-V5	1	BWB0305

Battelle MHTS
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-06 | **Client Sample Name:** JPL-GW, MW-11-1, 2/5/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 12:32	MGC	MS-V5	1	BWB0305

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-06 | **Client Sample Name:** JPL-GW, MW-11-1, 2/5/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/12/13 16:56	LS1	IC6	1	BWB0764

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-06 | **Client Sample Name:** JPL-GW, MW-11-1, 2/5/2013 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/06/13 08:01	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/12/13	02/13/13 00:00	SRM	PE-EL1	1	BWB0803

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-07 | **Client Sample Name:** JPL-GW, MW-21-5, 2/5/2013 11:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**5.6**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-07 | **Client Sample Name:** JPL-GW, MW-21-5, 2/5/2013 11:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.74**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.090**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

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505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-07 | **Client Sample Name:** JPL-GW, MW-21-5, 2/5/2013 11:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 12:55	MGC	MS-V5	1	BWB0305

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505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-07 | **Client Sample Name:** JPL-GW, MW-21-5, 2/5/2013 11:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 12:55	MGC	MS-V5	1	BWB0305

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-07 | **Client Sample Name:** JPL-GW, MW-21-5, 2/5/2013 11:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.0**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/12/13 17:10	LS1	IC6	1	BWB0764

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-07 | **Client Sample Name:** JPL-GW, MW-21-5, 2/5/2013 11:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.5**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/06/13 08:01	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/12/13	02/13/13 00:03	SRM	PE-EL1	1	BWB0803

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-08 | **Client Sample Name:** JPL-GW, MW-21-4, 2/5/2013 12:10:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**6.4**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	**0.090**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-08 | **Client Sample Name:** JPL-GW, MW-21-4, 2/5/2013 12:10:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.75**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-08 | **Client Sample Name:** JPL-GW, MW-21-4, 2/5/2013 12:10:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 13:17	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-08 | **Client Sample Name:** JPL-GW, MW-21-4, 2/5/2013 12:10:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 13:17	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-08 | **Client Sample Name:** JPL-GW, MW-21-4, 2/5/2013 12:10:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**2.7**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/12/13 17:23	LS1	IC6	1	BWB0764

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-08 | **Client Sample Name:** JPL-GW, MW-21-4, 2/5/2013 12:10:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.1**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/06/13 08:01	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/12/13	02/13/13 00:06	SRM	PE-EL1	1	BWB0803

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-09 | **Client Sample Name:** JPL-GW, MW-21-3, 2/5/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**2.7**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	**0.86**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-09 | **Client Sample Name:** JPL-GW, MW-21-3, 2/5/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	**0.28**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**4.7**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.73**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-09 | **Client Sample Name:** JPL-GW, MW-21-3, 2/5/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 13:40	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-09 | **Client Sample Name:** JPL-GW, MW-21-3, 2/5/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 13:40	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-09 | **Client Sample Name:** JPL-GW, MW-21-3, 2/5/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**4.0**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/12/13 17:36	LS1	IC6	1	BWB0764

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-09 | **Client Sample Name:** JPL-GW, MW-21-3, 2/5/2013 12:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.98**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/06/13 08:01	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/12/13	02/13/13 00:09	SRM	PE-EL1	1	BWB0803

Battelle MHTS
505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-10 | **Client Sample Name:** JPL-GW, MW-21-2, 2/5/2013 1:20:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**1.1**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	**0.34**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-10 | **Client Sample Name:** JPL-GW, MW-21-2, 2/5/2013 1:20:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	**0.20**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**2.2**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.29**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

Battelle MHTS
505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-10 | **Client Sample Name:** JPL-GW, MW-21-2, 2/5/2013 1:20:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 14:02	MGC	MS-V5	1	BWB0305

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-10 | **Client Sample Name:** JPL-GW, MW-21-2, 2/5/2013 1:20:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 14:02	MGC	MS-V5	1	BWB0305

Battelle MHTS
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Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-10 | **Client Sample Name:** JPL-GW, MW-21-2, 2/5/2013 1:20:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**1.8**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/12/13 17:49	LS1	IC6	1	BWB0764

Battelle MHTS
505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-10 | **Client Sample Name:** JPL-GW, MW-21-2, 2/5/2013 1:20:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/06/13 08:01	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/12/13	02/13/13 00:12	SRM	PE-EL1	1	BWB0803

Battelle MHTS
505 King Ave.
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Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-11 | **Client Sample Name:** JPL-GW, MW-21-1, 2/5/2013 1:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**2.1**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	**0.090**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-11 | **Client Sample Name:** JPL-GW, MW-21-1, 2/5/2013 1:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.93**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.11**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND	V11	1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302480-11 | **Client Sample Name:** JPL-GW, MW-21-1, 2/5/2013 1:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 14:47	MGC	MS-V5	1	BWB0336

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302480-11 | **Client Sample Name:** JPL-GW, MW-21-1, 2/5/2013 1:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/06/13	02/06/13 14:47	MGC	MS-V5	1	BWB0336

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302480-11 | **Client Sample Name:** JPL-GW, MW-21-1, 2/5/2013 1:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**3.2**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND	**J**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/12/13 18:29	LS1	IC6	1	BWB0765

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302480-11 | **Client Sample Name:** JPL-GW, MW-21-1, 2/5/2013 1:50:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.7**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/05/13	02/06/13 08:01	TDC	KONE-1	1	BWB0732
2	EPA-200.8	02/13/13	02/13/13 16:08	SRM	PE-EL1	1	BWB0856

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0305						
Benzene	BWB0305-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0305-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0305-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0305-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0305-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0305-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0305-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0305-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0305-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0305-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0305-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0305-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0305-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0305-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0305-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0305-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWB0305-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0305-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0305-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0305-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0305-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0305-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0305-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0305-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0305-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0305-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0305-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0305-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0305-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0305-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0305-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0305-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0305-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0305-BLK1	ND	ug/L	0.50	0.14	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0305						
trans-1,3-Dichloropropene	BWB0305-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0305-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0305-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0305-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0305-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0305-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0305-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0305-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0305-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0305-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0305-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0305-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0305-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0305-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0305-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0305-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWB0305-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0305-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0305-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0305-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0305-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0305-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0305-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0305-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0305-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0305-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0305-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0305-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0305-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0305-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0305-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0305-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0305-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0305-BLK1	ND	ug/L	4.0	0.97	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0305						
Ethyl t-butyl ether	BWB0305-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0305-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0305-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0305-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0305-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0305-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0305-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0305-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0305-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0305-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0305-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0305-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0305-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0305-BLK1	103	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0305-BLK1	97.6	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0305-BLK1	97.1	%	80 - 120 (LCL - UCL)		
QC Batch ID: BWB0336						
Benzene	BWB0336-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0336-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0336-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0336-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0336-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0336-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0336-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0336-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0336-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0336-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0336-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0336-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0336-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0336-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0336-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0336-BLK1	ND	ug/L	0.50	0.15	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0336						
Dibromochloromethane	BWB0336-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0336-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0336-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0336-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0336-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0336-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0336-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0336-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0336-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0336-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0336-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0336-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0336-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0336-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0336-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0336-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0336-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0336-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BWB0336-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0336-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0336-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0336-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0336-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0336-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0336-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0336-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0336-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0336-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0336-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0336-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0336-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0336-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0336-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0336-BLK1	ND	ug/L	0.50	0.19	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0336						
1,1,1-Trichloroethane	BWB0336-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0336-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0336-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0336-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0336-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0336-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0336-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0336-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0336-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0336-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0336-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0336-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0336-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0336-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0336-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0336-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0336-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0336-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BWB0336-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0336-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0336-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0336-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0336-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0336-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0336-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0336-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0336-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0336-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0336-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0336-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0336-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0336-BLK1	104	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0336-BLK1	99.4	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0336-BLK1	93.8	%	80 - 120 (LCL - UCL)		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0305										
Benzene	BWB0305-BS1	LCS	24.210	25.000	ug/L	96.8		70 - 130		
Bromodichloromethane	BWB0305-BS1	LCS	24.300	25.000	ug/L	97.2		70 - 130		
Chlorobenzene	BWB0305-BS1	LCS	23.250	25.000	ug/L	93.0		70 - 130		
Chloroethane	BWB0305-BS1	LCS	26.820	25.000	ug/L	107		70 - 130		
1,4-Dichlorobenzene	BWB0305-BS1	LCS	22.990	25.000	ug/L	92.0		70 - 130		
1,1-Dichloroethane	BWB0305-BS1	LCS	22.690	25.000	ug/L	90.8		70 - 130		
1,1-Dichloroethene	BWB0305-BS1	LCS	24.090	25.000	ug/L	96.4		70 - 130		
Toluene	BWB0305-BS1	LCS	23.650	25.000	ug/L	94.6		70 - 130		
Trichloroethene	BWB0305-BS1	LCS	23.210	25.000	ug/L	92.8		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0305-BS1	LCS	9.8300	10.000	ug/L	98.3		75 - 125		
Toluene-d8 (Surrogate)	BWB0305-BS1	LCS	9.9100	10.000	ug/L	99.1		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0305-BS1	LCS	9.8100	10.000	ug/L	98.1		80 - 120		
QC Batch ID: BWB0336										
Benzene	BWB0336-BS1	LCS	23.850	25.000	ug/L	95.4		70 - 130		
Bromodichloromethane	BWB0336-BS1	LCS	24.800	25.000	ug/L	99.2		70 - 130		
Chlorobenzene	BWB0336-BS1	LCS	23.010	25.000	ug/L	92.0		70 - 130		
Chloroethane	BWB0336-BS1	LCS	26.480	25.000	ug/L	106		70 - 130		
1,4-Dichlorobenzene	BWB0336-BS1	LCS	23.050	25.000	ug/L	92.2		70 - 130		
1,1-Dichloroethane	BWB0336-BS1	LCS	22.460	25.000	ug/L	89.8		70 - 130		
1,1-Dichloroethene	BWB0336-BS1	LCS	23.840	25.000	ug/L	95.4		70 - 130		
Toluene	BWB0336-BS1	LCS	23.860	25.000	ug/L	95.4		70 - 130		
Trichloroethene	BWB0336-BS1	LCS	24.090	25.000	ug/L	96.4		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0336-BS1	LCS	10.210	10.000	ug/L	102		75 - 125		
Toluene-d8 (Surrogate)	BWB0336-BS1	LCS	9.8800	10.000	ug/L	98.8		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0336-BS1	LCS	9.9700	10.000	ug/L	99.7		80 - 120		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0305	Used client sample: Y - Description: MW-11-3, 02/05/2013 08:40										
Benzene	MS	1302480-04	ND	24.610	25.000	ug/L		98.4		70 - 130	
	MSD	1302480-04	ND	24.050	25.000	ug/L	2.3	96.2	20	70 - 130	
Bromodichloromethane	MS	1302480-04	ND	24.780	25.000	ug/L		99.1		70 - 130	
	MSD	1302480-04	ND	24.430	25.000	ug/L	1.4	97.7	20	70 - 130	
Chlorobenzene	MS	1302480-04	ND	23.670	25.000	ug/L		94.7		70 - 130	
	MSD	1302480-04	ND	23.190	25.000	ug/L	2.0	92.8	20	70 - 130	
Chloroethane	MS	1302480-04	ND	27.880	25.000	ug/L		112		70 - 130	
	MSD	1302480-04	ND	26.450	25.000	ug/L	5.3	106	20	70 - 130	
1,4-Dichlorobenzene	MS	1302480-04	ND	23.320	25.000	ug/L		93.3		70 - 130	
	MSD	1302480-04	ND	22.960	25.000	ug/L	1.6	91.8	20	70 - 130	
1,1-Dichloroethane	MS	1302480-04	ND	22.980	25.000	ug/L		91.9		70 - 130	
	MSD	1302480-04	ND	22.850	25.000	ug/L	0.6	91.4	20	70 - 130	
1,1-Dichloroethene	MS	1302480-04	ND	24.270	25.000	ug/L		97.1		70 - 130	
	MSD	1302480-04	ND	23.560	25.000	ug/L	3.0	94.2	20	70 - 130	
Toluene	MS	1302480-04	ND	24.100	25.000	ug/L		96.4		70 - 130	
	MSD	1302480-04	ND	23.660	25.000	ug/L	1.8	94.6	20	70 - 130	
Trichloroethene	MS	1302480-04	ND	23.720	25.000	ug/L		94.9		70 - 130	
	MSD	1302480-04	ND	23.100	25.000	ug/L	2.6	92.4	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302480-04	ND	9.9100	10.000	ug/L		99.1		75 - 125	
	MSD	1302480-04	ND	9.9600	10.000	ug/L	0.5	99.6		75 - 125	
Toluene-d8 (Surrogate)	MS	1302480-04	ND	9.7600	10.000	ug/L		97.6		80 - 120	
	MSD	1302480-04	ND	9.8600	10.000	ug/L	1.0	98.6		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302480-04	ND	9.9500	10.000	ug/L		99.5		80 - 120	
	MSD	1302480-04	ND	9.7400	10.000	ug/L	2.1	97.4		80 - 120	
QC Batch ID: BWB0336	Used client sample: Y - Description: MW-21-1, 02/05/2013 13:50										
Benzene	MS	1302480-11	ND	24.570	25.000	ug/L		98.3		70 - 130	
	MSD	1302480-11	ND	23.860	25.000	ug/L	2.9	95.4	20	70 - 130	
Bromodichloromethane	MS	1302480-11	ND	25.480	25.000	ug/L		102		70 - 130	
	MSD	1302480-11	ND	25.090	25.000	ug/L	1.5	100	20	70 - 130	
Chlorobenzene	MS	1302480-11	ND	23.730	25.000	ug/L		94.9		70 - 130	
	MSD	1302480-11	ND	23.880	25.000	ug/L	0.6	95.5	20	70 - 130	
Chloroethane	MS	1302480-11	ND	27.190	25.000	ug/L		109		70 - 130	
	MSD	1302480-11	ND	26.680	25.000	ug/L	1.9	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1302480-11	ND	23.630	25.000	ug/L		94.5		70 - 130	
	MSD	1302480-11	ND	24.170	25.000	ug/L	2.3	96.7	20	70 - 130	
1,1-Dichloroethane	MS	1302480-11	ND	23.500	25.000	ug/L		94.0		70 - 130	
	MSD	1302480-11	ND	22.830	25.000	ug/L	2.9	91.3	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0336	Used client sample: Y - Description: MW-21-1, 02/05/2013 13:50										
1,1-Dichloroethene	MS	1302480-11	ND	24.500	25.000	ug/L		98.0		70 - 130	
	MSD	1302480-11	ND	23.890	25.000	ug/L	2.5	95.6	20	70 - 130	
Toluene	MS	1302480-11	ND	24.610	25.000	ug/L		98.4		70 - 130	
	MSD	1302480-11	ND	23.880	25.000	ug/L	3.0	95.5	20	70 - 130	
Trichloroethene	MS	1302480-11	0.11000	23.700	25.000	ug/L		94.4		70 - 130	
	MSD	1302480-11	0.11000	23.580	25.000	ug/L	0.5	93.9	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302480-11	ND	10.320	10.000	ug/L		103		75 - 125	
	MSD	1302480-11	ND	10.020	10.000	ug/L	2.9	100		75 - 125	
Toluene-d8 (Surrogate)	MS	1302480-11	ND	9.8300	10.000	ug/L		98.3		80 - 120	
	MSD	1302480-11	ND	9.8400	10.000	ug/L	0.1	98.4		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302480-11	ND	9.9900	10.000	ug/L		99.9		80 - 120	
	MSD	1302480-11	ND	10.180	10.000	ug/L	1.9	102		80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0305						
Chloroacetonitrile	BWB0305-BLK1	0	ug/L			
1-Chlorobutane	BWB0305-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0305-BLK1	0	ug/L			
Methyl acrylate	BWB0305-BLK1	0	ug/L			
Nitrobenzene	BWB0305-BLK1	0	ug/L			
2-Nitropropane	BWB0305-BLK1	0	ug/L			
QC Batch ID: BWB0336						
Chloroacetonitrile	BWB0336-BLK1	0	ug/L			
1-Chlorobutane	BWB0336-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0336-BLK1	0	ug/L			
Methyl acrylate	BWB0336-BLK1	0	ug/L			
Nitrobenzene	BWB0336-BLK1	0	ug/L			
2-Nitropropane	BWB0336-BLK1	0	ug/L			

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0763						
Perchlorate	BWB0763-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0764						
Perchlorate	BWB0764-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0765						
Perchlorate	BWB0765-BLK1	ND	ug/L	4.0	0.81	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0763										
Perchlorate	BWB0763-BS1	LCS	11.472	10.000	ug/L	115		85 - 115		
QC Batch ID: BWB0764										
Perchlorate	BWB0764-BS1	LCS	10.751	10.000	ug/L	108		85 - 115		
QC Batch ID: BWB0765										
Perchlorate	BWB0765-BS1	LCS	10.878	10.000	ug/L	109		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0763	Used client sample: Y - Description: MW-11-3, 02/05/2013 08:40										
Perchlorate	DUP	1302480-04	ND	ND		ug/L			15		
	MS	1302480-04	ND	10.493	10.101	ug/L		104		80 - 120	
	MSD	1302480-04	ND	10.588	10.101	ug/L	0.9	105	15	80 - 120	
QC Batch ID: BWB0764	Used client sample: Y - Description: MW-11-2, 02/05/2013 09:15										
Perchlorate	DUP	1302480-05	ND	ND		ug/L			15		
	MS	1302480-05	ND	10.421	10.101	ug/L		103		80 - 120	
	MSD	1302480-05	ND	11.065	10.101	ug/L	6.0	110	15	80 - 120	
QC Batch ID: BWB0765	Used client sample: Y - Description: MW-21-1, 02/05/2013 13:50										
Perchlorate	DUP	1302480-11	3.2082	3.2467		ug/L	1.2		15		J
	MS	1302480-11	3.2082	13.275	10.101	ug/L		99.7		80 - 120	
	MSD	1302480-11	3.2082	13.509	10.101	ug/L	1.7	102	15	80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0732						
Hexavalent Chromium	BWB0732-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB0803						
Total Recoverable Chromium	BWB0803-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: BWB0856						
Total Recoverable Chromium	BWB0856-BLK1	ND	ug/L	3.0	0.50	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0732										
Hexavalent Chromium	BWB0732-BS1	LCS	0.049724	0.050000	mg/L	99.4		85 - 115		
QC Batch ID: BWB0803										
Total Recoverable Chromium	BWB0803-BS1	LCS	38.864	40.000	ug/L	97.2		85 - 115		
QC Batch ID: BWB0856										
Total Recoverable Chromium	BWB0856-BS1	LCS	38.919	40.000	ug/L	97.3		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0732	Used client sample: Y - Description: MW-11-3, 02/05/2013 08:40										
Hexavalent Chromium	DUP	1302480-04	ND	ND		mg/L			10		
	MS	1302480-04	ND	0.053597	0.052632	mg/L		102		85 - 115	
	MSD	1302480-04	ND	0.053561	0.052632	mg/L	0.1	102	10	85 - 115	
QC Batch ID: BWB0803	Used client sample: Y - Description: MW-11-3, 02/05/2013 08:40										
Total Recoverable Chromium	DUP	1302480-04	ND	ND		ug/L			20		
	MS	1302480-04	ND	36.642	40.000	ug/L		91.6		70 - 130	
	MSD	1302480-04	ND	36.234	40.000	ug/L	1.1	90.6	20	70 - 130	
QC Batch ID: BWB0856	Used client sample: Y - Description: MW-21-1, 02/05/2013 13:50										
Total Recoverable Chromium	DUP	1302480-11	1.7360	1.7840		ug/L	2.7		20		J
	MS	1302480-11	1.7360	35.661	40.000	ug/L		84.8		70 - 130	
	MSD	1302480-11	1.7360	36.212	40.000	ug/L	1.5	86.2	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/19/2013 16:47
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/21/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1302612
Invoice ID:	B140368

Enclosed are the results of analyses for samples received by the laboratory on 2/6/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

Table of Contents

Chain of Custody and Cooler Receipt Form for 1302612 Page 1 of 2

BC Laboratories, Inc.

Chain of Custody Form

Page 1 of 1

*Required Fields

Report To: Client:* Battelle MHTS		Project Description:* JPL-GW Monitoring	
Attn:* David Conner			
Street Address:* 505 King Ave.		Project Code:* 1Q13	
City:* Columbus	State:* OH Zip:* 43201		
Phone#:* (614) 424 - 5489	Fax#: (614) 458 - 5489	Sampler (s):* Blaine Tech	
Email Address: connerd@battelle.org			
Submission #: 13-02612			

Billing

Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*

Are there any tests with holding times? less than or equal to 48 hours? ☑ Yes ☐ No

*Standard Turnaround = 10

Analysis Requested

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2			Notes
-1	TB-8-2/6/13	2-6-13	0700	AQ	X									
-2	MW-13	↓	0805	↓	X	X	X	X	X	X	X			
-3	DUP-5-1Q13	↓	0805	↓	X	X	X	X						
-4	MW-6	↓	0910	↓	X	X	X	X						
-5	MW-5	↓	1325	↓	X	X	X	X						
-6	MW-15	↓	1400	↓		X		X						

CHK BY [illegible] DISTRIBUTION [illegible] SUB-OUT ☐

SHORT HOLDING TIME
Cr+6 (circled) NO_2 (circled) NO_3 (circled) OP (circled) SS
BO Cl_2 BOD MBAS COT

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: ________ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) ________

Cost Center: ________ Global ID: ________

Relinquished By	Date	Time	Received By	Date	Time
1. [signature]	2-6-13	1545	1. Nicole (SC)	2/6/13	1505
2. Nicole (SC)	2/6/13	1635	2. [signature] BCL	2/6/13	1635
3. [signature]	2/6/13	1945	3. [signature]	2/6/13	1945

BC Laboratories, Inc. 4100 Atlas Court – Bakersfield CA 93308 (661) 327 – 4911 Fax: (661) 327 – 1918 www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1302612 Page 2 of 2

C LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 Of 1

ubmission #: 13-02612

SHIPPING INFORMATION	SHIPPING CONTAINER
ederal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
C Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

ustody Seals Ice Chest ☐ Intact? Yes ☐ No ☐ Containers ☐ Intact? Yes ☐ No ☐ None ☑ Comments:

ll samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.98 Container: NOC Thermometer ID: 207 Date/Time 2-6-13

Temperature: (A) 3.6 °C / (C) 3.7 °C Analyst Init JLW 1945

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
T GENERAL MINERAL/ GENERAL PHYSICAL		B	B	B	B	A				
T PE UNPRESERVED										
T INORGANIC CHEMICAL METALS										
T INORGANIC CHEMICAL METALS		C	C	C	C	B				
T CYANIDE										
T NITROGEN FORMS										
T TOTAL SULFIDE										
6z. NITRATE / NITRITE										
T TOTAL ORGANIC CARBON										
T TOX										
T CHEMICAL OXYGEN DEMAND										
1A PHENOLICS										
0ml VOA VIAL TRAVEL BLANK	A(1)									
0ml VOA VIAL	"	A 3	A 3	A 3	A 3	"	"	"	"	"
QT EPA 413.1, 413.2, 418.1										
T ODOR										
IA DIOLOGICAL										
3A CTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:

Sample Numbering Completed By: KIQ Date/Time: 2-6-13 @ 2120

A = Actual / C = Corrected

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302612-01	**COC Number:**	---	**Receive Date:**	02/06/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/06/2013 07:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB-8-2/6/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): TB-8-2/6/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302612-02	**COC Number:**	---	**Receive Date:**	02/06/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/06/2013 08:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302612-03	**COC Number:**	---	**Receive Date:**	02/06/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/06/2013 08:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	DUP-5-1Q13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): DUP-5-1Q13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302612-04	**COC Number:**	---	**Receive Date:**	02/06/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/06/2013 09:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-6	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-6	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302612-05	**COC Number:**	---	**Receive Date:**	02/06/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/06/2013 13:25
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-5	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-5	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302612-06	**COC Number:**	---	**Receive Date:**	02/06/2013 19:45
	Project Number:	JPL-GW	**Sampling Date:**	02/06/2013 14:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-15	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-15	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-01 | **Client Sample Name:** JPL-GW, TB-8-2/6/13, 2/6/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-01 | **Client Sample Name:** JPL-GW, TB-8-2/6/13, 2/6/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-01 | **Client Sample Name:** JPL-GW, TB-8-2/6/13, 2/6/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 13:45	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302612-01 | **Client Sample Name:** JPL-GW, TB-8-2/6/13, 2/6/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 13:45	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-02 | **Client Sample Name:** JPL-GW, MW-13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**0.59**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.65**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**9.4**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.14**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	**0.65**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-02 | **Client Sample Name:** JPL-GW, MW-13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.54**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.17**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-02 | **Client Sample Name:** JPL-GW, MW-13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	106	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 14:07	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302612-02 | **Client Sample Name:** JPL-GW, MW-13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 14:07	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302612-02 | **Client Sample Name:** JPL-GW, MW-13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**59**	**mg/L**	**0.50**	**0.068**	**EPA-300.0**	0.21		1
Nitrate as N	**4.1**	**mg/L**	**0.10**	**0.021**	**EPA-300.0**	ND		1
Sulfate	**45**	**mg/L**	**1.0**	**0.13**	**EPA-300.0**	ND		1
Nitrite as N	ND	mg/L	0.050	0.012	EPA-353.2	ND		2
Perchlorate	**1400**	**ug/L**	**400**	**81**	**EPA-314.0**	ND	**A01**	3
ortho-Phosphate as P	**0.053**	**mg/L**	**0.020**	**0.0038**	**EPA-365.1**	0.0066		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	02/06/13	02/07/13 13:26	LD1	IC1	1	BWB0410
2	EPA-353.2	02/07/13	02/07/13 09:02	TDC	KONE-1	1	BWB0828
3	EPA-314.0	02/11/13	02/13/13 00:55	LS1	IC6	100	BWB0764
4	EPA-365.1	02/07/13	02/07/13 08:11	TDC	KONE-1	1	BWB0845

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302612-02 | **Client Sample Name:** JPL-GW, MW-13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0060**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND		1
Total Recoverable Chromium	**17**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/06/13	02/07/13 00:04	TDC	KONE-1	1	BWB0736
2	EPA-200.8	02/13/13	02/13/13 16:36	SRM	PE-EL1	1	BWB0856

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-03 | **Client Sample Name:** JPL-GW, DUP-5-1Q13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**0.62**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.64**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**9.5**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.13**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	**0.63**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-03 | **Client Sample Name:** JPL-GW, DUP-5-1Q13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.53**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**0.18**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND	**J**	1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-03 | **Client Sample Name:** JPL-GW, DUP-5-1Q13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	113	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 14:30	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302612-03 | **Client Sample Name:** JPL-GW, DUP-5-1Q13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 14:30	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302612-03 | **Client Sample Name:** JPL-GW, DUP-5-1Q13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**1400**	**ug/L**	**400**	**81**	**EPA-314.0**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/13/13	02/14/13 05:08	LD1	IC6	100	BWB0956

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302612-03 | **Client Sample Name:** JPL-GW, DUP-5-1Q13, 2/6/2013 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0058**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND		1
Total Recoverable Chromium	**15**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/06/13	02/06/13 23:39	TDC	KONE-1	1	BWB0736
2	EPA-200.8	02/13/13	02/13/13 16:39	SRM	PE-EL1	1	BWB0856

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-04 | **Client Sample Name:** JPL-GW, MW-6, 2/6/2013 9:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**0.80**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	**0.28**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	**0.25**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND	**J**	1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	**0.22**	**ug/L**	**0.50**	**0.15**	**EPA-524.2**	ND	**J**	1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-04 | **Client Sample Name:** JPL-GW, MW-6, 2/6/2013 9:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**1.3**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**4.2**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-04 | **Client Sample Name:** JPL-GW, MW-6, 2/6/2013 9:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 14:52	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302612-04 | **Client Sample Name:** JPL-GW, MW-6, 2/6/2013 9:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 14:52	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302612-04 | **Client Sample Name:** JPL-GW, MW-6, 2/6/2013 9:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**4.5**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/13/13 08:55	LD1	IC6	1	BWB0764

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302612-04 | **Client Sample Name:** JPL-GW, MW-6, 2/6/2013 9:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**1.6**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/06/13	02/06/13 23:39	TDC	KONE-1	1	BWB0736
2	EPA-200.8	02/13/13	02/13/13 16:42	SRM	PE-EL1	1	BWB0856

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-05 | **Client Sample Name:** JPL-GW, MW-5, 2/6/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-05 | **Client Sample Name:** JPL-GW, MW-5, 2/6/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
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Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302612-05 | **Client Sample Name:** JPL-GW, MW-5, 2/6/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	104	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 15:15	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302612-05 | **Client Sample Name:** JPL-GW, MW-5, 2/6/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/07/13	02/07/13 15:15	MGC	MS-V5	1	BWB0429

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302612-05 | **Client Sample Name:** JPL-GW, MW-5, 2/6/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/11/13	02/12/13 20:29	LS1	IC6	1	BWB0764

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302612-05 | **Client Sample Name:** JPL-GW, MW-5, 2/6/2013 1:25:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/06/13	02/06/13 23:39	TDC	KONE-1	1	BWB0736
2	EPA-200.8	02/13/13	02/13/13 16:45	SRM	PE-EL1	1	BWB0856

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Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302612-06 | **Client Sample Name:** JPL-GW, MW-15, 2/6/2013 2:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.64**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/06/13	02/06/13 23:39	TDC	KONE-1	1	BWB0736
2	EPA-200.8	02/13/13	02/13/13 16:48	SRM	PE-EL1	1	BWB0856

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0429						
Benzene	BWB0429-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0429-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0429-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0429-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0429-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0429-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0429-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0429-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0429-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0429-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0429-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0429-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0429-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0429-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0429-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0429-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWB0429-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0429-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0429-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0429-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0429-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0429-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0429-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0429-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0429-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0429-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0429-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0429-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0429-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0429-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0429-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0429-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0429-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0429-BLK1	ND	ug/L	0.50	0.14	

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505 King Ave.
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Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0429						
trans-1,3-Dichloropropene	BWB0429-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0429-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0429-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0429-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0429-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0429-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0429-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0429-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0429-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0429-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0429-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0429-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0429-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0429-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0429-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0429-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWB0429-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0429-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0429-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0429-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0429-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0429-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0429-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0429-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0429-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0429-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0429-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0429-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0429-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0429-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0429-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0429-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0429-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0429-BLK1	ND	ug/L	4.0	0.97	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0429						
Ethyl t-butyl ether	BWB0429-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0429-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0429-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0429-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0429-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0429-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0429-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0429-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0429-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0429-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0429-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0429-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0429-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0429-BLK1	107	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0429-BLK1	97.2	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0429-BLK1	92.4	%	80 - 120 (LCL - UCL)		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0429										
Benzene	BWB0429-BS1	LCS	23.760	25.000	ug/L	95.0		70 - 130		
Bromodichloromethane	BWB0429-BS1	LCS	24.680	25.000	ug/L	98.7		70 - 130		
Chlorobenzene	BWB0429-BS1	LCS	23.350	25.000	ug/L	93.4		70 - 130		
Chloroethane	BWB0429-BS1	LCS	26.030	25.000	ug/L	104		70 - 130		
1,4-Dichlorobenzene	BWB0429-BS1	LCS	23.820	25.000	ug/L	95.3		70 - 130		
1,1-Dichloroethane	BWB0429-BS1	LCS	22.520	25.000	ug/L	90.1		70 - 130		
1,1-Dichloroethene	BWB0429-BS1	LCS	23.940	25.000	ug/L	95.8		70 - 130		
Toluene	BWB0429-BS1	LCS	23.220	25.000	ug/L	92.9		70 - 130		
Trichloroethene	BWB0429-BS1	LCS	23.970	25.000	ug/L	95.9		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0429-BS1	LCS	10.780	10.000	ug/L	108		75 - 125		
Toluene-d8 (Surrogate)	BWB0429-BS1	LCS	9.7500	10.000	ug/L	97.5		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0429-BS1	LCS	10.640	10.000	ug/L	106		80 - 120		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0429	Used client sample: Y - Description: MW-13, 02/06/2013 08:05										
Benzene	MS	1302612-02	ND	23.780	25.000	ug/L		95.1		70 - 130	
	MSD	1302612-02	ND	24.240	25.000	ug/L	1.9	97.0	20	70 - 130	
Bromodichloromethane	MS	1302612-02	0.59000	25.970	25.000	ug/L		102		70 - 130	
	MSD	1302612-02	0.59000	25.390	25.000	ug/L	2.3	99.2	20	70 - 130	
Chlorobenzene	MS	1302612-02	ND	22.930	25.000	ug/L		91.7		70 - 130	
	MSD	1302612-02	ND	23.750	25.000	ug/L	3.5	95.0	20	70 - 130	
Chloroethane	MS	1302612-02	ND	25.880	25.000	ug/L		104		70 - 130	
	MSD	1302612-02	ND	26.830	25.000	ug/L	3.6	107	20	70 - 130	
1,4-Dichlorobenzene	MS	1302612-02	ND	22.870	25.000	ug/L		91.5		70 - 130	
	MSD	1302612-02	ND	23.460	25.000	ug/L	2.5	93.8	20	70 - 130	
1,1-Dichloroethane	MS	1302612-02	0.14000	22.970	25.000	ug/L		91.3		70 - 130	
	MSD	1302612-02	0.14000	22.850	25.000	ug/L	0.5	90.8	20	70 - 130	
1,1-Dichloroethene	MS	1302612-02	0.65000	24.380	25.000	ug/L		94.9		70 - 130	
	MSD	1302612-02	0.65000	24.550	25.000	ug/L	0.7	95.6	20	70 - 130	
Toluene	MS	1302612-02	ND	23.650	25.000	ug/L		94.6		70 - 130	
	MSD	1302612-02	ND	23.780	25.000	ug/L	0.5	95.1	20	70 - 130	
Trichloroethene	MS	1302612-02	0.17000	23.410	25.000	ug/L		93.0		70 - 130	
	MSD	1302612-02	0.17000	23.000	25.000	ug/L	1.8	91.3	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302612-02	ND	10.600	10.000	ug/L		106		75 - 125	
	MSD	1302612-02	ND	10.180	10.000	ug/L	4.0	102		75 - 125	
Toluene-d8 (Surrogate)	MS	1302612-02	ND	9.9700	10.000	ug/L		99.7		80 - 120	
	MSD	1302612-02	ND	9.8200	10.000	ug/L	1.5	98.2		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302612-02	ND	10.070	10.000	ug/L		101		80 - 120	
	MSD	1302612-02	ND	10.160	10.000	ug/L	0.9	102		80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0429						
Chloroacetonitrile	BWB0429-BLK1	0	ug/L			
1-Chlorobutane	BWB0429-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0429-BLK1	0	ug/L			
Methyl acrylate	BWB0429-BLK1	0	ug/L			
Nitrobenzene	BWB0429-BLK1	0	ug/L			
2-Nitropropane	BWB0429-BLK1	0	ug/L			

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0410						
Chloride	BWB0410-BLK1	0.20900	mg/L	0.50	0.068	J
Nitrate as N	BWB0410-BLK1	ND	mg/L	0.10	0.021	
Sulfate	BWB0410-BLK1	ND	mg/L	1.0	0.13	
QC Batch ID: BWB0764						
Perchlorate	BWB0764-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0828						
Nitrite as N	BWB0828-BLK1	ND	mg/L	0.050	0.012	
QC Batch ID: BWB0845						
ortho-Phosphate as P	BWB0845-BLK1	0.0066380	mg/L	0.020	0.0038	J
QC Batch ID: BWB0956						
Perchlorate	BWB0956-BLK1	ND	ug/L	4.0	0.81	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0410										
Chloride	BWB0410-BS1	LCS	51.455	50.000	mg/L	103		90 - 110		
Nitrate as N	BWB0410-BS1	LCS	5.1230	5.0000	mg/L	102		90 - 110		
Sulfate	BWB0410-BS1	LCS	102.91	100.00	mg/L	103		90 - 110		
QC Batch ID: BWB0764										
Perchlorate	BWB0764-BS1	LCS	10.751	10.000	ug/L	108		85 - 115		
QC Batch ID: BWB0828										
Nitrite as N	BWB0828-BS1	LCS	0.51944	0.50000	mg/L	104		90 - 110		
QC Batch ID: BWB0845										
ortho-Phosphate as P	BWB0845-BS1	LCS	0.20286	0.20000	mg/L	101		90 - 110		
QC Batch ID: BWB0956										
Perchlorate	BWB0956-BS1	LCS	10.810	10.000	ug/L	108		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0410	Used client sample: N										
Chloride	DUP	302258-02RE1	64.008	63.988		mg/L	0.0		10		
	MS	302258-02RE1	64.008	175.46	101.01	mg/L		110		80 - 120	
	MSD	302258-02RE1	64.008	175.11	101.01	mg/L	0.2	110	10	80 - 120	
Nitrate as N	DUP	302258-02RE1	10.178	10.234		mg/L	0.5		10		
	MS	302258-02RE1	10.178	21.024	10.101	mg/L		107		80 - 120	
	MSD	302258-02RE1	10.178	21.000	10.101	mg/L	0.1	107	10	80 - 120	
Sulfate	DUP	302258-02RE1	422.06	422.11		mg/L	0.0		10		
	MS	302258-02RE1	422.06	631.64	202.02	mg/L		104		80 - 120	
	MSD	302258-02RE1	422.06	630.72	202.02	mg/L	0.1	103	10	80 - 120	
QC Batch ID: BWB0764	Used client sample: Y - Description: MW-11-2, 02/05/2013 09:15										
Perchlorate	DUP	1302480-05	ND	ND		ug/L			15		
	MS	1302480-05	ND	10.421	10.101	ug/L		103		80 - 120	
	MSD	1302480-05	ND	11.065	10.101	ug/L	6.0	110	15	80 - 120	
QC Batch ID: BWB0828	Used client sample: N										
Nitrite as N	DUP	1302615-01	0.042279	0.041416		mg/L	2.1		10		J
	MS	1302615-01	0.042279	0.57431	0.52632	mg/L		101		90 - 110	
	MSD	1302615-01	0.042279	0.58356	0.52632	mg/L	1.6	103	10	90 - 110	
QC Batch ID: BWB0845	Used client sample: N										
ortho-Phosphate as P	DUP	1302615-01	0.015411	0.014976		mg/L	2.9		10		J
	MS	1302615-01	0.015411	0.23163	0.21053	mg/L		103		90 - 110	
	MSD	1302615-01	0.015411	0.23350	0.21053	mg/L	0.8	104	10	90 - 110	
QC Batch ID: BWB0956	Used client sample: N										
Perchlorate	DUP	1302609-01	29.369	29.649		ug/L	0.9		15		
	MS	1302609-01	29.369	80.481	50.505	ug/L		101		80 - 120	
	MSD	1302609-01	29.369	78.127	50.505	ug/L	3.0	96.5	15	80 - 120	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0736						
Hexavalent Chromium	BWB0736-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB0856						
Total Recoverable Chromium	BWB0856-BLK1	ND	ug/L	3.0	0.50	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0736										
Hexavalent Chromium	BWB0736-BS1	LCS	0.051917	0.050000	mg/L	104		85 - 115		
QC Batch ID: BWB0856										
Total Recoverable Chromium	BWB0856-BS1	LCS	38.919	40.000	ug/L	97.3		85 - 115		

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0736	Used client sample: Y - Description: MW-13, 02/06/2013 08:05										
Hexavalent Chromium	DUP	1302612-02	0.0059530	0.0059970		mg/L	0.7		10		
	MS	1302612-02	0.0059530	0.059389	0.052632	mg/L		102		85 - 115	
	MSD	1302612-02	0.0059530	0.059269	0.052632	mg/L	0.2	101	10	85 - 115	
QC Batch ID: BWB0856	Used client sample: Y - Description: MW-21-1, 02/05/2013 13:50										
Total Recoverable Chromium	DUP	1302480-11	1.7360	1.7840		ug/L	2.7		20		J
	MS	1302480-11	1.7360	35.661	40.000	ug/L		84.8		70 - 130	
	MSD	1302480-11	1.7360	36.212	40.000	ug/L	1.5	86.2	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/21/2013 14:42
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

BC Laboratories, Inc.
Environmental Testing Laboratory Since 1949

Date of Report: 02/25/2013

David Conner

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Project:	JPL- GW Monitoring Wells
BC Work Order:	1302723
Invoice ID:	B140535

Enclosed are the results of analyses for samples received by the laboratory on 2/7/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Authorized Signature

Table of Contents

Chain of Custody Form

BC Laboratories, Inc.

*Required Fields

Page 1 of 1

Report To: Client:* Battelle MHTS
Attn:* David Conner
Street Address:* 505 King Ave.
City:* Columbus State:* OH Zip:* 43201
Phone#:* (614) 424 - 5489 Fax#: (614) 458 - 5489
Email Address: connerd@battelle.org
Submission #: 1302723

Project Description:* JPL-GW Monitoring
Project Code:* 1Q13
Sampler (s):* Blaine Tech

Sample #	Sample Description	Date	Time	Matrix*	VOCs EPA 524.2	Total Chromium 200.8 (ug/L)	Perchlorate 314.0	Hexavalent Cr6 -7196 (mg/L)	Chloride, Nitrate, Sulfate	Orthophosphate 365.1	Nitrite 353.2
-1	TB-9-2/7/13	2-7-13	0700	AQ	X						
-2	MW-10		0810		X	X	X	X			
-3	MW-8		0915		X	X	X	X	X	X	X
-4	DUP-6-1Q13		0915		X	X	X	X			
-5	MW-16		1140		X	X	X	X	X	X	X
-6	MW-7		1305		X	X	X	X	X	X	X
-7	DUP-7-1Q13	↓	1305	↓	X	X	X	X			

Billing
Client:* SAME
Attn:*
Address:*
City:* State:* Zip:*
Are there any tests with holding times? less than or equal to 48 hours?
☑ Yes ☐ No
*Standard Turnaround = 10

Notes

CHK BY DISTRIBUTION
KQ SUB-OUT ☐

SHORT HOLDING TIME
Cr^{+6} NO_2 NO_3 OP SS
DO Cl_2 BOD MBAS COT

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other

Turnaround # of working days:* ☐ 24 Hr Rush ☐ 48 Hr Rush ☐ 3-5 Day Rush ☑ Normal (10 – Days)

Lab TAT Approval: _____ *Additional Charges May Apply

Comments:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MS/MSD)
90% Level III and 10% Level IV data validation required; Level IV Notated on C of C
NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)

☐ MBU Site
☐ CVX RCRA
☐ Geotracker 5 File (CA Default)
☐ Geotracker 2 File
☐ Other (Specify) _____

Cost Center: _____ Global ID: _____

	Date	Time		Date	Time
1. Relinquished By:	2-7-13	1520	1. Received By:	2/7/13	1630
2. Relinquished By:	2/7/13	2000	2. Received By:	2-7-13	2000
3. Relinquished By:			3. Received By:		

BC Laboratories, Inc. 4100 Atlas Court – Bakersfield CA 93308 (661) 327 – 4911 Fax: (661) 327 – 1918 www.bclabs.com

Chain of Custody and Cooler Receipt Form for 1302723 Page 2 of 2

BC LABORATORIES INC. COOLER RECEIPT FORM Rev. No. 13 08/17/12 Page 1 OF 1

Submission #: 1302723

SHIPPING INFORMATION	SHIPPING CONTAINER
Federal Express ☐ UPS ☐ Hand Delivery ☐	Ice Chest ☑ None ☐
BC Lab Field Service ☑ Other ☐ (Specify)_____	Box ☐ Other ☐ (Specify)_____

Refrigerant: Ice ☑ Blue Ice ☐ None ☐ Other ☐ Comments:

Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐ | Containers ☐ Intact? Yes ☐ No ☐ | None ☑ Comments:

All samples received? Yes ☑ No ☐ All samples containers intact? Yes ☑ No ☐ Description(s) match COC? Yes ☑ No ☐

COC Received ☑ YES ☐ NO

Emissivity: 0.95 Container: Other Thermometer ID: 207 Date/Time 2-7-13

Temperature: (A) 1.2 °C / (C) 1.5 °C Analyst Init JDW 2000

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL		B	B	B	B	B	B			
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS		C	C	C	C	C	C			
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PtA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A1									
40ml VOA VIAL		A3	A3	A3	A3	A3	A3			
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										
SMART KIT										

Comments:_____

Sample Numbering Completed By: JDW Date/Time: 2/7/13 2140

A = Actual / C = Corrected

[S:\MyDOCS\WordPerfect\LAB_DOCS\FORMS\SAMRECR13]

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302723-01	**COC Number:**	---	**Receive Date:**	02/07/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	02/07/2013 07:00
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	TB-9-2/7/13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Trip Blank
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): TB-9-2/7/13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302723-02	**COC Number:**	---	**Receive Date:**	02/07/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	02/07/2013 08:10
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-10	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-10	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302723-03	**COC Number:**	---	**Receive Date:**	02/07/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	02/07/2013 09:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-8	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-8	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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505 King Ave.
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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1302723-04	**COC Number:**	---	**Receive Date:**	02/07/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	02/07/2013 09:15
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	DUP-6-1Q13	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): DUP-6-1Q13	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302723-05	**COC Number:**	---	**Receive Date:**	02/07/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	02/07/2013 11:40
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-16	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-16	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	
1302723-06	**COC Number:**	---	**Receive Date:**	02/07/2013 20:00
	Project Number:	JPL-GW	**Sampling Date:**	02/07/2013 13:05
	Sampling Location:	---	**Sample Depth:**	---
	Sampling Point:	MW-7	**Lab Matrix:**	Water
	Sampled By:	Blaine Tech of BAT	**Sample Type:**	Aqueous
			Delivery Work Order:	
			Global ID: 00000000000	
			Location ID (FieldPoint): MW-7	
			Matrix: W	
			Sample QC Type (SACode): CS	
			Cooler ID:	

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information

1302723-07

COC Number: ---
Project Number: JPL-GW
Sampling Location: ---
Sampling Point: DUP-7-1Q13
Sampled By: Blaine Tech of BAT

Receive Date: 02/07/2013 20:00
Sampling Date: 02/07/2013 13:05
Sample Depth: ---
Lab Matrix: Water
Sample Type: Aqueous
Delivery Work Order:
Global ID: 00000000000
Location ID (FieldPoint): DUP-7-1Q13
Matrix: W
Sample QC Type (SACode): CS
Cooler ID:

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-01 | **Client Sample Name:** JPL-GW, TB-9-2/7/13, 2/7/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND	V11	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-01 | **Client Sample Name:** JPL-GW, TB-9-2/7/13, 2/7/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-01 | **Client Sample Name:** JPL-GW, TB-9-2/7/13, 2/7/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 13:01	MGC	MS-V5	1	BWB0537

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302723-01 | **Client Sample Name:** JPL-GW, TB-9-2/7/13, 2/7/2013 7:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 13:01	MGC	MS-V5	1	BWB0537

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-02 | **Client Sample Name:** JPL-GW, MW-10, 2/7/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**1.1**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND	V11	1
1,1-Dichloroethane	**0.20**	**ug/L**	**0.50**	**0.11**	**EPA-524.2**	ND	**J**	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-02 | **Client Sample Name:** JPL-GW, MW-10, 2/7/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.88**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	**6.8**	**ug/L**	**0.50**	**0.085**	**EPA-524.2**	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-02 | **Client Sample Name:** JPL-GW, MW-10, 2/7/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 10:46	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302723-02 | **Client Sample Name:** JPL-GW, MW-10, 2/7/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 10:46	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302723-02 | **Client Sample Name:** JPL-GW, MW-10, 2/7/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**9.6**	**ug/L**	**4.0**	**0.81**	**EPA-314.0**	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/12/13	02/12/13 20:42	LS1	IC6	1	BWB0765

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302723-02 | **Client Sample Name:** JPL-GW, MW-10, 2/7/2013 8:10:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0030**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND		1
Total Recoverable Chromium	**5.8**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/08/13	02/08/13 01:03	TDC	KONE-1	1	BWB0913
2	EPA-200.8	02/15/13	02/15/13 17:25	SRM	PE-EL1	1	BWB1073

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-03 | **Client Sample Name:** JPL-GW, MW-8, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND	V11	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-03 | **Client Sample Name:** JPL-GW, MW-8, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	**0.36**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-03 | **Client Sample Name:** JPL-GW, MW-8, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	103	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 13:24	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302723-03 | **Client Sample Name:** JPL-GW, MW-8, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 13:24	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302723-03 | **Client Sample Name:** JPL-GW, MW-8, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**10**	**mg/L**	**0.50**	**0.068**	**EPA-300.0**	0.18		1
Nitrate as N	**0.31**	**mg/L**	**0.10**	**0.021**	**EPA-300.0**	ND		1
Sulfate	**23**	**mg/L**	**1.0**	**0.13**	**EPA-300.0**	0.28		1
Nitrite as N	ND	mg/L	0.050	0.012	EPA-353.2	ND		2
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		3
ortho-Phosphate as P	**0.0077**	**mg/L**	**0.020**	**0.0038**	**EPA-365.1**	ND	**J**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	02/08/13	02/08/13 04:18	LD1	IC1	1	BWB0565
2	EPA-353.2	02/08/13	02/08/13 10:06	TDC	KONE-1	1	BWB0937
3	EPA-314.0	02/12/13	02/12/13 20:56	LS1	IC6	1	BWB0765
4	EPA-365.1	02/08/13	02/08/13 10:17	TDC	KONE-1	1	BWB0940

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302723-03 | **Client Sample Name:** JPL-GW, MW-8, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	**0.64**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND	**J**	2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/08/13	02/08/13 08:03	TDC	KONE-1	1	BWB0913
2	EPA-200.8	02/15/13	02/15/13 17:29	SRM	PE-EL1	1	BWB1073

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-04 | **Client Sample Name:** JPL-GW, DUP-6-1Q13, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND	V11	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-04 | **Client Sample Name:** JPL-GW, DUP-6-1Q13, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	**0.36**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-04 | **Client Sample Name:** JPL-GW, DUP-6-1Q13, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	107	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 13:46	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302723-04 | **Client Sample Name:** JPL-GW, DUP-6-1Q13, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 13:46	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302723-04 | **Client Sample Name:** JPL-GW, DUP-6-1Q13, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/12/13	02/12/13 21:09	LS1	IC6	1	BWB0765

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302723-04 | **Client Sample Name:** JPL-GW, DUP-6-1Q13, 2/7/2013 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	ND	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/08/13	02/08/13 08:03	TDC	KONE-1	1	BWB0913
2	EPA-200.8	02/15/13	02/15/13 17:32	SRM	PE-EL1	1	BWB1073

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-05 | **Client Sample Name:** JPL-GW, MW-16, 2/7/2013 11:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**13**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND		1
Bromoform	**4.7**	**ug/L**	**0.50**	**0.27**	**EPA-524.2**	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.27**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND	**J**	1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**13**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	**12**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND	V11	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-05 | **Client Sample Name:** JPL-GW, MW-16, 2/7/2013 11:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-05 | **Client Sample Name:** JPL-GW, MW-16, 2/7/2013 11:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	90.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 14:09	MGC	MS-V5	1	BWB0537

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505 King Ave.
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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302723-05 | **Client Sample Name:** JPL-GW, MW-16, 2/7/2013 11:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 14:09	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302723-05 | **Client Sample Name:** JPL-GW, MW-16, 2/7/2013 11:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**69**	**mg/L**	**0.50**	**0.068**	**EPA-300.0**	0.18		1
Nitrate as N	**1.3**	**mg/L**	**0.10**	**0.021**	**EPA-300.0**	ND		1
Sulfate	**41**	**mg/L**	**1.0**	**0.13**	**EPA-300.0**	0.28		1
Nitrite as N	ND	mg/L	0.050	0.012	EPA-353.2	ND		2
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		3
ortho-Phosphate as P	**0.26**	**mg/L**	**0.020**	**0.0038**	**EPA-365.1**	ND		4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	02/08/13	02/08/13 04:30	LD1	IC1	1	BWB0565
2	EPA-353.2	02/08/13	02/08/13 10:06	TDC	KONE-1	1	BWB0937
3	EPA-314.0	02/12/13	02/12/13 21:49	LS1	IC6	1	BWB0765
4	EPA-365.1	02/08/13	02/08/13 10:17	TDC	KONE-1	1	BWB0940

Battelle MHTS
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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302723-05 | **Client Sample Name:** JPL-GW, MW-16, 2/7/2013 11:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.018**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND		1
Total Recoverable Chromium	**17**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/08/13	02/08/13 08:03	TDC	KONE-1	1	BWB0913
2	EPA-200.8	02/15/13	02/15/13 17:35	SRM	PE-EL1	1	BWB1073

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-06 | **Client Sample Name:** JPL-GW, MW-7, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**7.5**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.30**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND	**J**	1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**12**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	**0.43**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND	V11	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-06 | **Client Sample Name:** JPL-GW, MW-7, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	**0.78**	**ug/L**	**0.50**	**0.48**	**EPA-524.2**	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.46**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-06 | **Client Sample Name:** JPL-GW, MW-7, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	109	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 14:31	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302723-06 | **Client Sample Name:** JPL-GW, MW-7, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 14:31	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302723-06 | **Client Sample Name:** JPL-GW, MW-7, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	**69**	**mg/L**	**0.50**	**0.068**	**EPA-300.0**	0.18		1
Nitrate as N	**1.3**	**mg/L**	**0.10**	**0.021**	**EPA-300.0**	ND		1
Sulfate	**41**	**mg/L**	**1.0**	**0.13**	**EPA-300.0**	0.28		1
Nitrite as N	ND	mg/L	0.050	0.012	EPA-353.2	ND		2
Perchlorate	**35**	**ug/L**	**8.0**	**1.6**	**EPA-314.0**	ND	**A01**	3
ortho-Phosphate as P	**0.013**	**mg/L**	**0.020**	**0.0038**	**EPA-365.1**	ND	**J**	4

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-300.0	02/08/13	02/08/13 04:41	LD1	IC1	1	BWB0565
2	EPA-353.2	02/08/13	02/08/13 10:06	TDC	KONE-1	1	BWB0937
3	EPA-314.0	02/12/13	02/13/13 02:15	LD1	IC6	2	BWB0765
4	EPA-365.1	02/08/13	02/08/13 10:17	TDC	KONE-1	1	BWB0940

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302723-06 | **Client Sample Name:** JPL-GW, MW-7, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0096**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND		1
Total Recoverable Chromium	**12**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/08/13	02/08/13 08:03	TDC	KONE-1	1	BWB0913
2	EPA-200.8	02/15/13	02/15/13 17:38	SRM	PE-EL1	1	BWB1073

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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-07 | **Client Sample Name:** JPL-GW, DUP-7-1Q13, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.083	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
Bromodichloromethane	**7.3**	**ug/L**	**0.50**	**0.14**	**EPA-524.2**	ND		1
Bromoform	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromomethane	ND	ug/L	1.0	0.25	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Carbon tetrachloride	**0.34**	**ug/L**	**0.50**	**0.18**	**EPA-524.2**	ND	**J**	1
Chlorobenzene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroform	**13**	**ug/L**	**0.50**	**0.12**	**EPA-524.2**	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dibromochloromethane	**0.35**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.24	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.072	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.062	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.099	EPA-524.2	ND	V11	1
1,1-Dichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.086	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1

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505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-07 | **Client Sample Name:** JPL-GW, DUP-7-1Q13, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.079	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.098	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Isopropylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
p-Isopropyltoluene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Methylene chloride	**0.82**	**ug/L**	**0.50**	**0.48**	**EPA-524.2**	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.36	EPA-524.2	ND	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.068	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	**0.48**	**ug/L**	**0.50**	**0.13**	**EPA-524.2**	ND	**J**	1
Toluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.24	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Acetone	ND	ug/L	10	4.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.80	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.25	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	10	9.4	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	1.0	0.38	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.4	EPA-524.2	ND		1

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 1302723-07 | **Client Sample Name:** JPL-GW, DUP-7-1Q13, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	0.97	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	3.4	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	1.7	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	10	2.5	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	0.47	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	10	2.1	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.43	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	4.2	EPA-524.2	ND		1
Tetrahydrofuran	ND	ug/L	20	5.2	EPA-524.2	ND		1
p- & m-Xylenes	ND	ug/L	0.50	0.28	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.082	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	105	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 14:54	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 1302723-07 | **Client Sample Name:** JPL-GW, DUP-7-1Q13, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloroacetonitrile	**0**	**ug/L**			**EPA-524.2**	0		1
1-Chlorobutane	**0**	**ug/L**			**EPA-524.2**	0		1
1,1-Dichloropropanone	**0**	**ug/L**			**EPA-524.2**	0		1
Methyl acrylate	**0**	**ug/L**			**EPA-524.2**	0		1
Nitrobenzene	**0**	**ug/L**			**EPA-524.2**	0		1
2-Nitropropane	**0**	**ug/L**			**EPA-524.2**	0		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-524.2	02/08/13	02/08/13 14:54	MGC	MS-V5	1	BWB0537

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 1302723-07 | **Client Sample Name:** JPL-GW, DUP-7-1Q13, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	**35**	**ug/L**	**8.0**	**1.6**	**EPA-314.0**	ND	**A01**	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-314.0	02/12/13	02/13/13 02:28	LD1	IC6	2	BWB0765

Battelle MHTS
505 King Ave.
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Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 1302723-07 | **Client Sample Name:** JPL-GW, DUP-7-1Q13, 2/7/2013 1:05:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	**0.0095**	**mg/L**	**0.0020**	**0.00070**	**EPA-7196**	ND		1
Total Recoverable Chromium	**13**	**ug/L**	**3.0**	**0.50**	**EPA-200.8**	ND		2

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID
1	EPA-7196	02/08/13	02/08/13 08:03	TDC	KONE-1	1	BWB0913
2	EPA-200.8	02/15/13	02/15/13 17:41	SRM	PE-EL1	1	BWB1073

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0537						
Benzene	BWB0537-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWB0537-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWB0537-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWB0537-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWB0537-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWB0537-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWB0537-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWB0537-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWB0537-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWB0537-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWB0537-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWB0537-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWB0537-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWB0537-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWB0537-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWB0537-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWB0537-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWB0537-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWB0537-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWB0537-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWB0537-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWB0537-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWB0537-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWB0537-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWB0537-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWB0537-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWB0537-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWB0537-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWB0537-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWB0537-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWB0537-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWB0537-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWB0537-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWB0537-BLK1	ND	ug/L	0.50	0.14	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0537						
trans-1,3-Dichloropropene	BWB0537-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWB0537-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWB0537-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWB0537-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWB0537-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWB0537-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWB0537-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWB0537-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWB0537-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWB0537-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWB0537-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWB0537-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWB0537-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWB0537-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWB0537-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWB0537-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWB0537-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWB0537-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWB0537-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWB0537-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWB0537-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWB0537-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWB0537-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWB0537-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWB0537-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWB0537-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWB0537-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWB0537-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWB0537-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWB0537-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWB0537-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWB0537-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWB0537-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWB0537-BLK1	ND	ug/L	4.0	0.97	

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0537						
Ethyl t-butyl ether	BWB0537-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWB0537-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWB0537-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWB0537-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWB0537-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWB0537-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWB0537-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWB0537-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWB0537-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWB0537-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWB0537-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWB0537-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWB0537-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWB0537-BLK1	105	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWB0537-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWB0537-BLK1	94.3	%	80 - 120 (LCL - UCL)		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0537										
Benzene	BWB0537-BS1	LCS	23.950	25.000	ug/L	95.8		70 - 130		
Bromodichloromethane	BWB0537-BS1	LCS	24.360	25.000	ug/L	97.4		70 - 130		
Chlorobenzene	BWB0537-BS1	LCS	23.670	25.000	ug/L	94.7		70 - 130		
Chloroethane	BWB0537-BS1	LCS	26.830	25.000	ug/L	107		70 - 130		
1,4-Dichlorobenzene	BWB0537-BS1	LCS	23.320	25.000	ug/L	93.3		70 - 130		
1,1-Dichloroethane	BWB0537-BS1	LCS	22.800	25.000	ug/L	91.2		70 - 130		
1,1-Dichloroethene	BWB0537-BS1	LCS	24.230	25.000	ug/L	96.9		70 - 130		
Toluene	BWB0537-BS1	LCS	23.900	25.000	ug/L	95.6		70 - 130		
Trichloroethene	BWB0537-BS1	LCS	23.700	25.000	ug/L	94.8		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWB0537-BS1	LCS	10.420	10.000	ug/L	104		75 - 125		
Toluene-d8 (Surrogate)	BWB0537-BS1	LCS	10.060	10.000	ug/L	101		80 - 120		
4-Bromofluorobenzene (Surrogate)	BWB0537-BS1	LCS	10.120	10.000	ug/L	101		80 - 120		

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Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0537	Used client sample: Y - Description: MW-10, 02/07/2013 08:10										
Benzene	MS	1302723-02	ND	23.990	25.000	ug/L		96.0		70 - 130	
	MSD	1302723-02	ND	23.080	25.000	ug/L	3.9	92.3	20	70 - 130	
Bromodichloromethane	MS	1302723-02	ND	25.230	25.000	ug/L		101		70 - 130	
	MSD	1302723-02	ND	24.620	25.000	ug/L	2.4	98.5	20	70 - 130	
Chlorobenzene	MS	1302723-02	ND	23.480	25.000	ug/L		93.9		70 - 130	
	MSD	1302723-02	ND	22.860	25.000	ug/L	2.7	91.4	20	70 - 130	
Chloroethane	MS	1302723-02	ND	26.180	25.000	ug/L		105		70 - 130	
	MSD	1302723-02	ND	25.750	25.000	ug/L	1.7	103	20	70 - 130	
1,4-Dichlorobenzene	MS	1302723-02	ND	23.590	25.000	ug/L		94.4		70 - 130	
	MSD	1302723-02	ND	23.060	25.000	ug/L	2.3	92.2	20	70 - 130	
1,1-Dichloroethane	MS	1302723-02	0.20000	22.760	25.000	ug/L		90.2		70 - 130	
	MSD	1302723-02	0.20000	22.550	25.000	ug/L	0.9	89.4	20	70 - 130	
1,1-Dichloroethene	MS	1302723-02	ND	24.230	25.000	ug/L		96.9		70 - 130	
	MSD	1302723-02	ND	23.650	25.000	ug/L	2.4	94.6	20	70 - 130	
Toluene	MS	1302723-02	ND	23.690	25.000	ug/L		94.8		70 - 130	
	MSD	1302723-02	ND	23.660	25.000	ug/L	0.1	94.6	20	70 - 130	
Trichloroethene	MS	1302723-02	6.7800	29.120	25.000	ug/L		89.4		70 - 130	
	MSD	1302723-02	6.7800	28.490	25.000	ug/L	2.2	86.8	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1302723-02	ND	10.340	10.000	ug/L		103		75 - 125	
	MSD	1302723-02	ND	9.8000	10.000	ug/L	5.4	98.0		75 - 125	
Toluene-d8 (Surrogate)	MS	1302723-02	ND	9.8500	10.000	ug/L		98.5		80 - 120	
	MSD	1302723-02	ND	9.9900	10.000	ug/L	1.4	99.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1302723-02	ND	9.8500	10.000	ug/L		98.5		80 - 120	
	MSD	1302723-02	ND	9.8000	10.000	ug/L	0.5	98.0		80 - 120	

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Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0537						
Chloroacetonitrile	BWB0537-BLK1	0	ug/L			
1-Chlorobutane	BWB0537-BLK1	0	ug/L			
1,1-Dichloropropanone	BWB0537-BLK1	0	ug/L			
Methyl acrylate	BWB0537-BLK1	0	ug/L			
Nitrobenzene	BWB0537-BLK1	0	ug/L			
2-Nitropropane	BWB0537-BLK1	0	ug/L			

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Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0565						
Chloride	BWB0565-BLK1	0.18300	mg/L	0.50	0.068	J
Nitrate as N	BWB0565-BLK1	ND	mg/L	0.10	0.021	
Sulfate	BWB0565-BLK1	0.27600	mg/L	1.0	0.13	J
QC Batch ID: BWB0765						
Perchlorate	BWB0765-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: BWB0937						
Nitrite as N	BWB0937-BLK1	ND	mg/L	0.050	0.012	
QC Batch ID: BWB0940						
ortho-Phosphate as P	BWB0940-BLK1	ND	mg/L	0.020	0.0038	

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Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0565										
Chloride	BWB0565-BS1	LCS	52.337	50.000	mg/L	105		90 - 110		
Nitrate as N	BWB0565-BS1	LCS	5.2060	5.0000	mg/L	104		90 - 110		
Sulfate	BWB0565-BS1	LCS	107.16	100.00	mg/L	107		90 - 110		
QC Batch ID: BWB0765										
Perchlorate	BWB0765-BS1	LCS	10.878	10.000	ug/L	109		85 - 115		
QC Batch ID: BWB0937										
Nitrite as N	BWB0937-BS1	LCS	0.53117	0.50000	mg/L	106		90 - 110		
QC Batch ID: BWB0940										
ortho-Phosphate as P	BWB0940-BS1	LCS	0.21330	0.20000	mg/L	107		90 - 110		

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Water Analysis (General Chemistry)

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0565	Used client sample: N										
Chloride	DUP	1302724-01	12.141	11.772		mg/L	3.1		10		
	MS	1302724-01	12.141	67.277	50.505	mg/L		109		80 - 120	
	MSD	1302724-01	12.141	67.337	50.505	mg/L	0.1	109	10	80 - 120	
Nitrate as N	DUP	1302724-01	2.8270	2.8260		mg/L	0.0		10		
	MS	1302724-01	2.8270	8.0848	5.0505	mg/L		104		80 - 120	
	MSD	1302724-01	2.8270	8.1626	5.0505	mg/L	1.0	106	10	80 - 120	
Sulfate	DUP	1302724-01	22.067	21.863		mg/L	0.9		10		
	MS	1302724-01	22.067	132.71	101.01	mg/L		110		80 - 120	
	MSD	1302724-01	22.067	132.76	101.01	mg/L	0.0	110	10	80 - 120	
QC Batch ID: BWB0765	Used client sample: Y - Description: MW-21-1, 02/05/2013 13:50										
Perchlorate	DUP	1302480-11	3.2082	3.2467		ug/L	1.2		15		J
	MS	1302480-11	3.2082	13.275	10.101	ug/L		99.7		80 - 120	
	MSD	1302480-11	3.2082	13.509	10.101	ug/L	1.7	102	15	80 - 120	
QC Batch ID: BWB0937	Used client sample: Y - Description: MW-8, 02/07/2013 09:15										
Nitrite as N	DUP	1302723-03	ND	ND		mg/L			10		
	MS	1302723-03	ND	0.52549	0.52632	mg/L		99.8		90 - 110	
	MSD	1302723-03	ND	0.52153	0.52632	mg/L	0.8	99.1	10	90 - 110	
QC Batch ID: BWB0940	Used client sample: Y - Description: MW-8, 02/07/2013 09:15										
ortho-Phosphate as P	DUP	1302723-03	0.0077080	0.0066850		mg/L	14.2		10		J,A02
	MS	1302723-03	0.0077080	0.21858	0.21053	mg/L		100		90 - 110	
	MSD	1302723-03	0.0077080	0.21700	0.21053	mg/L	0.7	99.4	10	90 - 110	

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Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: BWB0913						
Hexavalent Chromium	BWB0913-BLK1	ND	mg/L	0.0020	0.00070	
QC Batch ID: BWB1073						
Total Recoverable Chromium	BWB1073-BLK1	ND	ug/L	3.0	0.50	

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Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits Percent Recovery	Control Limits RPD	Lab Quals
QC Batch ID: BWB0913										
Hexavalent Chromium	BWB0913-BS1	LCS	0.049806	0.050000	mg/L	99.6		85 - 115		
QC Batch ID: BWB1073										
Total Recoverable Chromium	BWB1073-BS1	LCS	38.881	40.000	ug/L	97.2		85 - 115		

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Metals Analysis

Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits RPD	Control Limits Percent Recovery	Lab Quals
QC Batch ID: BWB0913	Used client sample: Y - Description: MW-8, 02/07/2013 09:15										
Hexavalent Chromium	DUP	1302723-03	ND	ND		mg/L			10		
	MS	1302723-03	ND	0.058386	0.052632	mg/L		111		85 - 115	
	MSD	1302723-03	ND	0.052359	0.052632	mg/L	10.9	99.5	10	85 - 115	Q02
QC Batch ID: BWB1073	Used client sample: N										
Total Recoverable Chromium	DUP	1302745-01	2.9640	2.8300		ug/L	4.6		20		J
	MS	1302745-01	2.9640	42.206	40.000	ug/L		98.1		70 - 130	
	MSD	1302745-01	2.9640	42.933	40.000	ug/L	1.7	99.9	20	70 - 130	

Battelle MHTS
505 King Ave.
Columbus, OH 43201

Reported: 02/25/2013 10:27
Project: JPL- GW Monitoring Wells
Project Number: 1Q13
Project Manager: David Conner

Notes And Definitions

J	Estimated Value (CLP Flag)
MDL	Method Detection Limit
ND	Analyte Not Detected at or above the reporting limit
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
A01	PQL's and MDL's are raised due to sample dilution.
A02	The difference between duplicate readings is less than the PQL.
Q02	Matrix spike precision is not within the control limits.
V11	The Continuing Calibration Verification (CCV) recovery is not within established control limits.

ATTACHMENT 4: FIELD LOGS

This attachment contains the groundwater sample collection field logs for the relatively shallow standpipe monitoring wells (MW-5 through MW-8, MW-10, MW-13, MW-15, and MW-16), as well as the field data sheets for the Westbay™ multiport wells (MW-3, MW-4, MW-11, MW-12, MW-14, and MW-17 through MW-26). Groundwater sample collection for the 1st Quarter 2013 sampling event was conducted by Blaine Tech Services, Inc.

WELL MONITORING DATA SHEET

Project #: 130125-AW1	Site: JPL Pasadena
Sampler: AW	Gauging Date: 2-6-13
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 140	Depth to Water (DTW): 80.58
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type YSI-Pro Plus
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 92.46	

Purge Method:
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- 2" Rediflo pump
- Extraction Pump
- Other Dedicated RF2

Sampling Method:
- Disposable Bailer
- Extraction Port
- (Dedicated Tubing)
- Other: ___

Flow Rate= 3gpm

Start Purge Date= ___ Pump @ 125'

38.7 (Gals.) X 3 = 116.1 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
1248	15.5	6.61	458	0.51	0.85	237.6 √	21	81.10
1254	15.5	6.63	457	0.30	0.84	236.7	39	81.10
1301	15.5	6.63	456	0.24	0.82	230.3	60	81.10
1307	15.4	6.63	455	0.19	0.80	226.6	78	81.10
1314	15.4	6.63	455	0.23	0.78	220.4	99	81.10
1320	15.4	6.64	454	0.15	0.78	217.2	117	81.10

Did well dewater? Yes (No) Gallons actually evacuated: 117

Sampling Date: 2-6-13 Sampling Time: 1325 Depth to Water: 81.10

Sample I.D.: MW-5 Laboratory: BC Labs

Analyzed for: See COC. Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

FB I.D. (if applicable): @ Time Analyzed for:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

√ confirmed ORP w/ Ultrameter II

WELL MONITORING DATA SHEET

Project #: 130125-AW1	Site: JPL Pasadena
Sampler: AW	Gauging Date: 2-6-13
Well I.D.: MW-6	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 245	Depth to Water (DTW): 188.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type YSI Pro Plus
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 200.04	

Purge Method: Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; 2" Rediflo pump; Extraction Pump; Other Dedicated RF2

Sampling Method: Disposable Bailer; Extraction Port; Dedicated Tubing; Other:

Flow Rate= 3 gpm

Start Purge Date= 2-6-13 Pump @ 230'

36.6 (Gals.) X 3 = 109.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
0836	20.6	6.52	1215	2.26	9.26	118.2	19	189.49
0842	20.6	6.50	1213	1.82	9.10	126.3	37	189.49
0849	20.6	6.49	1213	0.83	9.12	131.4	56	189.49
0855	20.6	6.49	1214	0.40	9.13	135.0	74	189.49
0901	20.6	6.49	1213	0.41	9.12	138.2	92	189.49
0907	20.6	6.49	1214	0.40	9.16	141.3	110	189.49

Did well dewater? Yes (No) Gallons actually evacuated: 110

Sampling Date: 2-6-13 Sampling Time: 0910 Depth to Water: 189.49

Sample I.D.: MW-6 Laboratory: BC Labs

Analyzed for: See COC Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

FB I.D. (if applicable): @ Time Analyzed for:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 130125-AW1	Site: JPL, Pasadena
Sampler: AW	Gauging Date: 2-7-13
Well I.D.: MW-7	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 275	Depth to Water (DTW): 221.23
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type YSI Pro Plus
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 231.98	

Purge Method: Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; 2" Rediflo pump; Extraction Pump; Other Dedicated RF2

Sampling Method: Disposable Bailer; Extraction Port; (Dedicated Tubing); Other:

Flow Rate= 2 gpm

Start Purge Date= 2-7-13 Pump @ 265'

35.0 (Gals.) X 3 = 10.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
1220	24.4	6.92	686	0.47	6.46	398.7	16	221.28
1228	24.5	6.93	684	0.59	6.08	351.4	36	221.28
1236	24.5	6.93	681	0.42	5.95	310.8	52	221.28
1244	24.6	6.92	680	0.35	5.85	312.1	68	221.28
1252	24.7	6.92	680	0.37	5.74	314.6	84	221.28
1300	24.7	6.92	679	0.39	5.66	314.1	110	221.28

Did well dewater? Yes (No) Gallons actually evacuated: 110

Sampling Date: 2-7-13 Sampling Time: 1305 Depth to Water: 221.28

Sample I.D.: MW-7 Laboratory: BC Labs

Analyzed for: See COC. Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-7-1Q13 1305

FB I.D. (if applicable): @ Time Analyzed for: See COC.

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 130125-AW1	Site: JPL Pasadena
Sampler: AW	Gauging Date: 2-7-13
Well I.D.: MW-8	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 205	Depth to Water (DTW): 146.31
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type YSI Pro Plus
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 158.04	

Purge Method: Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; 2" Rediflo pump; Extraction Pump; Other Dedicated RFZ

Sampling Method: Disposable Bailer; Extraction Port; (Dedicated Tubing); Other:

Flow Rate= 3 gpm

Start Purge Date= 2-7-13 Pump @ 195'

38.2 (Gals.) X 3 = 114.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
0839	15.9	7.00	429	0.29	3.68	203.5	18	147.15
0846	15.9	6.97	428	0.26	3.65	213.8	39	147.15
0852	15.9	6.96	427	0.31	3.59	221.1	57	147.15
0859	15.9	6.95	427	0.46	3.63	226.6	78	147.15
0905	15.9	6.95	425	0.38	3.67	229.7	96	147.15
0912	16.0	6.95	425	0.25	3.63	232.1	117	147.15

Did well dewater? Yes (No) Gallons actually evacuated: 117

Sampling Date: 2-7-13 Sampling Time: 0915 Depth to Water: 147.15

Sample I.D.: MW-8 Laboratory: BC Labs

Analyzed for: See C.O.C. Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-6-1Q13

FB I.D. (if applicable): @ Time Analyzed for: See COC

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 130125-AW1	Site: JPL, Pasadena
Sampler: AW	Gauging Date: 2-7-13
Well I.D.: MW-10	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 155	Depth to Water (DTW): 98.26
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type YSI- Pro Plus
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 109.60	

Purge Method: Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; 2" Rediflo pump; Extraction Pump; Other Dedicated Pump RF2

Sampling Method: Disposable Bailer; Extraction Port; (Dedicated Tubing); Other:

Flow Rate= 2 gpm

Start Purge Date= 2-7-13 Pump @ 140'

36.9 (Gals.) X 3 = 110.7 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius^2 * 0.163

Time	Temp (°C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
0720	19.8	6.59	984	0.85	6.84	188.7	19	98.40
0729	19.8	6.58	986	0.71	6.92	203.2	37	98.40
0740	19.9	6.57	988	0.78	6.89	211.0	56	98.40
0749	19.9	6.57	993	0.61	6.93	219.1	74	98.40
0759	19.9	6.56	991	0.48	6.95	223.6	93	98.40
0808	19.9	6.56	992	0.37	6.96	227.1	111	98.40

Did well dewater? Yes (No) Gallons actually evacuated: 111

Sampling Date: 2-7-13 Sampling Time: 0810 Depth to Water: 98.40

Sample I.D.: MW-10 Laboratory: BC Labs

Analyzed for: See C.O.C. Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

FB I.D. (if applicable): @ Time Analyzed for:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 130125-tw1	Site: JPL, Pasadena
Sampler: tw	Gauging Date: 2-6-13
Well I.D.: MW-13	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 235	Depth to Water (DTW): 192.71
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type YSI Pro Plus
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 201.16	

Purge Method: Disposable Bailer; Positive Air Displacement; Electric Submersible; Waterra; 2" Rediflo pump; Extraction Pump; Other Dedicated RF2

Sampling Method: Disposable Bailer; Extraction Port; (Dedicated Tubing); Other:

Flow Rate= _____

Start Purge Date= 2-6-13 Pump @ 220'

27.5 (Gals.) X 3 = 82.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
0740	22.6	6.82	653	4.62	6.44	173.3	15	193.01
0744	22.5	6.81	653	2.29	6.41	136.2	28	193.01
0749	22.5	6.80	652	1.23	6.42	103.7	43	193.01
0753	22.5	6.80	652	2.10	6.44	95.6	56	193.01
0758	22.5	6.79	652	0.78	6.46	90.7	71	193.01
0802	22.6	6.79	652	0.60	6.44	90.1	83	193.01

Did well dewater? Yes (No) Gallons actually evacuated: 83

Sampling Date: 2-6-13 Sampling Time: 0805 Depth to Water: 193.01

Sample I.D.: MW-13 Laboratory: BC Labs

Analyzed for: See C.O.C. Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable): DUP-5-1013 0805

FB I.D. (if applicable): @ Time Analyzed for: See COC

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 130125-AW1	Site: JPL, Pasadena
Sampler: AW	Gauging Date: 2-6-13
Well I.D.: MW-15	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 74	Depth to Water (DTW): 32.30
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type YSI Pro Plus
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 40.64	

Purge Method:
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- 2" Rediflo pump
- Extraction Pump
- Other Dedicated RFZ

Sampling Method:
- Disposable Bailer
- Extraction Port
- (Dedicated Tubing)
- Other: ___

Flow Rate= 4 gpm

Start Purge Date= 2-6-13 Pump @ 54'

27.2 (Gals.) X 3 = 81.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
1338	16.6	6.97	492	0.04	0.14	153.0	14	33.23
1342	16.6	6.96	487	0.12	0.15	157.1	28	33.05
1345	16.6	6.97	490	0.22	0.15	158.6	42	33.05
1349	16.6	6.97	490	0.21	0.14	161.2	56	33.05
1352	16.6	6.97	491	0.26	0.13	158.9	70	33.05
1356	16.6	6.98	490	0.23	0.12	155.1	84	33.05

Did well dewater? Yes (No) Gallons actually evacuated: 84

Sampling Date: 2-6-13 Sampling Time: 1400 Depth to Water: 33.05

Sample I.D.: MW-15 Laboratory: BC Labs

Analyzed for: See COC. Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

FB I.D. (if applicable): @ Time Analyzed for:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 130125-tw1	Site: JPL, Pasadena
Sampler: tw	Gauging Date: 2-7-13
Well I.D.: MW-16	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 285	Depth to Water (DTW): 244.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	Flow Cell Type YSI-Pro Plus
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 252.84	

Purge Method:
- Disposable Bailer
- Positive Air Displacement
- Electric Submersible
- Waterra
- 2" Rediflo pump
- Extraction Pump
- Other Dedicated RFZ

Sampling Method:
- Disposable Bailer
- Extraction Port
- (Dedicated Tubing)
- Other:

Flow Rate= 1gpm

Start Purge Date= 2-7-13 Pump @ 265'

26.2 (Gals.) X 3 = 78.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°C)	pH	Cond. (mS or µS)	Turbidity (NTUs)	D.O. (mg/L)	ORP (mV)	Gals. Removed	DTW
1030	25.2	7.03	661 tw	0.30	4.64	736.0 vv	14	245.34
1043	25.2	7.03	659	0.81	4.52	747.0	27	245.34
1056	25.2	7.02	662	0.43	3.68	759.6	40	245.31
1109	25.2	7.02	661	0.48	3.70	760.7	53	245.33
1122	25.2	7.01	661	0.38	3.80	760.5	66	245.29
1135	25.2	7.00	661	0.29	3.64	762.9	79	245.30

Did well dewater? Yes (No) Gallons actually evacuated: 79

Sampling Date: 2-7-13 Sampling Time: 1140 Depth to Water: 245.30

Sample I.D.: MW-16 Laboratory: BC Labs

Analyzed for: See C.O.C. Other:

EB I.D. (if applicable): @ Time Duplicate I.D. (if applicable):

FB I.D. (if applicable): @ Time Analyzed for:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	mV	Post-purge:	mV

vv Confirmed ORP reading w/ Utrameter II

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-3
SAMPLING DATE(S) 1-30-13
LOCATION: W of E Parking lot, Near spreading Ponds
WATER LEVEL INSIDE CASING: 174.62
ATM. PRESSURE (PSI): (Start) 14.26 (Finish) 14.27
21.84°C 17.25°C

PROBE TYPE Westbay
SERIAL NO. EMS2508
PROJECT: JPL Pasadena
OPERATOR(S) AWolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	185.30	✓	189.20	✓	189.20	✓	185.30	18.5	429	8.27	22.0	8.0	136	1235	MW-3-4
3	1	✓	✓	✓	✓	✓	92.90	✓	101.29	✓	101.29	✓	92.90	18.3	438	8.28	3.48	7.9	192	1305	MW-3-3
2	1	✓	✓	✓	✓	✓	51.89	✓	66.61	✓	66.61	✓	51.89	18.1	392	8.22	3.50	8.3	203	1335	MW-3-2

Comments: MS/MSD @ Port 4

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-4
SAMPLING DATE(S) 2-4-13
LOCATION: Parking lot E. of B-306, JPL
WATER LEVEL INSIDE CASING: 201.62
ATM. PRESSURE (PSI): (Start) 14.17 (Finish) 14.16
13.21°C 16.06°C

PROBE TYPE Westbay
SERIAL NO. EMS2508
PROJECT: JPL, Pasadena
OPERATOR(S) KWolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
3	1	✓	✓	✓	✓	✓	70.41	✓	106.80	✓	106.80	✓	70.41	15.7	459	7.92	4.65	~~13.5~~ 7.6	186	0805	MW-4-3
	2	✓	✓	✓	✓	✓	70.41	✓	106.77	✓	106.77	✓	70.41								
2	1	✓	✓	✓	✓	✓	34.54	✓	72.11	✓	72.11	✓	34.54	16.4	732	7.89	61.3	7.2	152	0900	MW-4-2
1	1	✓	✓	✓	✓	✓	14.28	✓	39.91	✓	39.91	✓	14.28	17.5	431	8.06	9.53	6.8	190	0940	MW-4-1

Comments: TB= TB-6-2/4/13 0700 EB= EB-6-2/4/13 0730 DUP @ Port 3 = DUP-4-0213 0805

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-11
SAMPLING DATE(S) 3-5-13
LOCATION: Loading area S. of B-277, JPL
WATER LEVEL INSIDE CASING: 157.31
ATM. PRESSURE (PSI): (Start) 14.15 (Finish) 14.11
13.48°C 16.75°C

PROBE TYPE Westbay
SERIAL NO. EMS250A
PROJECT: JPL Pasadena
OPERATOR(S) AWolff
WEATHER Fog

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	176.76	✓	172.60	✓	172.60	✓	176.76	14.6	247	8.55	7.92	7.5	-65	0800	MW-11-4
3	1	✓	✓	✓	✓	✓	135.87	✓	130.90	✓	130.90	✓	135.87	13.9	367	8.44	6.49	7.0	83	0840	MW-11-3
2	1	✓	✓	✓	✓	✓	62.01	✓	61.17	✓	61.17	✓	62.01	13.8	465	8.41	7.05	7.4	83	0915	MW-11-2
1	1	✓	✓	✓	✓	✓	14.60	✓	28.49	✓	28.49	✓	14.60	13.7	500	8.30	3.39	8.9	69	0950	MW-11-1

Comments: TB= TB-7-2/5/13 0920 EB= EB-7-2/5/13 0930 MS/MSD @ Port 3 Level IV @ Port 2

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-12
SAMPLING DATE(S) 2-4-13
LOCATION: Parking lot E. of B-302, JPL
WATER LEVEL INSIDE CASING: 105.08
ATM. PRESSURE (PSI): (Start) 14.19 (Finish) 14.13
20.83°C 16.86°C

PROBE TYPE Westbay
SERIAL NO. EMS2508
PROJECT: JPL Pasadena
OPERATOR(S) tWolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	211.41	✓	183.30	✓	183.30	✓	211.41	15.4	431	8.38	4.62	6.3	61	1100	MW-12-5
4	1	✓	✓	✓	✓	✓	161.57	✓	145.72	✓	145.72	✓	161.57	15.1	470	8.29	13.5	6.8	181	1135	MW-12-4
3	1	✓	✓	✓	✓	✓	113.27	✓	98.91	✓	98.91	✓	113.27	15.6	437	8.37	~~13.5~~ 528	6.8	26	1215	MW-12-3
2	1	✓	✓	✓	✓	✓	78.49	✓	65.72	✓	65.72	✓	78.49	15.7	546	7.72	2.93	8.4	45	1250	MW-12-2
1	1	✓	✓	✓	✓	✓	33.42	✓	30.01	✓	30.01	✓	33.42	15.4	423	8.21	29.6	7.2	96	1330	MW-12-1

Comments: MS/MSD @ Port 4

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-14
SAMPLING DATE(S) 1-29-13
LOCATION: JPL Annex Parking Lot
WATER LEVEL INSIDE CASING: 49.49
ATM. PRESSURE (PSI): (Start) 14.14 (Finish) 14.20
13.00°C 18.75°C

PROBE TYPE Westbay
SERIAL NO. EMS 2598
PROJECT: JPL Pasadena
OPERATOR(S) Awaliff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm in	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	187.60	✓	173.60	✓	173.60	✓	187.60	16.8	346	8.51	4.69	6.5	150	0850	MW-14-5
4	1	✓	✓	✓	✓	✓	151.02	✓	137.24	✓	137.24	✓	151.02	16.2	750	8.15	1.21	9.5	181	0920	MW-14-4
3	1	✓	✓	✓	✓	✓	119.71	✓	105.17	✓	105.17	✓	119.71	15.9	1141	8.25	1.91	7.2	201	0950	MW-14-3
2	1	✓	✓	✓	✓	✓	73.90	✓	59.52	✓	59.52	✓	73.90	16.0	1207	8.09	2.99	6.8	195	1020	MW-14-2
1	1	✓	✓	✓	✓	✓	43.32	✓	29.44	✓	29.44	✓	43.32	14.9	1151	7.96	13.3	7.9	194	1050	MW-14-1

Comments: TB= TB-2-1/29/13 0800 EB= EB-2-1/29/13 0810 Level IV @ Port 1

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-1T
SAMPLING DATE(S) 1-30-13
LOCATION: 800 W. Harriet St, Altadena
WATER LEVEL INSIDE CASING: 204.94
ATM. PRESSURE (PSI): (Start) 14.22 (Finish) 14.21
12.19°C 16.72°C

PROBE TYPE Westbay
SERIAL NO. EMS 2508
PROJECT: JPL Pasadena
OPERATOR(S) AWolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	180.02	✓	156.60	✓	156.60	✓	180.02	14.0	489	8.35	3.27	8.0	172	0820	MW-1T-4
3	1	✓	✓	✓	✓	✓	130.57	✓	116.74	✓	116.74	✓	130.57	14.0	491	8.51	2.69	7.8	176	0850	MW-1T-3
2	1	✓	✓	✓	✓	✓	87.97	✓	77.07	✓	77.07	✓	87.97	14.8	485	8.29	5.02	7.8	138	0920	MW-1T-2

Comments: TB= TB-3-1/30/13 0730 EB= EB-3-1/30/13 0800 Level II @ Port 4

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-18
SAMPLING DATE(S) 1-30-13
LOCATION: 820 Altadena Dr, Altadena
WATER LEVEL INSIDE CASING: 344.51
ATM. PRESSURE (PSI): (Start) 14.22 (Finish) 14.22
19.78°C 19.76°C

PROBE TYPE Westbay
SERIAL NO. EMS2508
PROJECT: JPL Pasadena
OPERATOR(S) AWolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	165.10	✓	189.74	✓	189.74	✓	165.10	16.8	309	8.35	1.86	7.0	103	1015	MW-18-5
4	1	✓	✓	✓	✓	✓	113.80	✓	139.14	✓	139.14	✓	113.80	17.6	392	8.46	1.38	7.6	71	1045	MW-18-4
3	1	✓	✓	✓	✓	✓	52.81	✓	89.66	✓	89.66	✓	52.81	17.7	481	8.45	1.59	7.2	39	1115	MW-18-3
2	1	✓	✓	✓	✓	✓	14.41	✓	45.82	✓	45.82	✓	14.41	17.3	458	8.46	6.47	7.0	155	1145	MW-18-2

Comments: MS/MSD @ Port 3

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-19
SAMPLING DATE(S) 1-28-13
LOCATION: 2696 Windsor Ave, Altadena
WATER LEVEL INSIDE CASING: 135.81
ATM. PRESSURE (PSI): (Start) 14.16 (Finish) 14.14
16.85°C 15.69°C

PROBE TYPE Westbay
SERIAL NO. EMS2508
PROJECT: JPL Pasadena
OPERATOR(S) AWolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	172.74	✓	144.46	✓	144.46	✓	172.74	14.8	672	8.30	1.16	6.3	113	1150	MW-19-5
4	1	✓	✓	✓	✓	✓	149.03	✓	119.58	✓	119.58	✓	149.03	16.1	650	8.13	0.26	7.0	148	1215	MW-19-4
3	1	✓	✓	✓	✓	✓	126.45	✓	106.75	✓	106.75	✓	126.45	15.6	592	8.11	0.24	6.5	179	1245	MW-19-3
2	1	✓	✓	✓	✓	✓	92.61	✓	73.02	✓	73.02	✓	92.61	15.8	1029	7.85	21.9	6.8	200	1315	MW-19-2
1	1	✓	✓	✓	✓	✓	61.46	✓	44.84	✓	44.84	✓	61.46	14.7	443	7.62	20.6	5.8	97	1345	MW-19-1
	2	✓	✓	✓	✓	✓	61.46	✓	44.85	✓	44.85	✓	61.46								

Comments: MS/MSD Collected @ Port 4 DUP collected @ Port 1 = DUP-1-1Q13 1345

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-20
SAMPLING DATE(S) 1-28-13
LOCATION: 2580 N. Lincoln Ave, Altadena
WATER LEVEL INSIDE CASING: 191.77
ATM. PRESSURE (PSI): (Start) 14.11 (Finish) 14.11
13.71°C 17.01°C

PROBE TYPE Westbay
SERIAL NO. EMS 2508
PROJECT: JPL Pasadena
OPERATOR(S) Jwolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	323.14	✓	317.23	✓	317.23	✓	323.14	10.5	422	9.13	2.52	11.0	-21	0855	MW-20-5
4	1	✓	✓	✓	✓	✓	236.40	✓	224.38	✓	224.38	✓	236.40	12.8	290	9.42	1.83	9.4	-117	0930	MW-20-4
3	1	✓	✓	✓	✓	✓	176.65	✓	162.06	✓	162.06	✓	176.65	12.7	304	9.52	1.53	6.9	-92	1000	MW-20-3
2	1	✓	✓	✓	✓	✓	102.79	✓	94.23	✓	94.23	✓	102.79	12.9	500	8.62	0.95	5.5	96	1030	MW-20-2
1	1	✓	✓	✓	✓	✓	32.38	✓	24.19	✓	24.19	✓	32.38	12.8	596	8.31	4.92	10.2	-45	1100	MW-20-1

Comments: TB= TB-1-1/28/13 0750 SB= SB-1-1/28/13 0800 EB= EB-1-1/28/13 0815

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-21
SAMPLING DATE(S) 2-5-13
LOCATION: Hahamongna Park, Dirt lot, Holes 5 basket
WATER LEVEL INSIDE CASING: 7.17
ATM. PRESSURE (PSI): (Start) 14.21 (Finish) 14.20
17.32°C 16.92°C

PROBE TYPE Westbay
SERIAL NO. EMS2SBR
PROJECT: JPL Pasadena
OPERATOR(S) AWolff
WEATHER Hazey

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	129.55	✓	147.01	✓	147.01	✓	129.55	17.7	835	8.22	1.13	7.8	156	1130	MW-21-5
4	1	✓	✓	✓	✓	✓	102.46	✓	120.14	✓	120.14	✓	102.46	17.2	783	7.99	2.49	7.8	144	1210	MW-21-4
3	1	✓	✓	✓	✓	✓	72.48	✓	90.28	✓	90.28	✓	72.48	17.6	1155	8.16	1.44	7.2	175	1245	MW-21-3
2	1	✓	✓	✓	✓	✓	37.92	✓	56.06	✓	56.06	✓	37.92	16.9	1303	8.09	0.56	7.5	204	1320	MW-21-2
1	1	✓	✓	✓	✓	✓	14.20	✓	24.61	✓	24.61	✓	14.20	17.7	1207	7.95	2.86	7.7	176	1350	MW-21-1

Comments: MS/MSD @ Port 1

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-22
SAMPLING DATE(S): 1-31-13
LOCATION: Building 180 Parking lot, JPL
WATER LEVEL INSIDE CASING: 160.51
ATM. PRESSURE (PSI): (Start) 14.19 (Finish) 14.16
13.15°C 18.02°C

PROBE TYPE: Westbay
SERIAL NO.: EMS2504
PROJECT: JPL Pasadena
OPERATOR(S): tWaiff
WEATHER: Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
3	1	✓	✓	✓	✓	✓	115.60	✓	102.69	✓	102.64	✓	115.60	12.6	681	8.18	1.05	9.5	206	~~0748~~ 0750	MW-22-3
2	1	✓	✓	✓	✓	✓	89.90	✓	76.46	✓	76.46	✓	89.90	14.1	741	8.12	1.00	7.0	200	0810	MW-22-2
1	1	✓	✓	✓	✓	✓	53.01	✓	40.05	✓	40.05	✓	53.01	13.4	1158	7.96	15.0	10.7	215	0840	MW-22-1

Comments: TB= TB-4-1/31/13 0630 SB= SB-2-1/31/13 0640 EB= EB-4-1/31/13 0650 Level IV @ Port 2

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-23
SAMPLING DATE(S) 2-1-13
LOCATION: B-233 Parking Lot in Handicap spot, JPL
WATER LEVEL INSIDE CASING: 106.31
ATM. PRESSURE (PSI): (Start) 14.21 (Finish) 14.17
13.18°C 20.23°C

PROBE TYPE Westbay
SERIAL NO. EMS2508
PROJECT: JPL Pasadena
OPERATOR(S) A Wolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	162.96	✓	148.97	✓	148.97	✓	162.96	15.5	379	8.20	3.51	11.0	178	0715	MW-23-4
	2	✓	✓	✓	✓	✓	162.95	✓	148.98	✓	148.98	✓	162.95								
3	1	✓	✓	✓	✓	✓	108.28	✓	99.29	✓	99.29	✓	108.28	15.9	432	8.16	2.22	7.9	137	0810	MW-23-3
2	1	✓	✓	✓	✓	✓	80.10	✓	71.18	✓	71.18	✓	80.10	16.6	1064	7.95	0.86	7.2	191	0850	MW-23-2
1	1	✓	✓	✓	✓	✓	45.30	✓	38.15	✓	38.15	✓	45.30	19.0	1176	7.87	6.76	8.8	178	0925	MW-23-1

Comments: TB= TB-5-2/1/13 0630 EB= EB-5-2/1/13 0640 DUP @ Port 4 = DUP-3-1Q13 Level IV @ Port 3 0715

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-24
SAMPLING DATE(S) 1-31-13
LOCATION: Access Rd E. of B-233, JPL
WATER LEVEL INSIDE CASING: 192.11
ATM. PRESSURE (PSI): (Start) 14.16 (Finish) 14.20
18.36°C 21.58°C

PROBE TYPE Westbay
SERIAL NO. EMS 2508
PROJECT: JPL Pasadena
OPERATOR(S) MWolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
4	1	✓	✓	✓	✓	✓	172.80	✓	154.64	✓	154.64	✓	172.80	21.6	247	9.25	2.11	8.4	-85	1040	MW-24-4
3	1	✓	✓	✓	✓	✓	121.04	✓	108.03	✓	108.03	✓	121.04	21.7	415	8.48	1.70	5.7	-35	1115	MW-24-3
2	1	✓	✓	✓	✓	✓	94.22	✓	81.71	✓	81.71	✓	94.22	20.8	498	8.26	1.27	5.7	12	1200	MW-24-2
1	1	✓	✓	✓	✓	✓	53.40	✓	43.81	✓	43.81	✓	53.40	22.4	559	7.82	45.9	5.0	-36	1250	MW-24-1

Comments: Level IV @ Port 4 MS/MSD @ Port 1

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-25
SAMPLING DATE(S) 1-29-13
LOCATION: 1000 W. Mountain St.
WATER LEVEL INSIDE CASING: 258.40
ATM. PRESSURE (PSI): (Start) 14.28 (Finish) 14.30
16.26°C 19.62°C

PROBE TYPE Westbay
SERIAL NO. EMS2508
PROJECT: JPL, Pasadena
OPERATOR(S) AWolff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters							Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
5	1	✓	✓	✓	✓	✓	215.76	✓	217.04	✓	217.04	✓	215.76	17.5	365	9.54	1.21	7.0	-121	1200	MW-25-5
4	1	✓	✓	✓	✓	✓	181.20	✓	183.31	✓	183.31	✓	181.20	16.9	781	8.22	3.30	8.1	136	1235	MW-25-4
	2	✓	✓	✓	✓	✓	181.22	✓	183.31	✓	183.31	✓	181.22								
3	1	✓	✓	✓	✓	✓	124.80	✓	127.89	✓	127.79	✓	124.80	17.1	716	8.29	2.66	6.4	130	1325	MW-25-3
2	1	✓	✓	✓	✓	✓	89.99	✓	93.19	✓	93.19	✓	89.99	17.5	671	8.18	2.74	6.7	137	1355	MW-25-2
1	1	✓	✓	✓	✓	✓	61.76	✓	64.80	✓	64.80	✓	61.76	17.1	541	7.93	12.9	8.7	125	1425	MW-25-1

Comments: DUP @ Port 4 = DUP-2-1Q13 1235 Level II @ Port 2

WESTBAY™ GROUNDWATER MONITORING WELL
FIELD DATA LOG SHEET

WELL ID: MW-26
SAMPLING DATE(S) 2-1-13
LOCATION: John Muir High School Parking Lot
WATER LEVEL INSIDE CASING: 69.39
ATM. PRESSURE (PSI): (Start) 14.24 (Finish) 14.20
22.02°C 19.92°C

PROBE TYPE Westbay
SERIAL NO. EMS 2508
PROJECT: JPL Pasadena
OPERATOR(S) twiff
WEATHER Clear

Port Number	Run Number	Probe to Top Collar	Surface Function Tests / Position Sampler (probe in top of collar) / (lower probe to port)				Sample Collection Checks (probe at sampling port in MP casing)							Field Parameters						Sample	
		Arm out / Land Probe	Shoe Out/ Close Valve/ Check Vacuum	Open Valve/ Apply Vacuum (5 psi)	Close Valve/ Shoe In/ Arm In	Locate Port/ Arm Out/ Land Probe	Pressure in MP Casing (psi)	Shoe Out	Port Pressure (psi)	Open Valve	Port Pressure (psi)	Close Valve/ Shoe In	Pressure in MP Casing (psi)	Sample Temp (°C)	SC (µS/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (ppm)	ORP (mV)	Sample Time	Sample ID
2	1	✓	✓	✓	✓	✓	80.44	✓	67.04	✓	67.04	✓	80.44	19.7	661	8.38	15.4	6.4	198	1030	MW-26-2
1	1	✓	✓	✓	✓	✓	45.53	✓	31.73	✓	31.73	✓	45.53	19.4	978	8.05	25.1	5.3	204	1105	MW-26-1

Comments: