

### **ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS**

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



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 07/26/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1314762

Invoice ID: B151411

Enclosed are the results of analyses for samples received by the laboratory on 7/15/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*  
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4100 Atlas Court Bakersfield, CA 93308 (661) 327-4911 FAX (661) 327-1918 [www.bclabs.com](http://www.bclabs.com)

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BC

## Laboratories, Inc.

Environmental Testing Laboratory Since 1949

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## Chain of Custody Form

# 13-141762

\*Required Fields

		Analysis Requested				Billing	Page <u>1</u> of <u>2</u>	
						Client: * SAME		
Project Description: * JPL-GW Monitoring						Attn: *		
						Address: *		
Project Code: * 3Q13						City: *		
Street Address: * 505 King Ave.						State: *	ZIa: *	
City: * Columbus						Are there any tests with holding times? less than or equal to 48 hours?		
State: * OH						<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	
Zip: * 43201						*Standard Turnaround = 10		
Phone#: *(614) 424 - 5489								
Fax#: (614) 458 - 5489								
Email Address: connard@ Battelle.org								
Submission #:	Sample #	Sample Description	Date	Time	Matrix*	Notes		
-1	TB-1-7/15/13	7-15-13 0730	AQ	X				
-2	SB-1-7/15/13		0745	X	X			
-3	E3-1-7/15/13		0750	X	X			
-4	MW-20-5		0830	X	X			
-5	MW-20-4		0910	X	X	Level IV		
-6	MW-20-3		0945	X	X			
-7	MW-20-2		1010	X	X			
-8	MW-20-1		1105	X	X			
-9	MW-19-5		1205	X	X			
-10	DSP-1-3Q13		1210	X	X			
-11	MW-19-4		1300	V				
Matrix Types: S = Soil		SL = Sludge	DW = Drinking Water	VWW = Wastewater	GW = Groundwater	L = Liquid	M = Miscellaneous	O = Other
Turnaround # of working days: *		<input type="checkbox"/> 24 Hr Rush	<input type="checkbox"/> 48 Hr Rush	<input type="checkbox"/> 3-5 Day Rush	<input checked="" type="checkbox"/> Normal (10 - Days)	* Additional Charges May Apply		
Lab TAT Approval: _____								
Comments:		PLEASE NOTE WHICH SAMPLES TO USE FOR QC (MS/MSD) 90% Level III and 10% Level IV data validation required: Level IV Notified on C of C NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)						
		MBU Site	Cost Center:	Global ID:				
		<input type="checkbox"/>	1. Relinquished By: <i>Q-BL-JM</i>	Date	Time	1. Received By: <i>J-M</i>	Date	Time
		<input type="checkbox"/>	2. Relinquished By: <i>MICRO</i>	Date	Time	2. Received By: <i>J-M</i>	Date	Time
		<input type="checkbox"/>	3. Relinquished By: <i>MICRO</i>	Date	Time	3. Received By: <i>J-M</i>	Date	Time
		<input type="checkbox"/>	Other (Specify) <i>SAS</i>					

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



## Chain of Custody Form

# 13-14762

**\*Required Fields**

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*  
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

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## Chain of Custody and Cooler Receipt Form for 1314762 Page 3 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 15	07/01/13	Page 1 Of 3				
Submission #: 13-14762										
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE LIQUID				
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals		Ice Chest <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments: _____						
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98	Container: QT PE	Thermometer ID: 207	Date/Time 7-15-13 1945					
		Temperature: (A) 3.0	°C / (C) 3.1	°C	Analyst Init SAS					
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL		B				B	BC	B	B	
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS		C				C	SD D 7/15			
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 9	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										
Summa Canister										
Comments:										
Sample Numbering Completed By: SAS	Date/Time: 7/15/13 2110									



## Chain of Custody and Cooler Receipt Form for 1314762 Page 4 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 15	07/01/13	Page 2 Of 3	
Submission #: 13-14762									
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>		
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>									
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Emissivity: 0.98 Container: QT PE Thermometer ID: 207 Temperature: (A) 3.0 °C / (C) 3.1 °C				Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date/Time 7-15-13 1445 Analyst Init SAS			
<b>SAMPLE CONTAINERS</b>  QT GENERAL MINERAL/ GENERAL 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 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 Sodium Canister		<b>SAMPLE NUMBERS</b> 11 12 13 14 5 6 7 8 9 10							
		A 3	A 3	A 3	A 3	( )	( )	( )	( )
Comments: Sample has been transported and received Signature: SAK Date: 7/15/13 2118									



## Chain of Custody and Cooler Receipt Form for 1314762 Page 5 of 5

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 15	07/01/13	Page <u>3</u> Of <u>3</u>	
Submission #: <u>13-14762</u>									
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>	
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>									
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.98</u> Container: <u>PT PE</u> Thermometer ID: <u>207</u>				Date/Time <u>7-15-13 1945</u> Analyst Init <u>SAS</u>			
<b>SAMPLE CONTAINERS</b>		<b>SAMPLE NUMBERS</b>							
		1	2	3	4	5	6	7	8
QT GENERAL MINERAL/ GENERAL		<u>B</u>	<u>B</u>	<u>B</u>		<u>B</u>			
PT PE UNPRESERVED		<u>Bk</u>							
QT INORGANIC CHEMICAL METALS		<u>7/15</u>							
PT INORGANIC CHEMICAL METALS		<u>C</u>	<u>C</u>	<u>C</u>		<u>C</u>			
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									
Summa Canister									
Comments:									
Sample Numbering Completed By: <u>SAS</u> Date/Time: <u>7/15/13 2110</u>									

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1314762-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-1-7/15/13 <b>Sampled By:</b> BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 07:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-1-7/15/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314762-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> SB-1-7/15/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 07:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): SB-1-7/15/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314762-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> EB-1-7/15/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 07:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-1-7/15/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1314762-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-20-5 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 08:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314762-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-20-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 09:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314762-06	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-20-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 09:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1314762-07	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-20-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 10:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314762-08	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-20-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 11:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314762-09	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-19-5 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 12:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1314762-10	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> DUP-1-3Q13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 12:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-1-3Q13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314762-11	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-19-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 13:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314762-12	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-19-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 13:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1314762-13	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-19-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 14:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314762-14	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-19-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/15/2013 19:45 <b>Sampling Date:</b> 07/15/2013 14:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-01	Client Sample Name: JPL-GW, TB-1-7/15/13, 7/15/2013 7:30:00AM						
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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-01	Client Sample Name: JPL-GW, TB-1-7/15/13, 7/15/2013 7:30:00AM						
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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505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-01	Client Sample Name: JPL-GW, TB-1-7/15/13, 7/15/2013 7:30:00AM						
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		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)	101	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	10:50	MGC	MS-V5	1	BWG1026



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505 King Ave.  
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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-01	Client Sample Name: JPL-GW, TB-1-7/15/13, 7/15/2013 7:30:00AM						
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	07/16/13	07/16/13 10:50	MGC	MS-V5	1	BWG1026



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505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-02	Client Sample Name: JPL-GW, SB-1-7/15/13, 7/15/2013 7:45:00AM, 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

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505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-02	Client Sample Name: JPL-GW, SB-1-7/15/13, 7/15/2013 7:45:00AM, 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	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
<b>Toluene</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-02	Client Sample Name: JPL-GW, SB-1-7/15/13, 7/15/2013 7:45:00AM, 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		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		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)	97.5	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	11:12	MGC	MS-V5	1	BWG1026



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-02	Client Sample Name: JPL-GW, SB-1-7/15/13, 7/15/2013 7:45:00AM, 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	07/16/13	07/16/13 11:12	MGC	MS-V5	1	BWG1026



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505 King Ave.  
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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-02	Client Sample Name: JPL-GW, SB-1-7/15/13, 7/15/2013 7:45:00AM, 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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-314.0	07/18/13	07/18/13	20:54	LS1	IC6	1	BWG1314



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314762-02	Client Sample Name: JPL-GW, SB-1-7/15/13, 7/15/2013 7:45:00AM, 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	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	07/15/13	07/15/13 23:51	LS1	KONE-1	1	BWG1034
2	EPA-200.8	07/19/13	07/19/13 19:10	SRM	PE-EL2	1	BWG1383



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-03	Client Sample Name: JPL-GW, EB-1-7/15/13, 7/15/2013 7:50:00AM, 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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-03	Client Sample Name: JPL-GW, EB-1-7/15/13, 7/15/2013 7:50:00AM, 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	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
<b>Toluene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-03	Client Sample Name: JPL-GW, EB-1-7/15/13, 7/15/2013 7:50:00AM, 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	11:35	MGC	MS-V5	1	BWG1026



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-03	Client Sample Name: JPL-GW, EB-1-7/15/13, 7/15/2013 7:50:00AM, 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	07/16/13	07/16/13 11:35	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-03	Client Sample Name: JPL-GW, EB-1-7/15/13, 7/15/2013 7:50:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/18/13	07/18/13 21:06	LS1	IC6	1		BWG1314



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314762-03	Client Sample Name: JPL-GW, EB-1-7/15/13, 7/15/2013 7:50:00AM, 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	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/15/13	07/15/13 23:51	LS1	KONE-1	1	BWG1034	
2	EPA-200.8	07/19/13	07/19/13 19:36	SRM	PE-EL2	1	BWG1383	



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-04	Client Sample Name: JPL-GW, MW-20-5, 7/15/2013 8:30:00AM, 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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-04	Client Sample Name: JPL-GW, MW-20-5, 7/15/2013 8:30:00AM, 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	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
<b>Styrene</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-04	Client Sample Name: JPL-GW, MW-20-5, 7/15/2013 8:30:00AM, 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	11:57	MGC	MS-V5	1	BWG1026



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-04	Client Sample Name: JPL-GW, MW-20-5, 7/15/2013 8:30:00AM, 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	07/16/13	07/16/13 11:57	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-04	Client Sample Name: JPL-GW, MW-20-5, 7/15/2013 8:30:00AM, 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		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	
1	EPA-314.0	07/18/13	07/18/13 21:18	LS1	IC6	1	BWG1314	



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314762-04	Client Sample Name: JPL-GW, MW-20-5, 7/15/2013 8:30:00AM, 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	07/15/13	07/15/13 23:51	LS1	KONE-1	1	BWG1034
2	EPA-200.8	07/19/13	07/19/13 19:39	SRM	PE-EL2	1	BWG1383



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-05	Client Sample Name: JPL-GW, MW-20-4, 7/15/2013 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		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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-05	Client Sample Name: JPL-GW, MW-20-4, 7/15/2013 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	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-05	Client Sample Name: JPL-GW, MW-20-4, 7/15/2013 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		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		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)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	12:20	MGC	MS-V5	1	BWG1026



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
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**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-05	Client Sample Name: JPL-GW, MW-20-4, 7/15/2013 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	07/16/13	07/16/13 12:20	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-05	Client Sample Name: JPL-GW, MW-20-4, 7/15/2013 9:10:00AM, 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		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	
1	EPA-314.0	07/18/13	07/18/13 21:30	LS1	IC6	1	BWG1314	



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314762-05	Client Sample Name: JPL-GW, MW-20-4, 7/15/2013 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	0.88	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	07/15/13	07/15/13 23:51	LS1	KONE-1	1	BWG1034
2	EPA-200.8	07/19/13	07/19/13 19:42	SRM	PE-EL2	1	BWG1383



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-06	Client Sample Name: JPL-GW, MW-20-3, 7/15/2013 9:45:00AM, 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

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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-06	Client Sample Name: JPL-GW, MW-20-3, 7/15/2013 9:45:00AM, 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
<b>Ethylbenzene</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.098</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Styrene</b>	<b>0.36</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Tetrachloroethene</b>	<b>0.18</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>Toluene</b>	<b>0.12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Acrylonitrile</b>	<b>2.9</b>	<b>ug/L</b>	<b>5.0</b>	<b>1.2</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-06	Client Sample Name: JPL-GW, MW-20-3, 7/15/2013 9:45:00AM, 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		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		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)	106	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	12:42	MGC	MS-V5	1	BWG1026



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-06	Client Sample Name: JPL-GW, MW-20-3, 7/15/2013 9:45:00AM, 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	07/16/13	07/16/13 12:42	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-06	Client Sample Name: JPL-GW, MW-20-3, 7/15/2013 9:45:00AM, 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		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	
1	EPA-314.0	07/18/13	07/18/13 21:41	LS1	IC6	1	BWG1314	



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Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314762-06	Client Sample Name: JPL-GW, MW-20-3, 7/15/2013 9:45:00AM, 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	0.92	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	07/15/13	07/15/13 23:54	LS1	KONE-1	1	BWG1034
2	EPA-200.8	07/19/13	07/19/13 19:45	SRM	PE-EL2	1	BWG1383



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-07	Client Sample Name: JPL-GW, MW-20-2, 7/15/2013 10:10:00AM, 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
<b>Chloroform</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-07	Client Sample Name: JPL-GW, MW-20-2, 7/15/2013 10:10:00AM, 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
<b>Tetrachloroethene</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.76</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-07	Client Sample Name: JPL-GW, MW-20-2, 7/15/2013 10:10:00AM, 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		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)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	88.7	%	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	07/16/13	07/16/13 08:34	MGC	MS-V5	1	BWG1026



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-07	Client Sample Name: JPL-GW, MW-20-2, 7/15/2013 10:10:00AM, 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	07/16/13	07/16/13 08:34	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-07	Client Sample Name: JPL-GW, MW-20-2, 7/15/2013 10:10:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/18/13	07/18/13 21:53	LS1	IC6	1	BWG1314	



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Reported: 07/26/2013 16:39  
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Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314762-07	Client Sample Name: JPL-GW, MW-20-2, 7/15/2013 10:10:00AM, 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	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	07/15/13	07/15/13 23:51	LS1	KONE-1	1	BWG1034
2	EPA-200.8	07/22/13	07/22/13 19:59	JSS	PE-EL1	1	BWG1500



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505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-08	Client Sample Name: JPL-GW, MW-20-1, 7/15/2013 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
<b>Chloroform</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-08	Client Sample Name: JPL-GW, MW-20-1, 7/15/2013 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
<b>Methyl t-butyl ether</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-08	Client Sample Name: JPL-GW, MW-20-1, 7/15/2013 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		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)	103	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	13:05	MGC	MS-V5	1	BWG1026



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-08	Client Sample Name: JPL-GW, MW-20-1, 7/15/2013 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	07/16/13	07/16/13 13:05	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-08	Client Sample Name: JPL-GW, MW-20-1, 7/15/2013 11:00:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.2	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/18/13	07/18/13 22:05	LS1	IC6	1	BWG1314	



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314762-08	Client Sample Name: JPL-GW, MW-20-1, 7/15/2013 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	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	07/15/13	07/15/13 23:54	LS1	KONE-1	1	BWG1034
2	EPA-200.8	07/19/13	07/19/13 19:49	SRM	PE-EL2	1	BWG1383



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**Reported:** 07/26/2013 16:39  
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**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-09	Client Sample Name: JPL-GW, MW-19-5, 7/15/2013 12:05:00PM, 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		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
<b>Chloroform</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-09	Client Sample Name: JPL-GW, MW-19-5, 7/15/2013 12:05:00PM, 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	V11	1
n-Propylbenzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
<b>Styrene</b>	<b>0.070</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Tetrachloroethene</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-09	Client Sample Name: JPL-GW, MW-19-5, 7/15/2013 12:05:00PM, 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		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)	104	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	13:28	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-09	Client Sample Name: JPL-GW, MW-19-5, 7/15/2013 12:05:00PM, 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	07/16/13	07/16/13 13:28	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-09	Client Sample Name: JPL-GW, MW-19-5, 7/15/2013 12:05:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.1	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/18/13	07/18/13 22:17	LS1	IC6	1		BWG1314



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-10	Client Sample Name: JPL-GW, DUP-1-3Q13, 7/15/2013 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		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
<b>Chloroform</b>	<b>0.20</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-10	Client Sample Name: JPL-GW, DUP-1-3Q13, 7/15/2013 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	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
<b>Tetrachloroethene</b>	<b>0.85</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-10	Client Sample Name: JPL-GW, DUP-1-3Q13, 7/15/2013 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		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		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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	87.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	13:50	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-10	Client Sample Name: JPL-GW, DUP-1-3Q13, 7/15/2013 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	07/16/13	07/16/13 13:50	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-10	Client Sample Name: JPL-GW, DUP-1-3Q13, 7/15/2013 12:10:00PM, 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	07/18/13	07/18/13 22:29	LS1	IC6	1	BWG1314



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-11	Client Sample Name: JPL-GW, MW-19-4, 7/15/2013 1:00:00PM, 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		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
<b>Chloroform</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-11	Client Sample Name: JPL-GW, MW-19-4, 7/15/2013 1:00:00PM, 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	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
<b>Tetrachloroethene</b>	<b>0.51</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-11	Client Sample Name: JPL-GW, MW-19-4, 7/15/2013 1:00:00PM, 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		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		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)	101	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	14:13	MGC	MS-V5	1	BWG1026



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-11	Client Sample Name: JPL-GW, MW-19-4, 7/15/2013 1:00:00PM, 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	07/16/13	07/16/13 14:13	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-11	Client Sample Name: JPL-GW, MW-19-4, 7/15/2013 1:00:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/18/13	07/18/13 22:41	LS1	IC6	1	BWG1314	



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-12	Client Sample Name: JPL-GW, MW-19-3, 7/15/2013 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
<b>Chloroform</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-12	Client Sample Name: JPL-GW, MW-19-3, 7/15/2013 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	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
<b>Tetrachloroethene</b>	<b>0.59</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-12	Client Sample Name: JPL-GW, MW-19-3, 7/15/2013 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		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		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)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	90.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	14:36	MGC	MS-V5	1	BWG1026



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-12	Client Sample Name: JPL-GW, MW-19-3, 7/15/2013 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	07/16/13	07/16/13 14:36	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-12	Client Sample Name: JPL-GW, MW-19-3, 7/15/2013 1:30:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/18/13	07/18/13 23:16	LS1	IC6	1	BWG1315	



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-13	Client Sample Name: JPL-GW, MW-19-2, 7/15/2013 2:00:00PM, 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
<b>Bromodichloromethane</b>	<b>0.37</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Chloroform</b>	<b>0.89</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>1,2-Dichlorobenzene</b>	<b>0.080</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.072</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>1,1-Dichloroethane</b>	<b>0.34</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.32</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-13	Client Sample Name: JPL-GW, MW-19-2, 7/15/2013 2:00:00PM, 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	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
<b>Tetrachloroethene</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.86</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-13	Client Sample Name: JPL-GW, MW-19-2, 7/15/2013 2:00:00PM, 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		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		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)	102	%	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	07/16/13	07/16/13 14:58	MGC	MS-V5	1	BWG1026



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-13	Client Sample Name: JPL-GW, MW-19-2, 7/15/2013 2:00:00PM, 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	07/16/13	07/16/13 14:58	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-13	Client Sample Name: JPL-GW, MW-19-2, 7/15/2013 2:00:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/18/13	07/18/13 23:28	LS1	IC6	1	BWG1315	



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-14	Client Sample Name: JPL-GW, MW-19-1, 7/15/2013 2:30:00PM, 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

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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-14	Client Sample Name: JPL-GW, MW-19-1, 7/15/2013 2:30:00PM, 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	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:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314762-14	Client Sample Name: JPL-GW, MW-19-1, 7/15/2013 2:30:00PM, 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		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		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)	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/16/13	07/16/13	15:21	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314762-14	Client Sample Name: JPL-GW, MW-19-1, 7/15/2013 2:30:00PM, 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	07/16/13	07/16/13 15:21	MGC	MS-V5	1	BWG1026



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Reported: 07/26/2013 16:39  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314762-14	Client Sample Name: JPL-GW, MW-19-1, 7/15/2013 2:30:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/18/13	07/18/13 23:40	LS1	IC6	1		BWG1315



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1026</b>						
Benzene	BWG1026-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1026-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1026-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1026-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1026-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1026-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1026-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1026-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1026-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1026-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1026-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1026-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1026-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1026-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1026-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1026-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1026-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1026-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1026-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1026-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1026-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1026-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1026-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1026-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1026-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1026-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1026-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1026-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1026-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1026-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1026-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1026-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1026-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1026-BLK1	ND	ug/L	0.50	0.14	

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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1026</b>						
trans-1,3-Dichloropropene	BWG1026-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1026-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1026-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1026-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1026-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1026-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1026-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1026-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1026-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1026-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1026-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1026-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1026-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1026-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1026-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1026-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1026-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1026-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1026-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1026-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1026-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1026-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1026-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1026-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1026-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1026-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1026-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1026-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1026-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1026-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1026-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1026-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1026-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1026-BLK1	ND	ug/L	4.0	0.97	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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505 King Ave.  
Columbus, OH 43201

**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1026</b>						
Ethyl t-butyl ether	BWG1026-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1026-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1026-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1026-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1026-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1026-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1026-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1026-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1026-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1026-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1026-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1026-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1026-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1026-BLK1	103	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1026-BLK1	104	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1026-BLK1	89.2	%	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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1026</b>									
Benzene	BWG1026-BS1	LCS	24.230	25.000	ug/L	96.9	70 - 130		
Bromodichloromethane	BWG1026-BS1	LCS	25.080	25.000	ug/L	100	70 - 130		
Chlorobenzene	BWG1026-BS1	LCS	24.400	25.000	ug/L	97.6	70 - 130		
Chloroethane	BWG1026-BS1	LCS	24.390	25.000	ug/L	97.6	70 - 130		
1,4-Dichlorobenzene	BWG1026-BS1	LCS	26.480	25.000	ug/L	106	70 - 130		
1,1-Dichloroethane	BWG1026-BS1	LCS	24.060	25.000	ug/L	96.2	70 - 130		
1,1-Dichloroethene	BWG1026-BS1	LCS	24.640	25.000	ug/L	98.6	70 - 130		
Toluene	BWG1026-BS1	LCS	24.270	25.000	ug/L	97.1	70 - 130		
Trichloroethene	BWG1026-BS1	LCS	24.210	25.000	ug/L	96.8	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWG1026-BS1	LCS	10.100	10.000	ug/L	101	75 - 125		
Toluene-d8 (Surrogate)	BWG1026-BS1	LCS	10.090	10.000	ug/L	101	80 - 120		
4-Bromofluorobenzene (Surrogate)	BWG1026-BS1	LCS	10.370	10.000	ug/L	104	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	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1026</b>		Used client sample: Y - Description: MW-20-2, 07/15/2013 10:10									
Benzene	MS	1314762-07	ND	23.460	25.000	ug/L		93.8		70 - 130	
	MSD	1314762-07	ND	22.710	25.000	ug/L	3.2	90.8	20	70 - 130	
Bromodichloromethane	MS	1314762-07	ND	24.780	25.000	ug/L		99.1		70 - 130	
	MSD	1314762-07	ND	24.910	25.000	ug/L	0.5	99.6	20	70 - 130	
Chlorobenzene	MS	1314762-07	ND	24.100	25.000	ug/L		96.4		70 - 130	
	MSD	1314762-07	ND	23.710	25.000	ug/L	1.6	94.8	20	70 - 130	
Chloroethane	MS	1314762-07	ND	24.460	25.000	ug/L		97.8		70 - 130	
	MSD	1314762-07	ND	24.410	25.000	ug/L	0.2	97.6	20	70 - 130	
1,4-Dichlorobenzene	MS	1314762-07	ND	26.400	25.000	ug/L		106		70 - 130	
	MSD	1314762-07	ND	25.900	25.000	ug/L	1.9	104	20	70 - 130	
1,1-Dichloroethane	MS	1314762-07	ND	23.780	25.000	ug/L		95.1		70 - 130	
	MSD	1314762-07	ND	23.050	25.000	ug/L	3.1	92.2	20	70 - 130	
1,1-Dichloroethene	MS	1314762-07	ND	24.060	25.000	ug/L		96.2		70 - 130	
	MSD	1314762-07	ND	23.940	25.000	ug/L	0.5	95.8	20	70 - 130	
Toluene	MS	1314762-07	ND	23.740	25.000	ug/L		95.0		70 - 130	
	MSD	1314762-07	ND	23.950	25.000	ug/L	0.9	95.8	20	70 - 130	
Trichloroethene	MS	1314762-07	0.76000	24.160	25.000	ug/L		93.6		70 - 130	
	MSD	1314762-07	0.76000	24.480	25.000	ug/L	1.3	94.9	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1314762-07	ND	10.190	10.000	ug/L		102		75 - 125	
	MSD	1314762-07	ND	9.3900	10.000	ug/L	8.2	93.9		75 - 125	
Toluene-d8 (Surrogate)	MS	1314762-07	ND	10.200	10.000	ug/L		102		80 - 120	
	MSD	1314762-07	ND	10.100	10.000	ug/L	1.0	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1314762-07	ND	10.100	10.000	ug/L		101		80 - 120	
	MSD	1314762-07	ND	9.7200	10.000	ug/L	3.8	97.2		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
<b>QC Batch ID: BWG1026</b>						
Chloroacetonitrile	BWG1026-BLK1	0	ug/L			
1-Chlorobutane	BWG1026-BLK1	0	ug/L			
1,1-Dichloropropane	BWG1026-BLK1	0	ug/L			
Methyl acrylate	BWG1026-BLK1	0	ug/L			
Nitrobenzene	BWG1026-BLK1	0	ug/L			
2-Nitropropane	BWG1026-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
<b>QC Batch ID: BWG1314</b>						
Perchlorate	BWG1314-BLK1	ND	ug/L	4.0	0.81	
<b>QC Batch ID: BWG1315</b>						
Perchlorate	BWG1315-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	<b>Control Limits</b>		Lab Quals
							Percent Recovery	RPD	
QC Batch ID: BWG1314									
Perchlorate	BWG1314-BS1	LCS	10.099	10.000	ug/L	101		85 - 115	
QC Batch ID: BWG1315									
Perchlorate	BWG1315-BS1	LCS	10.494	10.000	ug/L	105		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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1314</b>		Used client sample: Y - Description: MW-20-2, 07/15/2013 10:10								
Perchlorate	DUP	1314762-07	1.9472	2.1912		ug/L	11.8		15	J
	MS	1314762-07	1.9472	11.800	10.101	ug/L		97.5		80 - 120
	MSD	1314762-07	1.9472	11.570	10.101	ug/L	2.0	95.3	15	80 - 120
<b>QC Batch ID: BWG1315</b>		Used client sample: N								
Perchlorate	DUP	1314766-01	ND	ND		ug/L			15	
	MS	1314766-01	ND	9.7629	10.101	ug/L		96.7		80 - 120
	MSD	1314766-01	ND	9.5388	10.101	ug/L	2.3	94.4	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
<b>QC Batch ID: BWG1034</b>						
Hexavalent Chromium	BWG1034-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1383</b>						
Total Recoverable Chromium	BWG1383-BLK1	ND	ug/L	3.0	0.50	
<b>QC Batch ID: BWG1500</b>						
Total Recoverable Chromium	BWG1500-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1034</b>									
Hexavalent Chromium	BWG1034-BS1	LCS	0.051465	0.050000	mg/L	103		85 - 115	
<b>QC Batch ID: BWG1383</b>									
Total Recoverable Chromium	BWG1383-BS1	LCS	41.707	40.000	ug/L	104		85 - 115	
<b>QC Batch ID: BWG1500</b>									
Total Recoverable Chromium	BWG1500-BS1	LCS	41.284	40.000	ug/L	103		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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1034</b>		Used client sample: Y - Description: MW-20-2, 07/15/2013 10:10									
Hexavalent Chromium	DUP	1314762-07	ND	ND		mg/L			10		
	MS	1314762-07	ND	0.056756	0.052632	mg/L		108		85 - 115	
	MSD	1314762-07	ND	0.056757	0.052632	mg/L	0.0	108	10	85 - 115	
<b>QC Batch ID: BWG1383</b>		Used client sample: Y - Description: SB-1-7/15/13, 07/15/2013 07:45									
Total Recoverable Chromium	DUP	1314762-02	ND	ND		ug/L			20		
	MS	1314762-02	ND	40.610	40.000	ug/L		102		70 - 130	
	MSD	1314762-02	ND	42.365	40.000	ug/L	4.2	106	20	70 - 130	
<b>QC Batch ID: BWG1500</b>		Used client sample: Y - Description: MW-20-2, 07/15/2013 10:10									
Total Recoverable Chromium	DUP	1314762-07	ND	0.56200		ug/L			20		J
	MS	1314762-07	ND	36.877	40.000	ug/L		92.2		70 - 130	
	MSD	1314762-07	ND	35.435	40.000	ug/L	4.0	88.6	20	70 - 130	



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**Reported:** 07/26/2013 16:39  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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.



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 07/29/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1314878

Invoice ID: B151494

Enclosed are the results of analyses for samples received by the laboratory on 7/16/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

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## Chain of Custody Form

# 13-14878

# 13-14878

\*Required Fields

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Report To: Battelle MHTS		Project Description: *JPL-GW Monitoring		Analysis Requested		Billing	
Client: *	David Conner	Attn: *		Client: *	SAME	Address: *	
Street Address: *	505 King Ave.	Project Code: *	3Q13	Attn: *		City: *	
City: * Columbus	State: * OH	Zip: *	43201	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?			
Email Address: connerd@battelle.org		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				* Standard Turnaround = 10	
Submission #:	Sample Description	Date	Time	Matrix *	Notes		
-1	TB-2-7/16/13	7-16-13	06:30	4Q	<input checked="" type="checkbox"/>		
-2	E3-2-7/16/13		06:30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-3	MA-14-5		0720	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-4	MA-14-4		0755	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-5	MA-14-3		0830	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-6	MA-14-2		0900	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-7	DOPE-2-3Q13		0905	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-8	MA-14-1		0940	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-9	MA-24-4		110	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-10	MA-24-3		1150	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
-11	MA-24-2		1300	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
Matrix Types: S = Soil SL = Sludge DW = Drinking Water		WW = Wastewater GW = Groundwater		L = Liquid		M = Miscellaneous O = Other	
Turnaround # of working days: * <input type="checkbox"/> 24 Hr Rush		<input type="checkbox"/> 48 Hr Rush		<input type="checkbox"/> 3-5 Day Rush		<input checked="" type="checkbox"/> Normal (10 - Days)	
* Additional Charges May Apply							
Lab TAT Approval: _____							
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)							
Cost Center:	MBU Site	1. Relinquished By:	Date	Time	1. Received By:	Date	Time
	<input type="checkbox"/>	<u>Connie</u>	7-16-13	1530	<u>Connie</u>	7-16-13	1530
	<input type="checkbox"/>	<u>Connie</u>	7-16-13	1540	<u>Connie</u>	7-16-13	1540
	<input type="checkbox"/>	<u>Connie</u>	7-16-13	1530	<u>Connie</u>	7-16-13	1530
	<input type="checkbox"/>	<u>Connie</u>	7-16-13	1530	<u>Connie</u>	7-16-13	1530
	<input type="checkbox"/>	<u>Connie</u>	7-16-13	1530	<u>Connie</u>	7-16-13	1530

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## Chain of Custody Form

# 13-141878

\*Required Fields

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## Chain of Custody and Cooler Receipt Form for 1314878 Page 3 of 4

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 15	07/01/13	Page <u>1</u> Of <u>2</u>		
Submission #: 13-14878										
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>			
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u> Container: <u>V04</u> Thermometer ID: <u>207</u> Temperature: (A) <u>1.4</u> °C / (C) <u>0.9</u> °C				Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date/Time <u>7-16-13 1830</u> Analyst Init <u>SAS</u>				
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	B	B	B	B	B	B	B	B	BA	BC
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	C			C	C	C	C	R	B	D
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 (3)	A (3)	A (9)
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504					SHORT HOLDING TIME					
QT EPA 508/608/8080					Cr <sup>+6</sup>	NO <sub>x</sub>	NO <sub>x</sub>	OP	SS	
QT EPA 515.1/8150					DO	Cl <sub>2</sub>	BOD	MBAS	COT	
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547					CHK BY	DISTRIBUTION				
100ml EPA 531.1					LMA	MAIN TDRK4				
QT EPA 548						SUB-OUT				
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										
Summa Canister										
Comments:										
Sample Numbering Completed By: <u>SAS</u>	Date/Time: <u>7-16-13 2055</u>									
A = Actual / C = Corrected										



## Chain of Custody and Cooler Receipt Form for 1314878 Page 4 of 4

BC LABORATORIES INC.		COOLER RECEIPT FORM					Rev. No. 15	07/01/13	Page <u>2</u> Of <u>2</u>	
Submission #: <u>13-14878</u>										
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____					<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>			
<b>Refrigerant:</b> Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>										
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: <u>0.97</u> Container: <u>V04</u> Thermometer ID: <u>207</u> Temperature: (A) <u>1.4</u> °C / (C) <u>0.9</u> °C					Date/Time <u>7/16/13 1830</u> Analyst Init <u>SAS</u>			
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1 <sub>1</sub>	1 <sub>2</sub>	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL	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										
Summa Canister										
Comments:										
Sample Numbering Completed By: <u>SAS</u>	Date/Time: <u>7/16/13 1830</u>									
A = Actual / C = Corrected										



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1314878-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-2-7/16/13 <b>Sampled By:</b> BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 06:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-2-7/16/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314878-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> EB-2-7/16/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 06:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-2-7/16/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314878-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-14-5 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 07:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1314878-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-14-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 07:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314878-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-14-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 08:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314878-06	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-14-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 09:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1314878-07	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> DUPE-2-3Q13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 09:05 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUPE-2-3Q13 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314878-08	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-14-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 09:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314878-09	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-24-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 11:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1314878-10	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-24-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 11:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314878-11	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-24-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 13:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314878-12	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-24-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/16/2013 18:30 <b>Sampling Date:</b> 07/16/2013 13:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-01	Client Sample Name: JPL-GW, TB-2-7/16/13, 7/16/2013 6:30:00AM						
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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Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-01	Client Sample Name: JPL-GW, TB-2-7/16/13, 7/16/2013 6:30:00AM						
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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-01	Client Sample Name: JPL-GW, TB-2-7/16/13, 7/16/2013 6:30:00AM						
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		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)	99.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/17/13	07/17/13	10:41	MGC	MS-V5	1	BWG1110



Battelle MHTS  
505 King Ave.  
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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-01	Client Sample Name: JPL-GW, TB-2-7/16/13, 7/16/2013 6:30:00AM						
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	07/17/13	07/17/13 10:41	MGC	MS-V5	1	BWG1110



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-02	Client Sample Name: JPL-GW, EB-2-7/16/13, 7/16/2013 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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-02	Client Sample Name: JPL-GW, EB-2-7/16/13, 7/16/2013 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
<b>Toluene</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-02	Client Sample Name: JPL-GW, EB-2-7/16/13, 7/16/2013 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		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		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)	89.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/17/13	07/17/13	11:03	MGC	MS-V5	1	BWG1110



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-02	Client Sample Name: JPL-GW, EB-2-7/16/13, 7/16/2013 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	07/17/13	07/17/13 11:03	MGC	MS-V5	1	BWG1110



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-02	Client Sample Name: JPL-GW, EB-2-7/16/13, 7/16/2013 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	07/19/13	07/19/13 18:42	LS1	IC6	1	BWG1437



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314878-02	Client Sample Name: JPL-GW, EB-2-7/16/13, 7/16/2013 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	0.77	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	07/16/13	07/16/13 21:35	TMS	KONE-1	1	BWG1169
2	EPA-200.8	07/22/13	07/22/13 23:25	JSS	PE-EL1	1	BWG1500



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-03	Client Sample Name: JPL-GW, MW-14-5, 7/16/2013 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		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
<b>Chloroform</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-03	Client Sample Name: JPL-GW, MW-14-5, 7/16/2013 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		1

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-03	Client Sample Name: JPL-GW, MW-14-5, 7/16/2013 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		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		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)	90.0	%	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	07/17/13	07/17/13 11:26	MGC	MS-V5	1	BWG1110



Battelle MHTS  
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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-03	Client Sample Name: JPL-GW, MW-14-5, 7/16/2013 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	07/17/13	07/17/13 11:26	MGC	MS-V5	1	BWG1110



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-03	Client Sample Name: JPL-GW, MW-14-5, 7/16/2013 7:20:00AM, 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	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-314.0	07/19/13	07/19/13 18:54	LS1	IC6	1		BWG1437



Battelle MHTS  
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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-04	Client Sample Name: JPL-GW, MW-14-4, 7/16/2013 7:55:00AM, 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
<b>Chloroform</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>1,1-Dichloroethane</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-04	Client Sample Name: JPL-GW, MW-14-4, 7/16/2013 7:55:00AM, 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	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
<b>Tetrachloroethene</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-04	Client Sample Name: JPL-GW, MW-14-4, 7/16/2013 7:55:00AM, 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/17/13	07/17/13	11:48	MGC	MS-V5	1	BWG1110



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-04	Client Sample Name: JPL-GW, MW-14-4, 7/16/2013 7:55:00AM, 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	07/17/13	07/17/13 11:48	MGC	MS-V5	1	BWG1110



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-04	Client Sample Name: JPL-GW, MW-14-4, 7/16/2013 7:55:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 19:06	LS1	IC6	1	BWG1437	



Battelle MHTS  
505 King Ave.  
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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-05	Client Sample Name: JPL-GW, MW-14-3, 7/16/2013 8:30:00AM, 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
<b>Chloroform</b>	<b>0.57</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>1,1-Dichloroethane</b>	<b>0.33</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-05	Client Sample Name: JPL-GW, MW-14-3, 7/16/2013 8:30:00AM, 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
<b>Tetrachloroethene</b>	<b>0.65</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>2.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-05	Client Sample Name: JPL-GW, MW-14-3, 7/16/2013 8:30:00AM, 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	87.5	%	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	07/17/13	07/17/13 12:11	MGC	MS-V5	1	BWG1110



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-05	Client Sample Name: JPL-GW, MW-14-3, 7/16/2013 8:30:00AM, 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	07/17/13	07/17/13 12:11	MGC	MS-V5	1	BWG1110



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505 King Ave.  
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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-05	Client Sample Name: JPL-GW, MW-14-3, 7/16/2013 8:30:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	5.3	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	
1	EPA-314.0	07/19/13	07/19/13 19:18	LS1	IC6	1	BWG1437	



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314878-05	Client Sample Name: JPL-GW, MW-14-3, 7/16/2013 8:30:00AM, 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	1.1	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/16/13	07/16/13 21:35	TMS	KONE-1	1	BWG1169
2	EPA-200.8	07/22/13	07/22/13 23:28	JSS	PE-EL1	1	BWG1500



Battelle MHTS  
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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-06	Client Sample Name: JPL-GW, MW-14-2, 7/16/2013 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	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
<b>Chloroform</b>	<b>0.56</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>1,1-Dichloroethane</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>trans-1,2-Dichloroethene</b>	<b>0.25</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.15</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-06	Client Sample Name: JPL-GW, MW-14-2, 7/16/2013 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
<b>Tetrachloroethene</b>	<b>0.49</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>5.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-06	Client Sample Name: JPL-GW, MW-14-2, 7/16/2013 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		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		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)	93.5	%	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	07/17/13	07/17/13 12:33	MGC	MS-V5	1	BWG1110



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505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-06	Client Sample Name: JPL-GW, MW-14-2, 7/16/2013 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	07/17/13	07/17/13 12:33	MGC	MS-V5	1	BWG1110



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-06	Client Sample Name: JPL-GW, MW-14-2, 7/16/2013 9:00:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 19:30	LS1	IC6	1	BWG1437	



Battelle MHTS  
505 King Ave.  
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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314878-06	Client Sample Name: JPL-GW, MW-14-2, 7/16/2013 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	1.3	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/16/13	07/16/13 21:35	TMS	KONE-1	1	BWG1169
2	EPA-200.8	07/22/13	07/22/13 23:31	JSS	PE-EL1	1	BWG1500



Battelle MHTS  
505 King Ave.  
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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-07	Client Sample Name: JPL-GW, DUPE-2-3Q13, 7/16/2013 9:05:00AM, 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
<b>Chloroform</b>	<b>0.63</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>1,1-Dichloroethane</b>	<b>0.20</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.33</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
<b>trans-1,2-Dichloroethene</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.15</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-07	Client Sample Name: JPL-GW, DUPE-2-3Q13, 7/16/2013 9:05:00AM, 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
<b>Tetrachloroethene</b>	<b>0.49</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>6.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-07	Client Sample Name: JPL-GW, DUPE-2-3Q13, 7/16/2013 9:05:00AM, 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		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		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)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	88.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/17/13	07/17/13	12:56	MGC	MS-V5	1	BWG1110



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-07	Client Sample Name: JPL-GW, DUPE-2-3Q13, 7/16/2013 9:05:00AM, 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	07/17/13	07/17/13 12:56	MGC	MS-V5	1	BWG1110



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-07	Client Sample Name: JPL-GW, DUPE-2-3Q13, 7/16/2013 9:05:00AM, 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				Dilution	QC Batch ID
			Analyst	Instrument				
1	EPA-314.0	07/19/13	07/19/13 19:41	LS1	IC6	1		BWG1437



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314878-07	Client Sample Name: JPL-GW, DUPE-2-3Q13, 7/16/2013 9:05:00AM, 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	1.3	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/16/13	07/16/13 21:35	TMS	KONE-1	1	BWG1169
2	EPA-200.8	07/22/13	07/22/13 23:34	JSS	PE-EL1	1	BWG1500



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-08	Client Sample Name: JPL-GW, MW-14-1, 7/16/2013 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
<b>Chloroform</b>	<b>0.55</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-08	Client Sample Name: JPL-GW, MW-14-1, 7/16/2013 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
<b>Methyl t-butyl ether</b>	<b>0.49</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Tetrachloroethene</b>	<b>0.27</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>2.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-08	Client Sample Name: JPL-GW, MW-14-1, 7/16/2013 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		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		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)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/17/13	07/17/13	13:18	MGC	MS-V5	1	BWG1110



Battelle MHTS  
505 King Ave.  
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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-08	Client Sample Name: JPL-GW, MW-14-1, 7/16/2013 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	07/17/13	07/17/13 13:18	MGC	MS-V5	1	BWG1110



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-08	Client Sample Name: JPL-GW, MW-14-1, 7/16/2013 9:40:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.1	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 19:53	LS1	IC6	1	BWG1437	



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314878-08	Client Sample Name: JPL-GW, MW-14-1, 7/16/2013 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	1.3	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/16/13	07/16/13 21:41	TMS	KONE-1	1	BWG1169
2	EPA-200.8	07/22/13	07/22/13 23:37	JSS	PE-EL1	1	BWG1500



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314878-09	Client Sample Name: JPL-GW, MW-24-4, 7/16/2013 11:10:00AM, 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	0.58	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/16/13	07/16/13 21:41	TMS	KONE-1	1	BWG1169
2	EPA-200.8	07/22/13	07/22/13 23:40	JSS	PE-EL1	1	BWG1500



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-10	Client Sample Name: JPL-GW, MW-24-3, 7/16/2013 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	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
<b>1,1-Dichloroethane</b>	<b>0.23</b>	ug/L	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-10	Client Sample Name: JPL-GW, MW-24-3, 7/16/2013 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
<b>Styrene</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Tetrachloroethene</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-10	Client Sample Name: JPL-GW, MW-24-3, 7/16/2013 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		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)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	90.2	%	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	07/17/13	07/17/13 08:25	MGC	MS-V5	1	BWG1110



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-10	Client Sample Name: JPL-GW, MW-24-3, 7/16/2013 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	07/17/13	07/17/13 08:25	MGC	MS-V5	1	BWG1110



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-10	Client Sample Name: JPL-GW, MW-24-3, 7/16/2013 11:50:00AM, 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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-314.0	07/19/13	07/19/13	20:05	LS1	IC6	1	BWG1437



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Metals Analysis

BCL Sample ID:	1314878-10	Client Sample Name: JPL-GW, MW-24-3, 7/16/2013 11:50:00AM, 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	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/16/13	07/16/13 22:22	TMS	KONE-1	1	BWG1169	
2	EPA-200.8	07/24/13	07/24/13 20:48	SRM	PE-EL1	1	BWG1698	



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-11	Client Sample Name: JPL-GW, MW-24-2, 7/16/2013 1:00:00PM, 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
<b>Bromodichloromethane</b>	<b>0.40</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Carbon tetrachloride</b>	<b>0.33</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Chloroform</b>	<b>0.64</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>1,1-Dichloroethane</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-11	Client Sample Name: JPL-GW, MW-24-2, 7/16/2013 1:00:00PM, 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
<b>Tetrachloroethene</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-11	Client Sample Name: JPL-GW, MW-24-2, 7/16/2013 1:00:00PM, 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		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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/17/13	07/17/13	13:41	MGC	MS-V5	1	BWG1110



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-11	Client Sample Name: JPL-GW, MW-24-2, 7/16/2013 1:00:00PM, 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	07/17/13	07/17/13 13:41	MGC	MS-V5	1	BWG1110



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-11	Client Sample Name: JPL-GW, MW-24-2, 7/16/2013 1:00:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 20:17	LS1	IC6	1	BWG1437	



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314878-11	Client Sample Name: JPL-GW, MW-24-2, 7/16/2013 1:00:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0013	mg/L	0.0020	0.00070	EPA-7196	ND	J	1
Total Recoverable Chromium	2.4	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/16/13	07/16/13 21:41	TMS	KONE-1	1	BWG1169
2	EPA-200.8	07/22/13	07/22/13 23:43	JSS	PE-EL1	1	BWG1500



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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-12	Client Sample Name: JPL-GW, MW-24-1, 7/16/2013 1:40:00PM, 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
<b>Bromodichloromethane</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Chloroform</b>	<b>3.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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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Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-12	Client Sample Name: JPL-GW, MW-24-1, 7/16/2013 1:40:00PM, 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:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314878-12	Client Sample Name: JPL-GW, MW-24-1, 7/16/2013 1:40:00PM, 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		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)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	85.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/17/13	07/17/13	14:03	MGC	MS-V5	1	BWG1110



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Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314878-12	Client Sample Name: JPL-GW, MW-24-1, 7/16/2013 1:40:00PM, 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	07/17/13	07/17/13 14:03	MGC	MS-V5	1	BWG1110



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314878-12	Client Sample Name: JPL-GW, MW-24-1, 7/16/2013 1:40:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	71	mg/L	0.50	0.067	EPA-300.0	ND		1
Nitrate as N	1.4	mg/L	0.10	0.025	EPA-300.0	ND		1
Sulfate	42	mg/L	1.0	0.18	EPA-300.0	ND		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	0.0051	mg/L	0.020	0.0040	EPA-365.1	ND	J	4

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-300.0	07/17/13	07/17/13	12:46	LD1	IC1	1	BWG1131
2	EPA-353.2	07/17/13	07/17/13	09:22	TDC	KONE-1	1	BWG1162
3	EPA-314.0	07/19/13	07/19/13	21:16	LS1	IC6	1	BWG1437
4	EPA-365.1	07/17/13	07/17/13	08:46	TDC	KONE-1	1	BWG1165



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Reported: 07/29/2013 16:42  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314878-12	Client Sample Name: JPL-GW, MW-24-1, 7/16/2013 1:40:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0073	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	07/16/13	07/16/13 21:41	TMS	KONE-1	1	BWG1169
2	EPA-200.8	07/22/13	07/22/13 23:46	JSS	PE-EL1	1	BWG1500



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505 King Ave.  
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**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1110</b>						
Benzene	BWG1110-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1110-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1110-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1110-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1110-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1110-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1110-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1110-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1110-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1110-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1110-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1110-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1110-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1110-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1110-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1110-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1110-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1110-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1110-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1110-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1110-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1110-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1110-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1110-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1110-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1110-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1110-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1110-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1110-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1110-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1110-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1110-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1110-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1110-BLK1	ND	ug/L	0.50	0.14	

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**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
<b>QC Batch ID: BWG1110</b>						
trans-1,3-Dichloropropene	BWG1110-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1110-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1110-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1110-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1110-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1110-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1110-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1110-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1110-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1110-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1110-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1110-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1110-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1110-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1110-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1110-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1110-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1110-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1110-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1110-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1110-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1110-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1110-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1110-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1110-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1110-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1110-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1110-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1110-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1110-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1110-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1110-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1110-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1110-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
<b>QC Batch ID: BWG1110</b>						
Ethyl t-butyl ether	BWG1110-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1110-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1110-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1110-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1110-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1110-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1110-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1110-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1110-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1110-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1110-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1110-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1110-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1110-BLK1	106	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1110-BLK1	102	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1110-BLK1	90.0	%	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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1110</b>									
Benzene	BWG1110-BS1	LCS	24.240	25.000	ug/L	97.0	70 - 130		
Bromodichloromethane	BWG1110-BS1	LCS	27.220	25.000	ug/L	109	70 - 130		
Chlorobenzene	BWG1110-BS1	LCS	24.650	25.000	ug/L	98.6	70 - 130		
Chloroethane	BWG1110-BS1	LCS	25.390	25.000	ug/L	102	70 - 130		
1,4-Dichlorobenzene	BWG1110-BS1	LCS	26.790	25.000	ug/L	107	70 - 130		
1,1-Dichloroethane	BWG1110-BS1	LCS	24.340	25.000	ug/L	97.4	70 - 130		
1,1-Dichloroethene	BWG1110-BS1	LCS	25.780	25.000	ug/L	103	70 - 130		
Toluene	BWG1110-BS1	LCS	25.190	25.000	ug/L	101	70 - 130		
Trichloroethene	BWG1110-BS1	LCS	25.350	25.000	ug/L	101	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWG1110-BS1	LCS	10.080	10.000	ug/L	101	75 - 125		
Toluene-d8 (Surrogate)	BWG1110-BS1	LCS	10.270	10.000	ug/L	103	80 - 120		
4-Bromofluorobenzene (Surrogate)	BWG1110-BS1	LCS	10.190	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	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1110</b>		Used client sample: Y - Description: MW-24-3, 07/16/2013 11:50									
Benzene	MS	1314878-10	ND	24.260	25.000	ug/L		97.0		70 - 130	
	MSD	1314878-10	ND	25.260	25.000	ug/L	4.0	101	20	70 - 130	
Bromodichloromethane	MS	1314878-10	ND	26.050	25.000	ug/L		104		70 - 130	
	MSD	1314878-10	ND	27.100	25.000	ug/L	4.0	108	20	70 - 130	
Chlorobenzene	MS	1314878-10	ND	24.790	25.000	ug/L		99.2		70 - 130	
	MSD	1314878-10	ND	23.970	25.000	ug/L	3.4	95.9	20	70 - 130	
Chloroethane	MS	1314878-10	ND	25.200	25.000	ug/L		101		70 - 130	
	MSD	1314878-10	ND	27.430	25.000	ug/L	8.5	110	20	70 - 130	
1,4-Dichlorobenzene	MS	1314878-10	ND	27.100	25.000	ug/L		108		70 - 130	
	MSD	1314878-10	ND	25.590	25.000	ug/L	5.7	102	20	70 - 130	
1,1-Dichloroethane	MS	1314878-10	0.23000	24.610	25.000	ug/L		97.5		70 - 130	
	MSD	1314878-10	0.23000	26.150	25.000	ug/L	6.1	104	20	70 - 130	
1,1-Dichloroethene	MS	1314878-10	ND	24.620	25.000	ug/L		98.5		70 - 130	
	MSD	1314878-10	ND	26.720	25.000	ug/L	8.2	107	20	70 - 130	
Toluene	MS	1314878-10	ND	24.300	25.000	ug/L		97.2		70 - 130	
	MSD	1314878-10	ND	25.060	25.000	ug/L	3.1	100	20	70 - 130	
Trichloroethene	MS	1314878-10	ND	24.030	25.000	ug/L		96.1		70 - 130	
	MSD	1314878-10	ND	25.620	25.000	ug/L	6.4	102	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1314878-10	ND	10.100	10.000	ug/L		101		75 - 125	
	MSD	1314878-10	ND	10.160	10.000	ug/L	0.6	102		75 - 125	
Toluene-d8 (Surrogate)	MS	1314878-10	ND	10.130	10.000	ug/L		101		80 - 120	
	MSD	1314878-10	ND	10.110	10.000	ug/L	0.2	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1314878-10	ND	10.290	10.000	ug/L		103		80 - 120	
	MSD	1314878-10	ND	9.5000	10.000	ug/L	8.0	95.0		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
<b>QC Batch ID: BWG1110</b>						
Chloroacetonitrile	BWG1110-BLK1	0	ug/L			
1-Chlorobutane	BWG1110-BLK1	0	ug/L			
1,1-Dichloropropane	BWG1110-BLK1	0	ug/L			
Methyl acrylate	BWG1110-BLK1	0	ug/L			
Nitrobenzene	BWG1110-BLK1	0	ug/L			
2-Nitropropane	BWG1110-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
<b>QC Batch ID: BWG1131</b>						
Chloride	BWG1131-BLK1	ND	mg/L	0.50	0.067	
Nitrate as N	BWG1131-BLK1	ND	mg/L	0.10	0.025	
Sulfate	BWG1131-BLK1	ND	mg/L	1.0	0.18	
<b>QC Batch ID: BWG1162</b>						
Nitrite as N	BWG1162-BLK1	0.0013680	mg/L	0.050	0.0013	J
<b>QC Batch ID: BWG1165</b>						
ortho-Phosphate as P	BWG1165-BLK1	ND	mg/L	0.020	0.0040	
<b>QC Batch ID: BWG1437</b>						
Perchlorate	BWG1437-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1131</b>									
Chloride	BWG1131-BS1	LCS	52.598	50.000	mg/L	105		90 - 110	
Nitrate as N	BWG1131-BS1	LCS	5.1340	5.0000	mg/L	103		90 - 110	
Sulfate	BWG1131-BS1	LCS	105.51	100.00	mg/L	106		90 - 110	
<b>QC Batch ID: BWG1162</b>									
Nitrite as N	BWG1162-BS1	LCS	0.49180	0.50000	mg/L	98.4		90 - 110	
<b>QC Batch ID: BWG1165</b>									
ortho-Phosphate as P	BWG1165-BS1	LCS	0.19319	0.20000	mg/L	96.6		90 - 110	
<b>QC Batch ID: BWG1437</b>									
Perchlorate	BWG1437-BS1	LCS	10.146	10.000	ug/L	101		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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1131</b>		Used client sample: N								
Chloride	DUP	314851-01RE'	343.22	343.00		mg/L	0.1		10	
	MS	314851-01RE'	343.22	614.62	252.53	mg/L		107		80 - 120
	MSD	314851-01RE'	343.22	614.71	252.53	mg/L	0.0	108	10	80 - 120
Nitrate as N	DUP	314851-01RE'	0.70000	0.75000		mg/L	6.9		10	
	MS	314851-01RE'	0.70000	26.884	25.253	mg/L		104		80 - 120
	MSD	314851-01RE'	0.70000	26.904	25.253	mg/L	0.1	104	10	80 - 120
Sulfate	DUP	314851-01RE'	4.3750	4.1600		mg/L	5.0		10	J
	MS	314851-01RE'	4.3750	533.41	505.05	mg/L		105		80 - 120
	MSD	314851-01RE'	4.3750	536.24	505.05	mg/L	0.5	105	10	80 - 120
<b>QC Batch ID: BWG1162</b>		Used client sample: Y - Description: MW-24-1, 07/16/2013 13:40								
Nitrite as N	DUP	1314878-12	ND	ND		mg/L			10	
	MS	1314878-12	ND	0.52624	0.52632	mg/L		100		90 - 110
	MSD	1314878-12	ND	0.52639	0.52632	mg/L	0.0	100	10	90 - 110
<b>QC Batch ID: BWG1165</b>		Used client sample: Y - Description: MW-24-1, 07/16/2013 13:40								
ortho-Phosphate as P	DUP	1314878-12	0.0051400	0.0054070		mg/L	5.1		10	J
	MS	1314878-12	0.0051400	0.21304	0.21053	mg/L		98.8		90 - 110
	MSD	1314878-12	0.0051400	0.21629	0.21053	mg/L	1.5	100	10	90 - 110
<b>QC Batch ID: BWG1437</b>		Used client sample: Y - Description: MW-24-3, 07/16/2013 11:50								
Perchlorate	DUP	1314878-10	ND	ND		ug/L			15	
	MS	1314878-10	ND	9.3202	10.101	ug/L		92.3		80 - 120
	MSD	1314878-10	ND	9.4791	10.101	ug/L	1.7	93.8	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
<b>QC Batch ID: BWG1169</b>						
Hexavalent Chromium	BWG1169-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1500</b>						
Total Recoverable Chromium	BWG1500-BLK1	ND	ug/L	3.0	0.50	
<b>QC Batch ID: BWG1698</b>						
Total Recoverable Chromium	BWG1698-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1169</b>									
Hexavalent Chromium	BWG1169-BS1	LCS	0.051438	0.050000	mg/L	103		85 - 115	
<b>QC Batch ID: BWG1500</b>									
Total Recoverable Chromium	BWG1500-BS1	LCS	41.284	40.000	ug/L	103		85 - 115	
<b>QC Batch ID: BWG1698</b>									
Total Recoverable Chromium	BWG1698-BS1	LCS	41.278	40.000	ug/L	103		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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1169</b>		Used client sample: Y - Description: MW-24-3, 07/16/2013 11:50									
Hexavalent Chromium	DUP	1314878-10	ND	ND		mg/L			10		
	MS	1314878-10	ND	0.049497	0.052632	mg/L		94.0		85 - 115	
	MSD	1314878-10	ND	0.046575	0.052632	mg/L	6.1	88.5	10	85 - 115	
<b>QC Batch ID: BWG1500</b>		Used client sample: Y - Description: MW-20-2, 07/15/2013 10:10									
Total Recoverable Chromium	DUP	1314762-07	ND	0.56200		ug/L			20		J
	MS	1314762-07	ND	36.877	40.000	ug/L		92.2		70 - 130	
	MSD	1314762-07	ND	35.435	40.000	ug/L	4.0	88.6	20	70 - 130	
<b>QC Batch ID: BWG1698</b>		Used client sample: Y - Description: MW-24-3, 07/16/2013 11:50									
Total Recoverable Chromium	DUP	1314878-10	ND	ND		ug/L			20		
	MS	1314878-10	ND	36.651	40.000	ug/L		91.6		70 - 130	
	MSD	1314878-10	ND	36.901	40.000	ug/L	0.7	92.3	20	70 - 130	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/29/2013 16:42  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 07/31/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1314991

Invoice ID: B151646

Enclosed are the results of analyses for samples received by the laboratory on 7/17/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

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## Chain of Custody Form

# 13-14991

\*Required Fields

Report To:	Battelle MHTS			Project Description: JPL-GW Monitoring	Analysis Requested			Billing	
Client: Attn:	David Conner			Project Code: 3Q13	Client: Attn: Address: City: State: Zip:	SAME			
Street Address: City: Phone#: Email Address:	505 King Ave, Columbus (614) 424 - 5489 connerd@battelle.org			Nitrite 353.2	State: City: Zip: Are there any tests with holding times? less than or equal to 48 hours?				
Submission #:	Sample Description			Date	Time	Matrix*	Notes		
-1	TB-3-7/17/13			7-17-13	0700	AQ			
-2	EB-3-7/17/13				0710	X			
-3	MW-17-4				0800	X			
-4	MW-17-3				0840	X			
-5	MW-17-2				0915	X			
-6	MW-18-5				1030	X			
-7	MW-18-4				1130	X			
-8	DUPE-3-3Q13				1135	X			
-9	MW-18-3				1240	X			
-10	MW-18-2				1330	X			
									MISMSD
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 <input checked="" type="checkbox"/> Normal (10 - Days)									*Additional Charges May Apply
Lab TAT Approval:									
Comments:									Global ID:
PLEASE NOTATE WHICH SAMPLES TO USE FOR QC (MSMSD) 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)									1. Relinquished By: <i>Conner D</i> Date: 7-17-13 Time: 1530
									2. Relinquished By: <i>Nicole</i> Date: 7/17/13 Time: 1600
									3. Relinquished By: <i>Z</i> Date: 7-17-13 Time: 1905
									7/17/13 Time: 1905
									7/17/13 Time: 1905



## Chain of Custody and Cooler Receipt Form for 1314991 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM			Rev. No. 15	07/01/13	Page <u>1</u> Of <u>1</u>			
Submission #: <u>13-14991</u>										
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE LIQUID				
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals	Ice Chest <input type="checkbox"/>	Containers <input type="checkbox"/>	None <input checked="" type="checkbox"/> Comments: _____							
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>							
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <u>0.98</u>	Container: <u>A+PE</u>	Thermometer ID: <u>207</u>	Date/Time <u>7.17.13 1905</u>						
	Temperature: (A) <u>0.6</u> °C / (C) <u>0.7</u> °C			Analyst Init <u>SAS</u>						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL / GENERAL	B	B	B	B	B	B	B	B	BC	
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS	C	C	C	C		C	C	C	D	
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT TOX										
PT CHEMICAL OXYGEN DEMAND										
PLA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A 1									
40ml VOA VIAL	A 1 3	A 1 3	A 1 3	A 1 3	A 1 3	A 1 3	A 1 3	A 1 3	A 1 9	
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										
Summa Canister										
Comments: _____										
Sample Numbering Completed By: <u>SAS</u>	Date/Time: <u>7.17.13 2150</u>									
A = Actual / C = Corrected										

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Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1314991-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-3-7/17/13 <b>Sampled By:</b> BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 07:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-3-7/17/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314991-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> EB-3-7/17/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 07:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-3-7/17/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314991-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-17-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 08:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-17-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1314991-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-17-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 08:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-17-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314991-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-17-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 09:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-17-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1314991-06	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-18-5 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 10:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-18-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1314991-07	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-18-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 11:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-18-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314991-08	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> DUPE-3-3Q13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 11:35 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUPE-3-3Q13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1314991-09	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-18-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 12:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-18-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1314991-10	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-18-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/17/2013 19:05 <b>Sampling Date:</b> 07/17/2013 13:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-18-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-01	Client Sample Name: JPL-GW, TB-3-7/17/13, 7/17/2013 7:00:00AM						
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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Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-01	Client Sample Name: JPL-GW, TB-3-7/17/13, 7/17/2013 7:00:00AM						
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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-01	Client Sample Name: JPL-GW, TB-3-7/17/13, 7/17/2013 7:00:00AM						
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)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/18/13	07/18/13	10:44	MGC	MS-V5	1	BWG1226



Battelle MHTS  
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Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-01	Client Sample Name: JPL-GW, TB-3-7/17/13, 7/17/2013 7:00:00AM						
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	07/18/13	07/18/13 10:44	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-02	Client Sample Name: JPL-GW, EB-3-7/17/13, 7/17/2013 7:10:00AM, 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.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-02	Client Sample Name: JPL-GW, EB-3-7/17/13, 7/17/2013 7:10:00AM, 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
<b>Toluene</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-02	Client Sample Name: JPL-GW, EB-3-7/17/13, 7/17/2013 7:10:00AM, 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)	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)	92.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/18/13	07/18/13	11:06	MGC	MS-V5	1	BWG1226



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505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-02	Client Sample Name: JPL-GW, EB-3-7/17/13, 7/17/2013 7:10:00AM, 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	07/18/13	07/18/13 11:06	MGC	MS-V5	1	BWG1226



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-02	Client Sample Name: JPL-GW, EB-3-7/17/13, 7/17/2013 7:10:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 21:28	LS1	IC6	1	BWG1438	



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314991-02	Client Sample Name: JPL-GW, EB-3-7/17/13, 7/17/2013 7:10:00AM, 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	0.71	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/17/13	07/17/13 22:39	LS1	KONE-1	1	BWG1267	
2	EPA-200.8	07/23/13	07/23/13 18:57	SRM	PE-EL2	1	BWG1610	



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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-03	Client Sample Name: JPL-GW, MW-17-4, 7/17/2013 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
<b>Chloroform</b>	<b>0.26</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-03	Client Sample Name: JPL-GW, MW-17-4, 7/17/2013 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
<b>Styrene</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Tetrachloroethene</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.95</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-03	Client Sample Name: JPL-GW, MW-17-4, 7/17/2013 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)	103	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.8	%	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	07/18/13	07/18/13 11:29	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-03	Client Sample Name: JPL-GW, MW-17-4, 7/17/2013 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	07/18/13	07/18/13 11:29	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-03	Client Sample Name: JPL-GW, MW-17-4, 7/17/2013 8:00:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 21:40	LS1	IC6	1	BWG1438	



Battelle MHTS  
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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314991-03	Client Sample Name: JPL-GW, MW-17-4, 7/17/2013 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	0.61	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/17/13	07/17/13 22:39	LS1	KONE-1	1	BWG1267	
2	EPA-200.8	07/23/13	07/23/13 19:01	SRM	PE-EL2	1	BWG1610	



Battelle MHTS  
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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-04	Client Sample Name: JPL-GW, MW-17-3, 7/17/2013 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
<b>Carbon tetrachloride</b>	<b>0.25</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Chloroform</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-04	Client Sample Name: JPL-GW, MW-17-3, 7/17/2013 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
<b>Tetrachloroethene</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-04	Client Sample Name: JPL-GW, MW-17-3, 7/17/2013 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		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)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	90.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/18/13	07/18/13	11:51	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-04	Client Sample Name: JPL-GW, MW-17-3, 7/17/2013 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	07/18/13	07/18/13 11:51	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-04	Client Sample Name: JPL-GW, MW-17-3, 7/17/2013 8:40:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	7.6	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 21:52	LS1	IC6	1		BWG1438



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314991-04	Client Sample Name: JPL-GW, MW-17-3, 7/17/2013 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	0.88	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/17/13	07/17/13 22:39	LS1	KONE-1	1	BWG1267	
2	EPA-200.8	07/23/13	07/23/13 19:04	SRM	PE-EL2	1	BWG1610	



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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-05	Client Sample Name: JPL-GW, MW-17-2, 7/17/2013 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	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-05	Client Sample Name: JPL-GW, MW-17-2, 7/17/2013 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		1

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-05	Client Sample Name: JPL-GW, MW-17-2, 7/17/2013 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)	108	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	88.9	%	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	07/18/13	07/18/13 12:13	MGC	MS-V5	1	BWG1226



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-05	Client Sample Name: JPL-GW, MW-17-2, 7/17/2013 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	07/18/13	07/18/13 12:13	MGC	MS-V5	1	BWG1226



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-05	Client Sample Name: JPL-GW, MW-17-2, 7/17/2013 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 22:03	LS1	IC6	1	BWG1438	



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314991-05	Client Sample Name: JPL-GW, MW-17-2, 7/17/2013 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	0.69	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/17/13	07/17/13 22:39	LS1	KONE-1	1	BWG1267	
2	EPA-200.8	07/23/13	07/23/13 19:07	SRM	PE-EL2	1	BWG1610	



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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-06	Client Sample Name: JPL-GW, MW-18-5, 7/17/2013 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	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:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-06	Client Sample Name: JPL-GW, MW-18-5, 7/17/2013 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	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
<b>Styrene</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-06	Client Sample Name: JPL-GW, MW-18-5, 7/17/2013 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		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)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.6	%	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	07/18/13	07/18/13 12:36	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-06	Client Sample Name: JPL-GW, MW-18-5, 7/17/2013 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	07/18/13	07/18/13 12:36	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-06	Client Sample Name: JPL-GW, MW-18-5, 7/17/2013 10:50:00AM, 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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-314.0	07/19/13	07/19/13	22:15	LS1	IC6	1	BWG1438



Battelle MHTS  
505 King Ave.  
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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-07	Client Sample Name: JPL-GW, MW-18-4, 7/17/2013 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
<b>Carbon tetrachloride</b>	<b>2.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	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
<b>Chloroform</b>	<b>0.69</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-07	Client Sample Name: JPL-GW, MW-18-4, 7/17/2013 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
<b>Tetrachloroethene</b>	<b>0.95</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.92</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-07	Client Sample Name: JPL-GW, MW-18-4, 7/17/2013 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		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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	87.2	%	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	07/18/13	07/18/13 12:58	MGC	MS-V5	1	BWG1226



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-07	Client Sample Name: JPL-GW, MW-18-4, 7/17/2013 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	07/18/13	07/18/13 12:58	MGC	MS-V5	1	BWG1226



Battelle MHTS  
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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-07	Client Sample Name: JPL-GW, MW-18-4, 7/17/2013 11:30:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	13	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 22:27	LS1	IC6	1	BWG1438	



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314991-07	Client Sample Name: JPL-GW, MW-18-4, 7/17/2013 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	2.5	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/17/13	07/17/13 22:43	LS1	KONE-1	1	BWG1267	
2	EPA-200.8	07/23/13	07/23/13 19:10	SRM	PE-EL2	1	BWG1610	



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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-08	Client Sample Name: JPL-GW, DUPE-3-3Q13, 7/17/2013 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	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
<b>Carbon tetrachloride</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	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
<b>Chloroform</b>	<b>0.57</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-08	Client Sample Name: JPL-GW, DUPE-3-3Q13, 7/17/2013 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	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
<b>Tetrachloroethene</b>	<b>0.68</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.64</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-08	Client Sample Name: JPL-GW, DUPE-3-3Q13, 7/17/2013 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		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)	96.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/18/13	07/18/13	13:21	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-08	Client Sample Name: JPL-GW, DUPE-3-3Q13, 7/17/2013 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	07/18/13	07/18/13 13:21	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-08	Client Sample Name: JPL-GW, DUPE-3-3Q13, 7/17/2013 11:35:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	13	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 22:39	LS1	IC6	1		BWG1438



Battelle MHTS  
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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314991-08	Client Sample Name: JPL-GW, DUPE-3-3Q13, 7/17/2013 11:35:00AM, 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	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/17/13	07/17/13 22:43	LS1	KONE-1	1	BWG1267	
2	EPA-200.8	07/23/13	07/23/13 19:13	SRM	PE-EL2	1	BWG1610	



Battelle MHTS  
505 King Ave.  
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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-09	Client Sample Name: JPL-GW, MW-18-3, 7/17/2013 12:40:00PM, 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
<b>Carbon tetrachloride</b>	<b>10</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	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
<b>Chloroform</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-09	Client Sample Name: JPL-GW, MW-18-3, 7/17/2013 12:40:00PM, 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
<b>Tetrachloroethene</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.74</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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
<b>1,1,2-Trichloro-1,2,2-trifluoroethane</b>	<b>0.25</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.15</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-09	Client Sample Name: JPL-GW, MW-18-3, 7/17/2013 12:40:00PM, 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)	112	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	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	07/18/13	07/18/13 13:43	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-09	Client Sample Name: JPL-GW, MW-18-3, 7/17/2013 12:40:00PM, 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	07/18/13	07/18/13 13:43	MGC	MS-V5	1	BWG1226



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-09	Client Sample Name: JPL-GW, MW-18-3, 7/17/2013 12:40:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	44	ug/L	20	4.0	EPA-314.0	ND	A01	1

Run #	Method	Prep Date	Run Date/Time				QC Batch ID
			Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/20/13 03:47	LS1	IC6	5	BWG1438



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314991-09	Client Sample Name: JPL-GW, MW-18-3, 7/17/2013 12:40:00PM, 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	2.8	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/17/13	07/17/13 22:43	LS1	KONE-1	1	BWG1267	
2	EPA-200.8	07/23/13	07/23/13 19:16	SRM	PE-EL2	1	BWG1610	



Battelle MHTS  
505 King Ave.  
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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-10	Client Sample Name: JPL-GW, MW-18-2, 7/17/2013 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	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-10	Client Sample Name: JPL-GW, MW-18-2, 7/17/2013 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

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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1314991-10	Client Sample Name: JPL-GW, MW-18-2, 7/17/2013 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		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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.0	%	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	07/18/13	07/18/13 08:28	MGC	MS-V5	1	BWG1226



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**Reported:** 07/31/2013 13:27  
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**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1314991-10	Client Sample Name: JPL-GW, MW-18-2, 7/17/2013 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	07/18/13	07/18/13 08:28	MGC	MS-V5	1	BWG1226



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1314991-10	Client Sample Name: JPL-GW, MW-18-2, 7/17/2013 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/19/13	07/19/13 23:03	LS1	IC6	1	BWG1438	



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Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1314991-10	Client Sample Name: JPL-GW, MW-18-2, 7/17/2013 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	0.60	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/17/13	07/17/13 22:39	LS1	KONE-1	1	BWG1267	
2	EPA-200.8	07/23/13	07/23/13 18:26	SRM	PE-EL2	1	BWG1610	



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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
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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
<b>QC Batch ID: BWG1226</b>						
Benzene	BWG1226-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1226-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1226-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1226-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1226-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1226-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1226-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1226-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1226-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1226-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1226-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1226-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1226-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1226-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1226-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1226-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1226-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1226-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1226-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1226-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1226-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1226-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1226-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1226-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1226-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1226-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1226-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1226-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1226-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1226-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1226-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1226-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1226-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1226-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 07/31/2013 13:27  
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**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
<b>QC Batch ID: BWG1226</b>						
trans-1,3-Dichloropropene	BWG1226-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1226-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1226-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1226-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1226-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1226-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1226-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1226-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1226-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1226-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1226-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1226-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1226-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1226-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1226-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1226-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1226-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1226-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1226-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1226-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1226-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1226-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1226-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1226-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1226-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1226-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1226-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1226-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1226-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1226-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1226-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1226-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1226-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1226-BLK1	ND	ug/L	4.0	0.97	

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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1226</b>						
Ethyl t-butyl ether	BWG1226-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1226-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1226-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1226-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1226-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1226-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1226-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1226-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1226-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1226-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1226-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1226-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1226-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1226-BLK1	107	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1226-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1226-BLK1	93.6	%	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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1226</b>									
Benzene	BWG1226-BS1	LCS	25.770	25.000	ug/L	103		70 - 130	
Bromodichloromethane	BWG1226-BS1	LCS	28.300	25.000	ug/L	113		70 - 130	
Chlorobenzene	BWG1226-BS1	LCS	25.890	25.000	ug/L	104		70 - 130	
Chloroethane	BWG1226-BS1	LCS	26.920	25.000	ug/L	108		70 - 130	
1,4-Dichlorobenzene	BWG1226-BS1	LCS	28.490	25.000	ug/L	114		70 - 130	
1,1-Dichloroethane	BWG1226-BS1	LCS	26.200	25.000	ug/L	105		70 - 130	
1,1-Dichloroethene	BWG1226-BS1	LCS	25.710	25.000	ug/L	103		70 - 130	
Toluene	BWG1226-BS1	LCS	26.360	25.000	ug/L	105		70 - 130	
Trichloroethene	BWG1226-BS1	LCS	25.630	25.000	ug/L	103		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BWG1226-BS1	LCS	10.580	10.000	ug/L	106		75 - 125	
Toluene-d8 (Surrogate)	BWG1226-BS1	LCS	9.8800	10.000	ug/L	98.8		80 - 120	
4-Bromofluorobenzene (Surrogate)	BWG1226-BS1	LCS	10.210	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	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1226</b>		Used client sample: Y - Description: MW-18-2, 07/17/2013 13:30									
Benzene	MS	1314991-10	ND	26.260	25.000	ug/L		105		70 - 130	
	MSD	1314991-10	ND	25.080	25.000	ug/L	4.6	100	20	70 - 130	
Bromodichloromethane	MS	1314991-10	ND	29.600	25.000	ug/L		118		70 - 130	
	MSD	1314991-10	ND	27.830	25.000	ug/L	6.2	111	20	70 - 130	
Chlorobenzene	MS	1314991-10	ND	27.340	25.000	ug/L		109		70 - 130	
	MSD	1314991-10	ND	24.290	25.000	ug/L	11.8	97.2	20	70 - 130	
Chloroethane	MS	1314991-10	ND	27.720	25.000	ug/L		111		70 - 130	
	MSD	1314991-10	ND	26.280	25.000	ug/L	5.3	105	20	70 - 130	
1,4-Dichlorobenzene	MS	1314991-10	ND	31.730	25.000	ug/L		127		70 - 130	
	MSD	1314991-10	ND	27.940	25.000	ug/L	12.7	112	20	70 - 130	
1,1-Dichloroethane	MS	1314991-10	ND	27.000	25.000	ug/L		108		70 - 130	
	MSD	1314991-10	ND	25.420	25.000	ug/L	6.0	102	20	70 - 130	
1,1-Dichloroethene	MS	1314991-10	ND	27.500	25.000	ug/L		110		70 - 130	
	MSD	1314991-10	ND	25.880	25.000	ug/L	6.1	104	20	70 - 130	
Toluene	MS	1314991-10	ND	26.700	25.000	ug/L		107		70 - 130	
	MSD	1314991-10	ND	25.040	25.000	ug/L	6.4	100	20	70 - 130	
Trichloroethene	MS	1314991-10	ND	26.550	25.000	ug/L		106		70 - 130	
	MSD	1314991-10	ND	25.280	25.000	ug/L	4.9	101	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1314991-10	ND	9.8700	10.000	ug/L		98.7		75 - 125	
	MSD	1314991-10	ND	10.010	10.000	ug/L	1.4	100		75 - 125	
Toluene-d8 (Surrogate)	MS	1314991-10	ND	9.9500	10.000	ug/L		99.5		80 - 120	
	MSD	1314991-10	ND	9.9500	10.000	ug/L	0	99.5		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1314991-10	ND	10.330	10.000	ug/L		103		80 - 120	
	MSD	1314991-10	ND	10.080	10.000	ug/L	2.4	101		80 - 120	



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Columbus, OH 43201

Reported: 07/31/2013 13:27  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
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
<b>QC Batch ID: BWG1226</b>						
Chloroacetonitrile	BWG1226-BLK1	0	ug/L			
1-Chlorobutane	BWG1226-BLK1	0	ug/L			
1,1-Dichloropropane	BWG1226-BLK1	0	ug/L			
Methyl acrylate	BWG1226-BLK1	0	ug/L			
Nitrobenzene	BWG1226-BLK1	0	ug/L			
2-Nitropropane	BWG1226-BLK1	0	ug/L			



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1438</b>						
Perchlorate	BWG1438-BLK1	ND	ug/L	4.0	0.81	



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	<u>Control Limits</u>		Lab Quals
							Percent Recovery	RPD	
Perchlorate	BWG1438-BS1	LCS	10.222	10.000	ug/L	102			85 - 115
<b>QC Batch ID: BWG1438</b>									



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1438</b>		Used client sample: Y - Description: MW-17-3, 07/17/2013 08:40									
Perchlorate	DUP	1314991-04	7.5814	7.9592		ug/L	4.9		15		
	MS	1314991-04	7.5814	18.100	10.101	ug/L		104		80 - 120	
	MSD	1314991-04	7.5814	18.142	10.101	ug/L	0.2	105	15	80 - 120	



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**Reported:** 07/31/2013 13:27  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BWG1267</b>						
Hexavalent Chromium	BWG1267-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1610</b>						
Total Recoverable Chromium	BWG1610-BLK1	ND	ug/L	3.0	0.50	



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1267</b>									
Hexavalent Chromium	BWG1267-BS1	LCS	0.054346	0.050000	mg/L	109		85 - 115	
<b>QC Batch ID: BWG1610</b>									
Total Recoverable Chromium	BWG1610-BS1	LCS	39.069	40.000	ug/L	97.7		85 - 115	



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1267</b>		Used client sample: Y - Description: MW-18-2, 07/17/2013 13:30									
Hexavalent Chromium	DUP	1314991-10	ND	ND		mg/L			10		
	MS	1314991-10	ND	0.054044	0.052632	mg/L		103		85 - 115	
	MSD	1314991-10	ND	0.054042	0.052632	mg/L	0.0	103	10	85 - 115	
<b>QC Batch ID: BWG1610</b>		Used client sample: Y - Description: MW-18-2, 07/17/2013 13:30									
Total Recoverable Chromium	DUP	1314991-10	0.59900	ND		ug/L			20		
	MS	1314991-10	0.59900	40.345	40.000	ug/L		99.4		70 - 130	
	MSD	1314991-10	0.59900	39.385	40.000	ug/L	2.4	97.0	20	70 - 130	



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**Reported:** 07/31/2013 13:27

Project: JPL- GW Monitoring Wells

Project Number: 3Q13

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.



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 08/01/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1315120

Invoice ID: B151729

Enclosed are the results of analyses for samples received by the laboratory on 7/18/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*  
All results listed in this report are for the exclusive use of the submitting party. BC Laboratories, Inc. assumes no responsibility for report alteration, separation, detachment or third party interpretation.

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## Chain of Custody Form

\*Required Fields

Page 1 of 2

Sample #	Sample Description	Analysis Requested			Billing
		Date	Time	Matrix*	
1	TB-4-7-18/3	7-18-13	0600	AC	X
2	EB-4-7-18/3		0610		X
3	MW-22-3		0645		X
4	MW-22-2		0720		X
5	MW-22-1		0755		X
6	MW-26-2		0840		X
7	MW-26-1		0920		X
8	MW-25-5		1030		X
9	MW-25-4		1100		X
10	MW-25-3		1215		X
11	DUE-4-3Q13		1220		X
Notes					
VOCs EPA 524.2 Perchlorate 314.0 Total Chromium 200.8 (ug/L) Hexavalent Cr6+7-196 (mg/L) Chloride, Nitrate, Sulfate Orthophosphate 365.1 Nitrite 353.2 *Standard turnaround = 10 days					
<b>Matrix Types:</b> S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other _____					
Turnaround # of working days: * <input type="checkbox"/> 24 Hr Rush <input type="checkbox"/> 48 Hr Rush <input type="checkbox"/> 3-5 Day Rush <input checked="" type="checkbox"/> Normal (10 - Days) Lab TAT Approval: _____ *Additional Charges May Apply					
<b>Comments:</b> PLEASE NOTE 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)					
Cost Center: _____ 1. Relinquished By: <u>Andy Wolff</u> Date: 7-18-13 Time: 1530 Global ID: 7/18/13 1530 2. Relinquished By: <u>NICOLE R</u> Date: 7/18/13 Time: 1545 7/18/13 1545 3. Relinquished By: <u>Andy Wolff</u> Date: 7-18-13 Time: 1940 7/18/13 1940					

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## Chain of Custody Form

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## Chain of Custody and Cooler Receipt Form for 1315120 Page 3 of 4

BC LABORATORIES INC.		COOLER RECEIPT FORM			Rev. No. 15	07/01/13	Page _____ Of _____			
Submission #: 13-15120										
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments:										
Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Container <input type="checkbox"/> Intact Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		None <input checked="" type="checkbox"/> Comments:								
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98 Container: VTPC Thermometer ID: 207		Date/Time 7/18/13 Analyst Init K1Q 1940						
Temperature: (A) 3.4 °C / (C) 3.7 °C										
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/GENERAL	B	B	B	B	B	B	B	BC	B	
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS	C	C	C	C	C	C	C	D	C	
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	A(1)									
40ml VOA VIAL		A 3	A 3	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										
Summa Canister										
Comments: Sample Numbering Completed By: K1Q Date/Time: 7/18/13 @ 2120										



## Chain of Custody and Cooler Receipt Form for 1315120 Page 4 of 4

Submission #: 13-15120										
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____								
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals   None <input checked="" type="checkbox"/> Comments:										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Emissivity: 0.98 Container: HPC Thermometer ID: 207 Date/Time 7/18/13 Temperature: (A) 3.6 °C / (C) 3.7 °C Analyst Init K10 1940								
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
'T GENERAL MINERAL/ GENERAL	B	B	D							
'T PE UNPRESERVED										
'T INORGANIC CHEMICAL METALS	C	C	C							
'T INORGANIC CHEMICAL METALS										
'T CYANIDE										
'T NITROGEN FORMS										
'T TOTAL SULFIDE										
.0Z. NITRATE / NITRITE										
'T TOTAL ORGANIC CARBON										
'T TOX										
'T CHEMICAL OXYGEN DEMAND										
'T PHENOLICS										
0ml VOA VIAL TRAVEL BLANK	A 3	A 3	A 3	( )	( )	( )	( )	( )	( )	( )
0ml VOA VIAL										
'T EPA 413.1, 413.2, 418.1										
'T ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
0 ml VOA VIAL- 504										
'T EPA 508/608/8080										
'T EPA 515.1/8150										
'T EPA 525										
'T EPA 525 TRAVEL BLANK										
00ml EPA 547										
00ml EPA 531.1										
'T EPA 548										
'T EPA 549										
'T EPA 632										
'T EPA 8015M										
'T AMBER										
OZ. JAR										
2 OZ. JAR										
OIL SLEEVE										
'CB VIAL										
'LASTIC BAG										
'ERROUS IRON										
'INCORE										
'MART KIT										
Alumina Canister										
Comments:										
Printed Name and Completed By: K10	Date/Time: 7/18/13 02123	This document is a chain of custody form and is not a report. It is the responsibility of the analyst to complete the report section of the document.								



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Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315120-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-4-7/18/13 <b>Sampled By:</b> BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 06:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-4-7/18/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315120-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> EB-4-7/18/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 06:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-4-7/18/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315120-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-22-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 06:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-22-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315120-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-22-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 07:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-22-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315120-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-22-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 07:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-22-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315120-06	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-26-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 08:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-26-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315120-07	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-26-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 09:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-26-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315120-08	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-25-5 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 10:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315120-09	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-25-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 11:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315120-10	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-25-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 12:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315120-11	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> DUPE-4-3Q13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 12:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUPE-4-3Q13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315120-12	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-25-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 13:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315120-13	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-25-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/18/2013 19:40 <b>Sampling Date:</b> 07/18/2013 13:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-01	Client Sample Name: JPL-GW, TB-4-7/18/13, 7/18/2013 6:00:00AM						
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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-01	Client Sample Name: JPL-GW, TB-4-7/18/13, 7/18/2013 6:00:00AM						
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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-01	Client Sample Name: JPL-GW, TB-4-7/18/13, 7/18/2013 6:00:00AM						
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		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)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	90.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	14:50	MGC	MS-V5	1	BWG1454



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-01	Client Sample Name: JPL-GW, TB-4-7/18/13, 7/18/2013 6:00:00AM						
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	07/22/13	07/22/13 14:50	MGC	MS-V5	1	BWG1454



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-02	Client Sample Name: JPL-GW, EB-4-7/18/13, 7/18/2013 6:10:00AM, 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

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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-02	Client Sample Name: JPL-GW, EB-4-7/18/13, 7/18/2013 6:10:00AM, 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
<b>Toluene</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-02	Client Sample Name: JPL-GW, EB-4-7/18/13, 7/18/2013 6:10:00AM, 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		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)	91.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	15:13	MGC	MS-V5	1	BWG1454



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-02	Client Sample Name: JPL-GW, EB-4-7/18/13, 7/18/2013 6:10:00AM, 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	07/22/13	07/22/13 15:13	MGC	MS-V5	1	BWG1454



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-02	Client Sample Name: JPL-GW, EB-4-7/18/13, 7/18/2013 6:10:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 00:55	LD1	IC6	1		BWG1555



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-02	Client Sample Name: JPL-GW, EB-4-7/18/13, 7/18/2013 6:10:00AM, 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	S05	1
Total Recoverable Chromium	0.67	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:12	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/24/13	07/24/13 21:35	SRM	PE-EL1	1	BWG1698



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-03	Client Sample Name: JPL-GW, MW-22-3, 7/18/2013 6:45:00AM, 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
<b>Chloroform</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-03	Client Sample Name: JPL-GW, MW-22-3, 7/18/2013 6:45:00AM, 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
<b>Tetrachloroethene</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-03	Client Sample Name: JPL-GW, MW-22-3, 7/18/2013 6:45:00AM, 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		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		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)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	15:35	MGC	MS-V5	1	BWG1454



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-03	Client Sample Name: JPL-GW, MW-22-3, 7/18/2013 6:45:00AM, 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	07/22/13	07/22/13 15:35	MGC	MS-V5	1	BWG1454



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Columbus, OH 43201

Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-03	Client Sample Name: JPL-GW, MW-22-3, 7/18/2013 6:45:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 01:06	LD1	IC6	1	BWG1555	



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-03	Client Sample Name: JPL-GW, MW-22-3, 7/18/2013 6:45:00AM, 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,S05	1
Total Recoverable Chromium	2.7	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	07/19/13	07/19/13 08:22	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/24/13	07/24/13 21:38	SRM	PE-EL1	1	BWG1698



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-04	Client Sample Name: JPL-GW, MW-22-2, 7/18/2013 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		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
<b>Chloroform</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>1,1-Dichloroethane</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-04	Client Sample Name: JPL-GW, MW-22-2, 7/18/2013 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
<b>Tetrachloroethene</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.20</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-04	Client Sample Name: JPL-GW, MW-22-2, 7/18/2013 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		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		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)	103	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	15:58	MGC	MS-V5	1	BWG1454



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-04	Client Sample Name: JPL-GW, MW-22-2, 7/18/2013 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	07/22/13	07/22/13 15:58	MGC	MS-V5	1	BWG1454



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-04	Client Sample Name: JPL-GW, MW-22-2, 7/18/2013 7:20:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 01:18	LD1	IC6	1	BWG1555	



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-04	Client Sample Name: JPL-GW, MW-22-2, 7/18/2013 7:20:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0012	mg/L	0.0020	0.00070	EPA-7196	ND	J,S05	1
Total Recoverable Chromium	1.9	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:12	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/25/13	07/25/13 17:57	SRM	PE-EL1	1	BWG1809



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-05	Client Sample Name: JPL-GW, MW-22-1, 7/18/2013 7:55:00AM, 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
<b>Chloroform</b>	<b>0.46</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>1,1-Dichloroethane</b>	<b>0.12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-05	Client Sample Name: JPL-GW, MW-22-1, 7/18/2013 7:55:00AM, 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	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
<b>Tetrachloroethene</b>	<b>0.55</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>1.5</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-05	Client Sample Name: JPL-GW, MW-22-1, 7/18/2013 7:55:00AM, 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	16:20	MGC	MS-V5	1	BWG1454



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**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-05	Client Sample Name: JPL-GW, MW-22-1, 7/18/2013 7:55:00AM, 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	07/22/13	07/22/13 16:20	MGC	MS-V5	1	BWG1454



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505 King Ave.  
Columbus, OH 43201

Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-05	Client Sample Name: JPL-GW, MW-22-1, 7/18/2013 7:55:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 11:48	LD1	IC6	1	BWG1555	



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-05	Client Sample Name: JPL-GW, MW-22-1, 7/18/2013 7:55:00AM, 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	S05	1
Total Recoverable Chromium	0.91	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:12	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/25/13	07/25/13 18:00	SRM	PE-EL1	1	BWG1809



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**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-06	Client Sample Name: JPL-GW, MW-26-2, 7/18/2013 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
<b>Chloroform</b>	<b>0.13</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-06	Client Sample Name: JPL-GW, MW-26-2, 7/18/2013 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
<b>Tetrachloroethene</b>	<b>0.40</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-06	Client Sample Name: JPL-GW, MW-26-2, 7/18/2013 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		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		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)	114	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.0	%	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	07/22/13	07/22/13 16:43	MGC	MS-V5	1	BWG1454



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-06	Client Sample Name: JPL-GW, MW-26-2, 7/18/2013 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	07/22/13	07/22/13 16:43	MGC	MS-V5	1	BWG1454



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-06	Client Sample Name: JPL-GW, MW-26-2, 7/18/2013 8:40:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.4	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 01:42	LD1	IC6	1	BWG1555	



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-06	Client Sample Name: JPL-GW, MW-26-2, 7/18/2013 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	2.6	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:12	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/25/13	07/25/13 18:03	SRM	PE-EL1	1	BWG1809



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-07	Client Sample Name: JPL-GW, MW-26-1, 7/18/2013 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
<b>Chloroform</b>	<b>0.37</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>1,1-Dichloroethane</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-07	Client Sample Name: JPL-GW, MW-26-1, 7/18/2013 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
<b>Tetrachloroethene</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.62</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-07	Client Sample Name: JPL-GW, MW-26-1, 7/18/2013 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		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)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	17:06	MGC	MS-V5	1	BWG1454



Battelle MHTS  
505 King Ave.  
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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-07	Client Sample Name: JPL-GW, MW-26-1, 7/18/2013 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	07/22/13	07/22/13 17:06	MGC	MS-V5	1	BWG1454



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-07	Client Sample Name: JPL-GW, MW-26-1, 7/18/2013 9:20:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 01:54	LD1	IC6	1	BWG1555	



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-07	Client Sample Name: JPL-GW, MW-26-1, 7/18/2013 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	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:30	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/25/13	07/25/13 18:06	SRM	PE-EL1	1	BWG1809



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-08	Client Sample Name: JPL-GW, MW-25-5, 7/18/2013 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	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-08	Client Sample Name: JPL-GW, MW-25-5, 7/18/2013 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

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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-08	Client Sample Name: JPL-GW, MW-25-5, 7/18/2013 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	17:28	MGC	MS-V5	1	BWG1454



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-08	Client Sample Name: JPL-GW, MW-25-5, 7/18/2013 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	07/22/13	07/22/13 17:28	MGC	MS-V5	1	BWG1454



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-08	Client Sample Name: JPL-GW, MW-25-5, 7/18/2013 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 02:29	LD1	IC6	1		BWG1555



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-08	Client Sample Name: JPL-GW, MW-25-5, 7/18/2013 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	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:30	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/25/13	07/25/13 18:09	SRM	PE-EL1	1	BWG1809



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-09	Client Sample Name: JPL-GW, MW-25-4, 7/18/2013 11:10:00AM, 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

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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-09	Client Sample Name: JPL-GW, MW-25-4, 7/18/2013 11:10:00AM, 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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-09	Client Sample Name: JPL-GW, MW-25-4, 7/18/2013 11:10:00AM, 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		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)	97.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	84.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	12:35	MGC	MS-V5	1	BWG1454



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-09	Client Sample Name: JPL-GW, MW-25-4, 7/18/2013 11:10:00AM, 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	07/22/13	07/22/13 12:35	MGC	MS-V5	1	BWG1454



Battelle MHTS  
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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-09	Client Sample Name: JPL-GW, MW-25-4, 7/18/2013 11:10:00AM, 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				Dilution	QC Batch ID
			Analyst	Instrument				
1	EPA-314.0	07/22/13	07/23/13 02:41	LD1	IC6		1	BWG1555



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-09	Client Sample Name: JPL-GW, MW-25-4, 7/18/2013 11:10:00AM, 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	1.5	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:30	TDC	KONE-1	1	BWG1400
2	EPA-200.8	07/25/13	07/25/13 17:29	SRM	PE-EL1	1	BWG1809



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-10	Client Sample Name: JPL-GW, MW-25-3, 7/18/2013 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
<b>Chloroform</b>	<b>0.58</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-10	Client Sample Name: JPL-GW, MW-25-3, 7/18/2013 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
<b>Tetrachloroethene</b>	<b>0.21</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-10	Client Sample Name: JPL-GW, MW-25-3, 7/18/2013 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		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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	90.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	17:51	MGC	MS-V5	1	BWG1454



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-10	Client Sample Name: JPL-GW, MW-25-3, 7/18/2013 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	07/22/13	07/22/13 17:51	MGC	MS-V5	1	BWG1454



Battelle MHTS  
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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-10	Client Sample Name: JPL-GW, MW-25-3, 7/18/2013 12:15:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 10:49	LD1	IC6	1		BWG1555



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-10	Client Sample Name: JPL-GW, MW-25-3, 7/18/2013 12:15:00PM, 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	3.3	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:38	TDC	KONE-1	1	BWG1400
2	EPA-200.8	07/25/13	07/25/13 18:12	SRM	PE-EL1	1	BWG1809



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-11	Client Sample Name: JPL-GW, DUPE-4-3Q13, 7/18/2013 12:20:00PM, 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		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
<b>Chloroform</b>	<b>0.48</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-11	Client Sample Name: JPL-GW, DUPE-4-3Q13, 7/18/2013 12:20:00PM, 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	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
<b>Tetrachloroethene</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-11	Client Sample Name: JPL-GW, DUPE-4-3Q13, 7/18/2013 12:20:00PM, 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		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		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)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/22/13	07/22/13	20:07	MGC	MS-V5	1	BWG1454



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-11	Client Sample Name: JPL-GW, DUPE-4-3Q13, 7/18/2013 12:20:00PM, 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	07/22/13	07/22/13 20:07	MGC	MS-V5	1	BWG1454



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-11	Client Sample Name: JPL-GW, DUPE-4-3Q13, 7/18/2013 12:20:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 03:05	LD1	IC6	1		BWG1555



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-11	Client Sample Name: JPL-GW, DUPE-4-3Q13, 7/18/2013 12:20:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0028	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	3.1	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/19/13	07/19/13 08:38	TDC	KONE-1	1	BWG1400	
2	EPA-200.8	07/25/13	07/25/13 18:15	SRM	PE-EL1	1	BWG1809	



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-12	Client Sample Name: JPL-GW, MW-25-2, 7/18/2013 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	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
<b>Chloroform</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-12	Client Sample Name: JPL-GW, MW-25-2, 7/18/2013 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	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
<b>Trichloroethene</b>	<b>0.29</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-12	Client Sample Name: JPL-GW, MW-25-2, 7/18/2013 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/22/13	07/22/13	20:29	MGC	MS-V5	1	BWG1454



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-12	Client Sample Name: JPL-GW, MW-25-2, 7/18/2013 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	07/22/13	07/22/13 20:29	MGC	MS-V5	1	BWG1454



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-12	Client Sample Name: JPL-GW, MW-25-2, 7/18/2013 1:15:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	16	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time				Dilution	QC Batch ID
			Analyst	Instrument				
1	EPA-314.0	07/22/13	07/23/13 04:51	LD1	IC6		1	BWG1554



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505 King Ave.  
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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-12	Client Sample Name: JPL-GW, MW-25-2, 7/18/2013 1:15:00PM, 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	2.9	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:20	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/25/13	07/25/13 18:18	SRM	PE-EL1	1	BWG1809



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-13	Client Sample Name: JPL-GW, MW-25-1, 7/18/2013 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		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
<b>Chloroform</b>	<b>0.76</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-13	Client Sample Name: JPL-GW, MW-25-1, 7/18/2013 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
<b>Methyl t-butyl ether</b>	<b>0.28</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>2.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315120-13	Client Sample Name: JPL-GW, MW-25-1, 7/18/2013 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		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		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)	104	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	20:52	MGC	MS-V5	1	BWG1454



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**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315120-13	Client Sample Name: JPL-GW, MW-25-1, 7/18/2013 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	07/22/13	07/22/13 20:52	MGC	MS-V5	1	BWG1454



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315120-13	Client Sample Name: JPL-GW, MW-25-1, 7/18/2013 1:50:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/22/13	07/23/13 00:19	LS1	IC6	1		BWG1554



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Reported: 08/01/2013 13:59  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315120-13	Client Sample Name: JPL-GW, MW-25-1, 7/18/2013 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	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/19/13	07/19/13 08:12	TDC	KONE-1	1	BWG1399
2	EPA-200.8	07/25/13	07/25/13 18:21	SRM	PE-EL1	1	BWG1809



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1454</b>						
Benzene	BWG1454-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1454-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1454-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1454-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1454-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1454-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1454-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1454-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1454-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1454-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1454-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1454-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1454-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1454-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1454-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1454-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1454-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1454-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1454-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1454-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1454</b>						
trans-1,3-Dichloropropene	BWG1454-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1454-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1454-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1454-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1454-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1454-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1454-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1454-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1454-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1454-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1454-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1454-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1454-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1454-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1454-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1454-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1454-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1454-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1454-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1454-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1454-BLK1	ND	ug/L	4.0	0.97	

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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1454</b>						
Ethyl t-butyl ether	BWG1454-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1454-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1454-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1454-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1454-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1454-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1454-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1454-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1454-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1454-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1454-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1454-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1454-BLK1	102	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1454-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1454-BLK1	90.7	%	80 - 120 (LCL - UCL)		



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1454</b>									
Benzene	BWG1454-BS1	LCS	23.780	25.000	ug/L	95.1		70 - 130	
Bromodichloromethane	BWG1454-BS1	LCS	25.600	25.000	ug/L	102		70 - 130	
Chlorobenzene	BWG1454-BS1	LCS	22.810	25.000	ug/L	91.2		70 - 130	
Chloroethane	BWG1454-BS1	LCS	24.640	25.000	ug/L	98.6		70 - 130	
1,4-Dichlorobenzene	BWG1454-BS1	LCS	25.550	25.000	ug/L	102		70 - 130	
1,1-Dichloroethane	BWG1454-BS1	LCS	24.220	25.000	ug/L	96.9		70 - 130	
1,1-Dichloroethene	BWG1454-BS1	LCS	24.910	25.000	ug/L	99.6		70 - 130	
Toluene	BWG1454-BS1	LCS	24.080	25.000	ug/L	96.3		70 - 130	
Trichloroethene	BWG1454-BS1	LCS	23.580	25.000	ug/L	94.3		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BWG1454-BS1	LCS	10.300	10.000	ug/L	103		75 - 125	
Toluene-d8 (Surrogate)	BWG1454-BS1	LCS	10.040	10.000	ug/L	100		80 - 120	
4-Bromofluorobenzene (Surrogate)	BWG1454-BS1	LCS	9.7500	10.000	ug/L	97.5		80 - 120	



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1454</b>		Used client sample: Y - Description: MW-25-4, 07/18/2013 11:10									
Benzene	MS	1315120-09	ND	24.760	25.000	ug/L		99.0		70 - 130	
	MSD	1315120-09	ND	25.080	25.000	ug/L	1.3	100	20	70 - 130	
Bromodichloromethane	MS	1315120-09	ND	27.300	25.000	ug/L		109		70 - 130	
	MSD	1315120-09	ND	27.500	25.000	ug/L	0.7	110	20	70 - 130	
Chlorobenzene	MS	1315120-09	ND	25.170	25.000	ug/L		101		70 - 130	
	MSD	1315120-09	ND	24.990	25.000	ug/L	0.7	100	20	70 - 130	
Chloroethane	MS	1315120-09	ND	25.410	25.000	ug/L		102		70 - 130	
	MSD	1315120-09	ND	25.540	25.000	ug/L	0.5	102	20	70 - 130	
1,4-Dichlorobenzene	MS	1315120-09	ND	28.110	25.000	ug/L		112		70 - 130	
	MSD	1315120-09	ND	27.650	25.000	ug/L	1.6	111	20	70 - 130	
1,1-Dichloroethane	MS	1315120-09	ND	25.120	25.000	ug/L		100		70 - 130	
	MSD	1315120-09	ND	25.380	25.000	ug/L	1.0	102	20	70 - 130	
1,1-Dichloroethene	MS	1315120-09	ND	26.120	25.000	ug/L		104		70 - 130	
	MSD	1315120-09	ND	26.370	25.000	ug/L	1.0	105	20	70 - 130	
Toluene	MS	1315120-09	ND	25.670	25.000	ug/L		103		70 - 130	
	MSD	1315120-09	ND	25.210	25.000	ug/L	1.8	101	20	70 - 130	
Trichloroethene	MS	1315120-09	ND	24.880	25.000	ug/L		99.5		70 - 130	
	MSD	1315120-09	ND	24.600	25.000	ug/L	1.1	98.4	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1315120-09	ND	9.9300	10.000	ug/L		99.3		75 - 125	
	MSD	1315120-09	ND	10.400	10.000	ug/L	4.6	104		75 - 125	
Toluene-d8 (Surrogate)	MS	1315120-09	ND	10.060	10.000	ug/L		101		80 - 120	
	MSD	1315120-09	ND	9.9500	10.000	ug/L	1.1	99.5		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1315120-09	ND	10.130	10.000	ug/L		101		80 - 120	
	MSD	1315120-09	ND	10.320	10.000	ug/L	1.9	103		80 - 120	



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1454</b>						
Chloroacetonitrile	BWG1454-BLK1	0	ug/L			
1-Chlorobutane	BWG1454-BLK1	0	ug/L			
1,1-Dichloropropane	BWG1454-BLK1	0	ug/L			
Methyl acrylate	BWG1454-BLK1	0	ug/L			
Nitrobenzene	BWG1454-BLK1	0	ug/L			
2-Nitropropane	BWG1454-BLK1	0	ug/L			



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
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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
<b>QC Batch ID: BWG1554</b>						
Perchlorate	BWG1554-BLK1	ND	ug/L	4.0	0.81	
<b>QC Batch ID: BWG1555</b>						
Perchlorate	BWG1555-BLK1	ND	ug/L	4.0	0.81	



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Project Number: 3Q13  
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	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BWG1554									
Perchlorate	BWG1554-BS1	LCS	10.190	10.000	ug/L	102		85 - 115	
QC Batch ID: BWG1555									
Perchlorate	BWG1555-BS1	LCS	10.184	10.000	ug/L	102		85 - 115	



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1554</b>		Used client sample: N									
Perchlorate	DUP	1315000-01	ND	ND		ug/L			15		
	MS	1315000-01	ND	10.448	10.101	ug/L		103		80 - 120	
	MSD	1315000-01	ND	10.558	10.101	ug/L	1.0	105	15	80 - 120	
<b>QC Batch ID: BWG1555</b>		Used client sample: Y - Description: MW-25-4, 07/18/2013 11:10									
Perchlorate	DUP	1315120-09	9.3259	8.8926		ug/L	4.8		15		
	MS	1315120-09	9.3259	20.091	10.101	ug/L		107		80 - 120	
	MSD	1315120-09	9.3259	19.965	10.101	ug/L	0.6	105	15	80 - 120	



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
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## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BWG1399</b>						
Hexavalent Chromium	BWG1399-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1400</b>						
Hexavalent Chromium	BWG1400-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1698</b>						
Total Recoverable Chromium	BWG1698-BLK1	ND	ug/L	3.0	0.50	
<b>QC Batch ID: BWG1809</b>						
Total Recoverable Chromium	BWG1809-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1399</b>									
Hexavalent Chromium	BWG1399-BS1	LCS	0.051764	0.050000	mg/L	104		85 - 115	
<b>QC Batch ID: BWG1400</b>									
Hexavalent Chromium	BWG1400-BS1	LCS	0.051155	0.050000	mg/L	102		85 - 115	
<b>QC Batch ID: BWG1698</b>									
Total Recoverable Chromium	BWG1698-BS1	LCS	41.278	40.000	ug/L	103		85 - 115	
<b>QC Batch ID: BWG1809</b>									
Total Recoverable Chromium	BWG1809-BS1	LCS	39.028	40.000	ug/L	97.6		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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1399</b>		Used client sample: N								
Hexavalent Chromium	DUP	1315116-03	ND	ND		mg/L			10	
	MS	1315116-03	ND	0.054674	0.052632	mg/L		104		85 - 115
	MSD	1315116-03	ND	0.054879	0.052632	mg/L	0.4	104	10	85 - 115
<b>QC Batch ID: BWG1400</b>		Used client sample: Y - Description: MW-25-4, 07/18/2013 11:10								
Hexavalent Chromium	DUP	1315120-09	ND	ND		mg/L			10	
	MS	1315120-09	ND	0.054953	0.052632	mg/L		104		85 - 115
	MSD	1315120-09	ND	0.054440	0.052632	mg/L	0.9	103	10	85 - 115
<b>QC Batch ID: BWG1698</b>		Used client sample: Y - Description: MW-24-3, 07/16/2013 11:50								
Total Recoverable Chromium	DUP	1314878-10	ND	ND		ug/L			20	
	MS	1314878-10	ND	36.651	40.000	ug/L		91.6		70 - 130
	MSD	1314878-10	ND	36.901	40.000	ug/L	0.7	92.3	20	70 - 130
<b>QC Batch ID: BWG1809</b>		Used client sample: Y - Description: MW-25-4, 07/18/2013 11:10								
Total Recoverable Chromium	DUP	1315120-09	1.5180	1.4420		ug/L	5.1		20	J
	MS	1315120-09	1.5180	38.644	40.000	ug/L		92.8		70 - 130
	MSD	1315120-09	1.5180	39.432	40.000	ug/L	2.0	94.8	20	70 - 130



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**Reported:** 08/01/2013 13:59  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
S05	The sample holding time was exceeded.



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 08/02/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1315237

Invoice ID: B151843

Enclosed are the results of analyses for samples received by the laboratory on 7/19/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Misty Orton  
Client Service Rep



Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

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## Chain of Custody Form



Laboratories, Inc.

\*Required Fields

Report To: Client*: Battelle MHTS Attn: David Conner		Project Description*: JPL-GW Monitoring	Analysis Requested		Billing
Street Address*: 505 King Ave. City*: Columbus State*: OH Zip*: 43201		Project Code*: 3Q13			
Phone#: (614) 424 - 5489 Fax#: (614) 458-5489		Sampler(s)*: Blaine Tech			
Email Address: connard@battelle.org		Submission #: 13-15231			
Sample #	Sample Description	Date	Time	Matrix*	Notes
-1	TB-5-7/19/13	7-19-13	0600	AQ	X
-2	SB-2-7/19/13		0615	X	X
-3	FB-5-7/19/13		0620	X	X
-4	MW-2-3-4		0640	X	X
-5	MW-2-3-3		0720	X	X
-6	MW-2-3-2		0755	X	X
-7	MW-2-3-1		0830	X	X
-8	MW-3-4		1000	X	X
-9	MW-3-3		1040	X	X
-10	MW-3-2		1100	X	X
-11	DOPE: 5-3Q13		1115	Y	X
Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater		GW = Groundwater		L = Liquid	M = Miscellaneous
Turnaround # of working days*: <input type="checkbox"/> 24 Hr Rush <input type="checkbox"/> 48 Hr Rush		<input type="checkbox"/> 3-5 Day Rush <input checked="" type="checkbox"/> Normal (10 - Days)		* Additional Charges May Apply	
Lab TAT Approval: _____		Comments:		Cost Center: _____ Global ID: _____	
PLEASE NOTE 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)		<input type="checkbox"/> MAU Site <input type="checkbox"/> CVX RCRA <input type="checkbox"/> Geotracker 5 File (CA Default) <input type="checkbox"/> Geotracker 2 File <input type="checkbox"/> Other (Specify) _____		1. Relinquished By: <u>July 19, 2013</u> Date <u>7/19/13</u> Time <u>1350</u> 2. Received By: <u>July 19, 2013</u> Date <u>7/19/13</u> Time <u>1350</u> 3. Received By: <u>July 19, 2013</u> Date <u>7/19/13</u> Time <u>1350</u>	



## Chain of Custody and Cooler Receipt Form for 1315237 Page 2 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 15	07/01/13	Page ___ Of ___					
Submission #: 13-15237											
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>					
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>											
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: 0.98 Container: HPE Thermometer ID: 207 Temperature: (A) 3.3 °C / (C) 3.4 °C			Date/Time 7/19/13 Analyst Init K10 1935							
SAMPLE CONTAINERS		SAMPLE NUMBERS									
		1	2	3	4	5	6	7	8	9	10
T GENERAL MINERAL/ GENERAL		B	B	A	B	D	B	B	B	B	B
T PE UNPRESERVED											
T INORGANIC CHEMICAL METALS		C	C	B	C	C	C	C	C	C	C
T CYANIDE											
T NITROGEN FORMS											
T TOTAL SULFIDE											
T <sub>2</sub> NITRATE / NITRITE											
T TOTAL ORGANIC CARBON											
T TOX											
T CHEMICAL OXYGEN DEMAND											
T PHENOLICS											
1ml VOA VIAL TRAVEL BLANK		A(1)									
1ml VOA VIAL			A(3)	A(3)		A(3)	A(3)	A(3)	A(3)	A(3)	A(3)
TEPA 413.1, 413.2, 418.1											
T ODOOR											
ADIOLOGICAL											
ACTERIOLOGICAL											
ml VOA VIAL- 504											
TEPA 508/608/8080		CHK BY									
TEPA 515.1/8150		S									
TEPA 525											
TEPA 525 TRAVEL BLANK											
0ml EPA 547											
0ml EPA 531.1											
TEPA 548											
TEPA 549											
TEPA 632											
TEPA 8015M											
AMBER											
1Z JAR		DO	C <sub>2</sub>	BOD	NO <sub>2</sub>	NO <sub>3</sub>	OP	SS			
OZ. JAR											
IL SLEEVE											
B VIAL											
ASTIC BAG											
RROUS IRON											
CORE											
ART KIT											
mma Canister											
Comments:											
Multiple Numbering Completed By:		K10		Date/Time:		7/19/13 @ 2230		15:\MyDOCS\WordPerfect\LAB_DOCS\FORMS\1SAMREC151			

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## Chain of Custody and Cooler Receipt Form for 1315237 Page 3 of 3

BC LABORATORIES INC.		COOLER RECEIPT FORM			Rev. No. 15	07/01/13	Page _____ Of _____		
Submission #: 13-15237									
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE LIQUID			
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery		Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/>			YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				
IC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		Other <input type="checkbox"/> (Specify) _____							
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>		Comments: _____							
Custody Seals: Ice Chest <input checked="" type="checkbox"/> Containers <input type="checkbox"/>		None <input checked="" type="checkbox"/> Comments: _____							
Samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>					
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98 Container: QHPe Thermometer ID: 207		Date/Time: 7/19/13					
		Temperature: (A) 3.3 °C / (C) 3.4 °C		Analyst Init: K10 1935					
SAMPLE CONTAINERS	SAMPLE NUMBERS								
	1	2	3	4	5	6	7	8	9
GENERAL MINERAL/GENERAL	3								
PE UNPRESERVED									
INORGANIC CHEMICAL METALS									
INORGANIC CHEMICAL METALS	C								
CYANIDE									
NITROGEN FORMS									
TOTAL SULFIDE									
NITRATE / NITRITE									
TOTAL ORGANIC CARBON									
TOX									
CHIMICAL OXYGEN DEMAND									
PHENOLICS									
VOA VIAL TRAVEL BLANK									
VOA VIAL	A 3	( )	( )	( )	( )	( )	( )	( )	( )
PA 413.1, 413.2, 418.1									
DOR									
IOLOGICAL									
TERIOLOGICAL									
VOA VIAL- 504									
PA 508/608/8080									
PA 515.1/8150									
PA 525									
PA 525 TRAVEL BLANK									
EPA 547									
EPA 531.1									
'A 548									
'A 549									
'A 632									
'A 8015M									
IBER									
JAR									
JAR									
SLEEVE									
IAL									
IC BAG									
DIS IRON									
RE									
TKIT									
a Canister									
nts:									
Numbering Completed By: K10 Date/Time: 7/19/13 @ 2230									
Total / C = Corrected									

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1315237-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-5-7/19/13 <b>Sampled By:</b> BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 06:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-5-7/19/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1315237-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> SB-2-7/19/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 06:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): SB-2-7/19/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1315237-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> EB-5-7/19/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 06:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-5-7/19/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:		



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315237-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-23-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 06:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-23-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315237-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-23-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 07:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-23-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315237-06	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-23-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 07:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water 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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## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315237-07	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-23-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 08:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-23-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315237-08	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-3-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 10:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-3-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315237-09	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-3-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 10:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-3-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315237-10	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-3-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 11:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-3-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315237-11	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> DUPE-5-3Q13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/19/2013 19:35 <b>Sampling Date:</b> 07/19/2013 11:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUPE-5-3Q13 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-01	Client Sample Name: JPL-GW, TB-5-7/19/13, 7/19/2013 6:00:00AM						
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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-01	Client Sample Name: JPL-GW, TB-5-7/19/13, 7/19/2013 6:00:00AM						
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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-01	Client Sample Name: JPL-GW, TB-5-7/19/13, 7/19/2013 6:00:00AM						
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		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)	103	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	21:14	MGC	MS-V5	1	BWG1454



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505 King Ave.  
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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-01	Client Sample Name: JPL-GW, TB-5-7/19/13, 7/19/2013 6:00:00AM						
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	07/22/13	07/22/13 21:14	MGC	MS-V5	1	BWG1454



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**Reported:** 08/02/2013 14:40  
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**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-02	Client Sample Name: JPL-GW, SB-2-7/19/13, 7/19/2013 6:15:00AM, 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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-02	Client Sample Name: JPL-GW, SB-2-7/19/13, 7/19/2013 6:15:00AM, 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
<b>Toluene</b>	<b>0.16</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-02	Client Sample Name: JPL-GW, SB-2-7/19/13, 7/19/2013 6:15:00AM, 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		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)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	21:37	MGC	MS-V5	1	BWG1454



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-02	Client Sample Name: JPL-GW, SB-2-7/19/13, 7/19/2013 6:15:00AM, 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	07/22/13	07/22/13 21:37	MGC	MS-V5	1	BWG1454



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-02	Client Sample Name: JPL-GW, SB-2-7/19/13, 7/19/2013 6:15:00AM, 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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-314.0	07/23/13	07/23/13	20:29	LS1	IC6	1	BWG1655



Battelle MHTS  
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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-02	Client Sample Name: JPL-GW, SB-2-7/19/13, 7/19/2013 6:15:00AM, 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	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/20/13	07/20/13 00:50	TDC	KONE-1	1	BWG1483	
2	EPA-200.8	07/26/13	07/29/13 19:05	SRM	PE-EL2	1	BWG1910	



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-03	Client Sample Name: JPL-GW, EB-5-7/19/13, 7/19/2013 6:20:00AM, 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	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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Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-03	Client Sample Name: JPL-GW, EB-5-7/19/13, 7/19/2013 6:20:00AM, 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
<b>Toluene</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-03	Client Sample Name: JPL-GW, EB-5-7/19/13, 7/19/2013 6:20:00AM, 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		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)	89.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	21:59	MGC	MS-V5	1	BWG1454



Battelle MHTS  
505 King Ave.  
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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-03	Client Sample Name: JPL-GW, EB-5-7/19/13, 7/19/2013 6:20:00AM, 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	07/22/13	07/22/13 21:59	MGC	MS-V5	1	BWG1454



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-03	Client Sample Name: JPL-GW, EB-5-7/19/13, 7/19/2013 6:20:00AM, 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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-314.0	07/23/13	07/23/13	20:41	LS1	IC6	1	BWG1655



Battelle MHTS  
505 King Ave.  
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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-03	Client Sample Name: JPL-GW, EB-5-7/19/13, 7/19/2013 6:20:00AM, 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	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/20/13	07/20/13 00:50	TDC	KONE-1	1	BWG1483	
2	EPA-200.8	07/26/13	07/29/13 19:30	SRM	PE-EL2	1	BWG1910	



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-04	Client Sample Name: JPL-GW, MW-23-4, 7/19/2013 6:40:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0019	mg/L	0.0020	0.00070	EPA-7196	ND	J	1
Total Recoverable Chromium	3.3	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/20/13	07/20/13 01:40	TDC	KONE-1	1	BWG1483	
2	EPA-200.8	07/26/13	07/29/13 19:33	SRM	PE-EL2	1	BWG1910	



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-05	Client Sample Name: JPL-GW, MW-23-3, 7/19/2013 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		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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-05	Client Sample Name: JPL-GW, MW-23-3, 7/19/2013 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		1

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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-05	Client Sample Name: JPL-GW, MW-23-3, 7/19/2013 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		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		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)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	22:22	MGC	MS-V5	1	BWG1454



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Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-05	Client Sample Name: JPL-GW, MW-23-3, 7/19/2013 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	07/22/13	07/22/13 22:22	MGC	MS-V5	1	BWG1454



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-05	Client Sample Name: JPL-GW, MW-23-3, 7/19/2013 7:20:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/23/13	07/23/13 20:53	LS1	IC6	1	BWG1655	



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-05	Client Sample Name: JPL-GW, MW-23-3, 7/19/2013 7:20:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0026	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	3.1	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/20/13	07/20/13 01:40	TDC	KONE-1	1	BWG1483	
2	EPA-200.8	07/26/13	07/29/13 19:37	SRM	PE-EL2	1	BWG1910	



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-06	Client Sample Name: JPL-GW, MW-23-2, 7/19/2013 7:55:00AM, 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
<b>Chloroform</b>	<b>0.60</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>1,1-Dichloroethane</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-06	Client Sample Name: JPL-GW, MW-23-2, 7/19/2013 7:55:00AM, 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	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
<b>Tetrachloroethene</b>	<b>0.51</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-06	Client Sample Name: JPL-GW, MW-23-2, 7/19/2013 7:55:00AM, 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		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)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	84.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	22:44	MGC	MS-V5	1	BWG1454



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-06	Client Sample Name: JPL-GW, MW-23-2, 7/19/2013 7:55:00AM, 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	07/22/13	07/22/13 22:44	MGC	MS-V5	1	BWG1454



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-06	Client Sample Name: JPL-GW, MW-23-2, 7/19/2013 7:55:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/23/13	07/23/13 21:05	LS1	IC6	1		BWG1655



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Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-06	Client Sample Name: JPL-GW, MW-23-2, 7/19/2013 7:55:00AM, 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	1.4	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/20/13	07/20/13 00:50	TDC	KONE-1	1	BWG1483
2	EPA-200.8	07/26/13	07/29/13 19:40	SRM	PE-EL2	1	BWG1910



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-07	Client Sample Name: JPL-GW, MW-23-1, 7/19/2013 8:30:00AM, 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
<b>Chloroform</b>	<b>0.43</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-07	Client Sample Name: JPL-GW, MW-23-1, 7/19/2013 8:30:00AM, 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
<b>Tetrachloroethene</b>	<b>0.36</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>2.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-07	Client Sample Name: JPL-GW, MW-23-1, 7/19/2013 8:30:00AM, 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		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)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	23:07	MGC	MS-V5	1	BWG1454



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-07	Client Sample Name: JPL-GW, MW-23-1, 7/19/2013 8:30:00AM, 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	07/22/13	07/22/13 23:07	MGC	MS-V5	1	BWG1454



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-07	Client Sample Name: JPL-GW, MW-23-1, 7/19/2013 8:30:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/23/13	07/23/13 21:17	LS1	IC6	1	BWG1655	



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-07	Client Sample Name: JPL-GW, MW-23-1, 7/19/2013 8:30:00AM, 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	7.0	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/20/13	07/20/13 00:56	TDC	KONE-1	1	BWG1483
2	EPA-200.8	07/26/13	07/29/13 19:43	SRM	PE-EL2	1	BWG1910



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-08	Client Sample Name: JPL-GW, MW-3-4, 7/19/2013 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
<b>1,1-Dichloroethane</b>	<b>0.18</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-08	Client Sample Name: JPL-GW, MW-3-4, 7/19/2013 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	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
<b>Tetrachloroethene</b>	<b>0.18</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-08	Client Sample Name: JPL-GW, MW-3-4, 7/19/2013 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		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)	89.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	23:29	MGC	MS-V5	1	BWG1454



Battelle MHTS  
505 King Ave.  
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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-08	Client Sample Name: JPL-GW, MW-3-4, 7/19/2013 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	07/22/13	07/22/13 23:29	MGC	MS-V5	1	BWG1454



Battelle MHTS  
505 King Ave.  
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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-08	Client Sample Name: JPL-GW, MW-3-4, 7/19/2013 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		Instrument	Dilution	QC	Batch ID
			Date/Time	Analyst				
1	EPA-314.0	07/23/13	07/23/13 21:28	LS1	IC6	1		BWG1655



Battelle MHTS  
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Columbus, OH 43201

Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-08	Client Sample Name: JPL-GW, MW-3-4, 7/19/2013 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	22	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/20/13	07/20/13 00:56	TDC	KONE-1	1	BWG1483
2	EPA-200.8	07/26/13	07/29/13 19:46	SRM	PE-EL2	1	BWG1910



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-09	Client Sample Name: JPL-GW, MW-3-3, 7/19/2013 10:40:00AM, 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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-09	Client Sample Name: JPL-GW, MW-3-3, 7/19/2013 10:40:00AM, 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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-09	Client Sample Name: JPL-GW, MW-3-3, 7/19/2013 10:40:00AM, 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		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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	90.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/22/13	23:52	MGC	MS-V5	1	BWG1453



Battelle MHTS  
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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-09	Client Sample Name: JPL-GW, MW-3-3, 7/19/2013 10:40:00AM, 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	07/22/13	07/22/13 23:52	MGC	MS-V5	1	BWG1453



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-09	Client Sample Name: JPL-GW, MW-3-3, 7/19/2013 10:40:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/23/13	07/23/13 21:40	LS1	IC6	1	BWG1655	



Battelle MHTS  
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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-09	Client Sample Name: JPL-GW, MW-3-3, 7/19/2013 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	2.4	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/20/13	07/20/13 00:56	TDC	KONE-1	1	BWG1483
2	EPA-200.8	07/26/13	07/29/13 19:49	SRM	PE-EL2	1	BWG1910



Battelle MHTS  
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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-10	Client Sample Name: JPL-GW, MW-3-2, 7/19/2013 11:10:00AM, 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

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-10	Client Sample Name: JPL-GW, MW-3-2, 7/19/2013 11:10:00AM, 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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-10	Client Sample Name: JPL-GW, MW-3-2, 7/19/2013 11:10:00AM, 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		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)	104	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	87.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/23/13	00:14	MGC	MS-V5	1	BWG1453



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-10	Client Sample Name: JPL-GW, MW-3-2, 7/19/2013 11:10:00AM, 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	07/22/13	07/23/13 00:14	MGC	MS-V5	1	BWG1453



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-10	Client Sample Name: JPL-GW, MW-3-2, 7/19/2013 11:10:00AM, 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		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	
1	EPA-314.0	07/23/13	07/23/13 22:16	LS1	IC6	1	BWG1655	



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-10	Client Sample Name: JPL-GW, MW-3-2, 7/19/2013 11:10:00AM, 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	0.56	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/20/13	07/20/13 00:56	TDC	KONE-1	1	BWG1483
2	EPA-200.8	07/26/13	07/29/13 19:53	SRM	PE-EL2	1	BWG1910



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-11	Client Sample Name: JPL-GW, DUPE-5-3Q13, 7/19/2013 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	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:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-11	Client Sample Name: JPL-GW, DUPE-5-3Q13, 7/19/2013 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	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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Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315237-11	Client Sample Name: JPL-GW, DUPE-5-3Q13, 7/19/2013 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		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		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)	104	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	86.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/22/13	07/23/13	00:37	MGC	MS-V5	1	BWG1453



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315237-11	Client Sample Name: JPL-GW, DUPE-5-3Q13, 7/19/2013 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	07/22/13	07/23/13 00:37	MGC	MS-V5	1	BWG1453



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315237-11	Client Sample Name: JPL-GW, DUPE-5-3Q13, 7/19/2013 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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-314.0	07/23/13	07/23/13	22:28	LS1	IC6	1	BWG1655



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315237-11	Client Sample Name: JPL-GW, DUPE-5-3Q13, 7/19/2013 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	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/20/13	07/20/13 00:56	TDC	KONE-1	1	BWG1483
2	EPA-200.8	07/26/13	07/29/13 19:56	SRM	PE-EL2	1	BWG1910



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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1453</b>						
Benzene	BWG1453-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1453-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1453-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1453-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1453-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1453-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1453-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1453-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1453-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1453-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1453-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1453-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1453-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1453-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1453-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1453-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1453-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1453-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1453-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1453-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1453-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1453-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1453-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1453-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1453-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1453-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1453-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1453-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1453-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1453-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1453-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1453-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1453-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1453-BLK1	ND	ug/L	0.50	0.14	

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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1453</b>						
trans-1,3-Dichloropropene	BWG1453-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1453-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1453-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1453-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1453-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1453-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1453-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1453-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1453-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1453-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1453-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1453-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1453-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1453-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1453-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1453-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1453-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1453-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1453-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1453-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1453-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1453-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1453-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1453-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1453-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1453-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1453-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1453-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1453-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1453-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1453-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1453-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1453-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1453-BLK1	ND	ug/L	4.0	0.97	

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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1453</b>						
Ethyl t-butyl ether	BWG1453-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1453-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1453-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1453-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1453-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1453-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1453-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1453-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1453-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1453-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1453-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1453-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1453-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1453-BLK1	112	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1453-BLK1	99.0	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1453-BLK1	101	%	80 - 120 (LCL - UCL)		
<b>QC Batch ID: BWG1454</b>						
Benzene	BWG1454-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1454-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1454-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1454-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1454-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1454-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1454-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1454-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1454-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1454-BLK1	ND	ug/L	0.50	0.15	

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**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1454</b>						
Dibromochloromethane	BWG1454-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1454-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1454-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1454-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1454-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1454-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1454-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1454-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1454-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1454-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BWG1454-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1454-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1454-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1454-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1454-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1454-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1454-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1454-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1454-BLK1	ND	ug/L	0.50	0.19	

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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1454</b>						
1,1,1-Trichloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1454-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1454-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1454-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1454-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1454-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1454-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1454-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1454-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1454-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1454-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1454-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1454-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1454-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1454-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1454-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BWG1454-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1454-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1454-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1454-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1454-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1454-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1454-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1454-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1454-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1454-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1454-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1454-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1454-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1454-BLK1	102	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1454-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1454-BLK1	90.7	%	80 - 120 (LCL - UCL)		

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**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1453</b>									
Benzene	BWG1453-BS1	LCS	23.640	25.000	ug/L	94.6	70 - 130		
Bromodichloromethane	BWG1453-BS1	LCS	25.540	25.000	ug/L	102	70 - 130		
Chlorobenzene	BWG1453-BS1	LCS	23.360	25.000	ug/L	93.4	70 - 130		
Chloroethane	BWG1453-BS1	LCS	24.650	25.000	ug/L	98.6	70 - 130		
1,4-Dichlorobenzene	BWG1453-BS1	LCS	25.480	25.000	ug/L	102	70 - 130		
1,1-Dichloroethane	BWG1453-BS1	LCS	23.170	25.000	ug/L	92.7	70 - 130		
1,1-Dichloroethene	BWG1453-BS1	LCS	24.980	25.000	ug/L	99.9	70 - 130		
Toluene	BWG1453-BS1	LCS	23.420	25.000	ug/L	93.7	70 - 130		
Trichloroethene	BWG1453-BS1	LCS	24.510	25.000	ug/L	98.0	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWG1453-BS1	LCS	10.050	10.000	ug/L	100	75 - 125		
Toluene-d8 (Surrogate)	BWG1453-BS1	LCS	9.9400	10.000	ug/L	99.4	80 - 120		
4-Bromofluorobenzene (Surrogate)	BWG1453-BS1	LCS	9.8600	10.000	ug/L	98.6	80 - 120		
<b>QC Batch ID: BWG1454</b>									
Benzene	BWG1454-BS1	LCS	23.780	25.000	ug/L	95.1	70 - 130		
Bromodichloromethane	BWG1454-BS1	LCS	25.600	25.000	ug/L	102	70 - 130		
Chlorobenzene	BWG1454-BS1	LCS	22.810	25.000	ug/L	91.2	70 - 130		
Chloroethane	BWG1454-BS1	LCS	24.640	25.000	ug/L	98.6	70 - 130		
1,4-Dichlorobenzene	BWG1454-BS1	LCS	25.550	25.000	ug/L	102	70 - 130		
1,1-Dichloroethane	BWG1454-BS1	LCS	24.220	25.000	ug/L	96.9	70 - 130		
1,1-Dichloroethene	BWG1454-BS1	LCS	24.910	25.000	ug/L	99.6	70 - 130		
Toluene	BWG1454-BS1	LCS	24.080	25.000	ug/L	96.3	70 - 130		
Trichloroethene	BWG1454-BS1	LCS	23.580	25.000	ug/L	94.3	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWG1454-BS1	LCS	10.300	10.000	ug/L	103	75 - 125		
Toluene-d8 (Surrogate)	BWG1454-BS1	LCS	10.040	10.000	ug/L	100	80 - 120		
4-Bromofluorobenzene (Surrogate)	BWG1454-BS1	LCS	9.7500	10.000	ug/L	97.5	80 - 120		

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1453</b>		Used client sample: N								
Benzene	MS	1315159-02	ND	23.860	25.000	ug/L		95.4		70 - 130
	MSD	1315159-02	ND	23.670	25.000	ug/L	0.8	94.7	20	70 - 130
Bromodichloromethane	MS	1315159-02	ND	27.880	25.000	ug/L		112		70 - 130
	MSD	1315159-02	ND	26.670	25.000	ug/L	4.4	107	20	70 - 130
Chlorobenzene	MS	1315159-02	ND	24.520	25.000	ug/L		98.1		70 - 130
	MSD	1315159-02	ND	24.680	25.000	ug/L	0.7	98.7	20	70 - 130
Chloroethane	MS	1315159-02	ND	24.790	25.000	ug/L		99.2		70 - 130
	MSD	1315159-02	ND	24.350	25.000	ug/L	1.8	97.4	20	70 - 130
1,4-Dichlorobenzene	MS	1315159-02	ND	27.690	25.000	ug/L		111		70 - 130
	MSD	1315159-02	ND	26.910	25.000	ug/L	2.9	108	20	70 - 130
1,1-Dichloroethane	MS	1315159-02	ND	23.960	25.000	ug/L		95.8		70 - 130
	MSD	1315159-02	ND	23.630	25.000	ug/L	1.4	94.5	20	70 - 130
1,1-Dichloroethene	MS	1315159-02	ND	25.050	25.000	ug/L		100		70 - 130
	MSD	1315159-02	ND	24.880	25.000	ug/L	0.7	99.5	20	70 - 130
Toluene	MS	1315159-02	ND	24.610	25.000	ug/L		98.4		70 - 130
	MSD	1315159-02	ND	24.100	25.000	ug/L	2.1	96.4	20	70 - 130
Trichloroethene	MS	1315159-02	ND	24.950	25.000	ug/L		99.8		70 - 130
	MSD	1315159-02	ND	24.080	25.000	ug/L	3.5	96.3	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1315159-02	ND	10.090	10.000	ug/L		101		75 - 125
	MSD	1315159-02	ND	9.7700	10.000	ug/L	3.2	97.7		75 - 125
Toluene-d8 (Surrogate)	MS	1315159-02	ND	9.8200	10.000	ug/L		98.2		80 - 120
	MSD	1315159-02	ND	9.7700	10.000	ug/L	0.5	97.7		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1315159-02	ND	10.000	10.000	ug/L		100		80 - 120
	MSD	1315159-02	ND	10.220	10.000	ug/L	2.2	102		80 - 120
<b>QC Batch ID: BWG1454</b>		Used client sample: Y - Description: MW-25-4, 07/18/2013 11:10								
Benzene	MS	1315120-09	ND	24.760	25.000	ug/L		99.0		70 - 130
	MSD	1315120-09	ND	25.080	25.000	ug/L	1.3	100	20	70 - 130
Bromodichloromethane	MS	1315120-09	ND	27.300	25.000	ug/L		109		70 - 130
	MSD	1315120-09	ND	27.500	25.000	ug/L	0.7	110	20	70 - 130
Chlorobenzene	MS	1315120-09	ND	25.170	25.000	ug/L		101		70 - 130
	MSD	1315120-09	ND	24.990	25.000	ug/L	0.7	100	20	70 - 130
Chloroethane	MS	1315120-09	ND	25.410	25.000	ug/L		102		70 - 130
	MSD	1315120-09	ND	25.540	25.000	ug/L	0.5	102	20	70 - 130
1,4-Dichlorobenzene	MS	1315120-09	ND	28.110	25.000	ug/L		112		70 - 130
	MSD	1315120-09	ND	27.650	25.000	ug/L	1.6	111	20	70 - 130
1,1-Dichloroethane	MS	1315120-09	ND	25.120	25.000	ug/L		100		70 - 130
	MSD	1315120-09	ND	25.380	25.000	ug/L	1.0	102	20	70 - 130

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1454</b>		Used client sample: Y - Description: MW-25-4, 07/18/2013 11:10									
1,1-Dichloroethene	MS	1315120-09	ND	26.120	25.000	ug/L		104		70 - 130	
	MSD	1315120-09	ND	26.370	25.000	ug/L	1.0	105	20	70 - 130	
Toluene	MS	1315120-09	ND	25.670	25.000	ug/L		103		70 - 130	
	MSD	1315120-09	ND	25.210	25.000	ug/L	1.8	101	20	70 - 130	
Trichloroethene	MS	1315120-09	ND	24.880	25.000	ug/L		99.5		70 - 130	
	MSD	1315120-09	ND	24.600	25.000	ug/L	1.1	98.4	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1315120-09	ND	9.9300	10.000	ug/L		99.3		75 - 125	
	MSD	1315120-09	ND	10.400	10.000	ug/L	4.6	104		75 - 125	
Toluene-d8 (Surrogate)	MS	1315120-09	ND	10.060	10.000	ug/L		101		80 - 120	
	MSD	1315120-09	ND	9.9500	10.000	ug/L	1.1	99.5		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1315120-09	ND	10.130	10.000	ug/L		101		80 - 120	
	MSD	1315120-09	ND	10.320	10.000	ug/L	1.9	103		80 - 120	



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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
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
<b>QC Batch ID: BWG1453</b>						
Chloroacetonitrile	BWG1453-BLK1	0	ug/L			
1-Chlorobutane	BWG1453-BLK1	0	ug/L			
1,1-Dichloropropanone	BWG1453-BLK1	0	ug/L			
Methyl acrylate	BWG1453-BLK1	0	ug/L			
Nitrobenzene	BWG1453-BLK1	0	ug/L			
2-Nitropropane	BWG1453-BLK1	0	ug/L			
<b>QC Batch ID: BWG1454</b>						
Chloroacetonitrile	BWG1454-BLK1	0	ug/L			
1-Chlorobutane	BWG1454-BLK1	0	ug/L			
1,1-Dichloropropanone	BWG1454-BLK1	0	ug/L			
Methyl acrylate	BWG1454-BLK1	0	ug/L			
Nitrobenzene	BWG1454-BLK1	0	ug/L			
2-Nitropropane	BWG1454-BLK1	0	ug/L			



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**Reported:** 08/02/2013 14:40  
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**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1655</b>						
Perchlorate	BWG1655-BLK1	ND	ug/L	4.0	0.81	



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**Reported:** 08/02/2013 14:40  
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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	<u>Control Limits</u>		Lab Quals
							Percent Recovery	RPD	
Perchlorate	BWG1655	BWG1655-BS1	LCS	10.426	10.000	ug/L	104	85 - 115	



Battelle MHTS  
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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1655</b>		Used client sample: Y - Description: MW-23-3, 07/19/2013 07:20									
Perchlorate	DUP	1315237-05	2.6264	2.7856		ug/L	5.9		15		J
	MS	1315237-05	2.6264	12.340	10.101	ug/L		96.2		80 - 120	
	MSD	1315237-05	2.6264	12.354	10.101	ug/L	0.1	96.3	15	80 - 120	



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**Reported:** 08/02/2013 14:40  
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**Project Number:** 3Q13  
**Project Manager:** David Conner

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BWG1483</b>						
Hexavalent Chromium	BWG1483-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1910</b>						
Total Recoverable Chromium	BWG1910-BLK1	ND	ug/L	3.0	0.50	



Battelle MHTS  
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Reported: 08/02/2013 14:40  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BWG1483									
Hexavalent Chromium	BWG1483-BS1	LCS	0.052575	0.050000	mg/L	105		85 - 115	
QC Batch ID: BWG1910									
Total Recoverable Chromium	BWG1910-BS1	LCS	40.511	40.000	ug/L	101		85 - 115	



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**Project Number:** 3Q13  
**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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1483</b>		Used client sample: Y - Description: SB-2-7/19/13, 07/19/2013 06:15									
Hexavalent Chromium	DUP	1315237-02	ND	ND		mg/L			10		
	MS	1315237-02	ND	0.055765	0.052632	mg/L		106		85 - 115	
	MSD	1315237-02	ND	0.056118	0.052632	mg/L	0.6	107	10	85 - 115	
<b>QC Batch ID: BWG1910</b>		Used client sample: Y - Description: SB-2-7/19/13, 07/19/2013 06:15									
Total Recoverable Chromium	DUP	1315237-02	ND	ND		ug/L			20		
	MS	1315237-02	ND	39.660	40.000	ug/L		99.2		70 - 130	
	MSD	1315237-02	ND	39.062	40.000	ug/L	1.5	97.7	20	70 - 130	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 14:40  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 08/02/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1315307

Invoice ID: B151853

Enclosed are the results of analyses for samples received by the laboratory on 7/22/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

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## Chain of Custody Form

# 13-15307

\*Required Fields

Report To: Battelle MHTS

Client: \* David Connor

Attn.: \* 505 King Ave.

Street Address: \* 505 King Ave.

City: \* Columbus

State: \* OH

Zip: \* 43201

Phone#: \*(614 ) 424 - 5489

Fax#: \*(614 ) 458 - 5489

Email Address: connard@battelle.org

Submission #:

Project Description: \* JPL GW Monitoring

Project Code: \* 3Q13

VOCS EPA 524.2

Perchlorate 314.0

Hexavalent Chromium 200.8 (ug/L)

Chloride, Nitrate, Sulfate

Orthophosphate 365.1

Nitrite 353.2

Standard Turnaround = 10

Notes

Are there any tests with holding times? less than or equal to 48 hours?

24: \*

 Yes  No

\*Standard Turnaround = 10

Analysis Requested

Client: \* SAME

Attn: \*

Address: \*

City: \*

State: \*

24: \*

Are there any tests with holding times? less than or equal to 48 hours?

24: \*

 Yes  No

\*Standard Turnaround = 10

Analysis Requested

Client: \* SAME

Attn: \*

Address: \*

City: \*

State: \*

24: \*

 Yes  No

\*Standard Turnaround = 10

Analysis Requested

Client: \* SAME

Attn: \*

Address: \*

City: \*

State: \*

24: \*

 Yes  No

\*Standard Turnaround = 10

Analysis Requested

Client: \* SAME

Attn: \*

Address: \*

City: \*

State: \*

24: \*

 Yes  No

\*Standard Turnaround = 10

Analysis Requested

Client: \* SAME

Attn: \*

Address: \*

City: \*

State: \*

24: \*

 Yes  No

\*Standard Turnaround = 10

BC Laboratories, Inc.

Matrix Types: \* 5 = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid N = 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 NOTE 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)

Other (Specify) \_\_\_\_\_

MBU Site

CVX RCR

Geotracker 5 File

(CA Default)

Geotracker 2 File

Other (Specify) \_\_\_\_\_

Cost Center:

1. Relinquished By:

Date: 7-22-13

Time: 16:00

1. Received By:

Date: 7-22-13

Time: 16:00

2. Relinquished By:

Date: 7-22-13

Time: 16:00

2. Received By:

Date: 7-22-13

Time: 16:00

3. Relinquished By:

Date: 7-22-13

Time: 16:00

3. Received By:

Date: 7-22-13

Time: 16:00



## Chain of Custody and Cooler Receipt Form for 1315307 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 15	07/01/13	Page 1 Of 1				
Submission #: 13-15307										
SHIPPING INFORMATION			SHIPPING CONTAINER			FREE-LIQUID				
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/>		Comments:								
Custody Seals: Ice Chest <input checked="" type="checkbox"/> Container <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments:										
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98	Container: A+PE	Thermometer ID: 207	Date/Time 7.22.13 1930					
		Temperature: (A) 0.8 °C / (C) 0.9 °C			Analyst Init 545					
SAMPLE CONTAINERS		SAMPLE NUMBERS								
		1	2	3	4	5	6	7	8	9
GENERAL MINERAL/ GENERAL		F3	B	BC	B	B	B	BC	B	B
PE UNPRESERVED										
INORGANIC CHEMICAL METALS		C	C	D	C			D	C	C
CYANIDE										
NITROGEN FORMS										
TOTAL SULFIDE										
NITRATE/NITRITE										
TOTAL ORGANIC CARBON										
TOX										
CHEMICAL OXYGEN DEMAND										
PHENOLICS										
VOA VIAL TRAVEL BLANK		A 1								
VOA VIAL		A 13	A 13	A 19	A 13	A 13	A 13	A 19	A 13	A 13
EPA 413.1, 413.2, 418.1										
ODOR										
BIOLOGICAL										
TERIOLOGICAL										
VOA VIAL-504		Cr <sup>+6</sup>	T	NO <sub>x</sub>	NC <sub>x</sub>	OP	SS			
EPA 508/608/8080		OQ	Cl <sub>2</sub>	BOD	MBAS	COT				
EPA 515.1/8150										
EPA 525										
EPA 525 TRAVEL BLANK		CHK BY	DISTRIBUTION							
EPA 547		K/Q	IMA	AT	JHR					
EPA 531.1										
PA 548										
PA 549										
PA 632										
PA 8015M										
MBER										
JAR										
L JAR										
SLEEVE										
VIAL										
TIC BAG										
OUS IRON										
IRE										
IT KIT										
na Canister										
ents:										
e Numbering Completed By: 545 Date/Time: 7.22.13 1940										

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315307-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-6-7/22/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 07:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-6-7/22/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315307-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> EB-6-7/22/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 07:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-6-7/22/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315307-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-4-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 07:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-4-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315307-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-4-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 08:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-4-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315307-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-4-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 09:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-4-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315307-06	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-12-5 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 10:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315307-07	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-12-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 11:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315307-08	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-12-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 12:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315307-09	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-12-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 14:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315307-10	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-12-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/22/2013 19:30 <b>Sampling Date:</b> 07/22/2013 14:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-01	Client Sample Name: JPL-GW, TB-6-7/22/13, 7/22/2013 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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-01	Client Sample Name: JPL-GW, TB-6-7/22/13, 7/22/2013 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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-01	Client Sample Name: JPL-GW, TB-6-7/22/13, 7/22/2013 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)	106	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	90.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/23/13	07/23/13	13:49	MGC	MS-V5	1	BWG1569



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**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-01	Client Sample Name: JPL-GW, TB-6-7/22/13, 7/22/2013 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	07/23/13	07/23/13 13:49	MGC	MS-V5	1	BWG1569



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-02	Client Sample Name: JPL-GW, EB-6-7/22/13, 7/22/2013 7:10:00AM, 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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-02	Client Sample Name: JPL-GW, EB-6-7/22/13, 7/22/2013 7:10:00AM, 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
<b>Toluene</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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	V11	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-02	Client Sample Name: JPL-GW, EB-6-7/22/13, 7/22/2013 7:10:00AM, 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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/23/13	07/23/13	14:12	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-02	Client Sample Name: JPL-GW, EB-6-7/22/13, 7/22/2013 7:10:00AM, 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	07/23/13	07/23/13 14:12	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-02	Client Sample Name: JPL-GW, EB-6-7/22/13, 7/22/2013 7:10:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/25/13	07/25/13 18:20	LS1	IC6	1		BWG1834



Battelle MHTS  
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Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315307-02	Client Sample Name: JPL-GW, EB-6-7/22/13, 7/22/2013 7:10:00AM, 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	ND	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/22/13	07/22/13 21:18	LS1	KONE-1	1	BWG1589	
2	EPA-200.8	07/26/13	07/30/13 16:30	JSS	PE-EL2	1	BWG1911	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-03	Client Sample Name: JPL-GW, MW-4-3, 7/22/2013 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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-03	Client Sample Name: JPL-GW, MW-4-3, 7/22/2013 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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-03	Client Sample Name: JPL-GW, MW-4-3, 7/22/2013 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		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)	96.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/23/13	07/23/13	14:35	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-03	Client Sample Name: JPL-GW, MW-4-3, 7/22/2013 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	07/23/13	07/23/13 14:35	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-03	Client Sample Name: JPL-GW, MW-4-3, 7/22/2013 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/25/13	07/25/13 18:32	LS1	IC6	1	BWG1834	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315307-03	Client Sample Name: JPL-GW, MW-4-3, 7/22/2013 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	1.0	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/22/13	07/22/13 21:52	LS1	KONE-1	1	BWG1589	
2	EPA-200.8	07/26/13	07/30/13 16:34	JSS	PE-EL2	1	BWG1911	



Battelle MHTS  
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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-04	Client Sample Name: JPL-GW, MW-4-2, 7/22/2013 8:30:00AM, 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
<b>Bromodichloromethane</b>	<b>2.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	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
<b>Carbon tetrachloride</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Chloroform</b>	<b>3.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>Dibromochloromethane</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	<b>V11</b>	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
<b>1,1-Dichloroethane</b>	<b>0.46</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-04	Client Sample Name: JPL-GW, MW-4-2, 7/22/2013 8:30:00AM, 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
<b>Tetrachloroethene</b>	<b>1.7</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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	V11	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-04	Client Sample Name: JPL-GW, MW-4-2, 7/22/2013 8:30:00AM, 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)	111	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/23/13	07/23/13	11:34	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-04	Client Sample Name: JPL-GW, MW-4-2, 7/22/2013 8:30:00AM, 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	07/23/13	07/23/13 11:34	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-04	Client Sample Name: JPL-GW, MW-4-2, 7/22/2013 8:30:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	250	ug/L	200	40	EPA-314.0	ND	A01	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/25/13	07/25/13 23:28	LS1	IC6	50	BWG1834	



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315307-04	Client Sample Name: JPL-GW, MW-4-2, 7/22/2013 8:30:00AM, 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	3.2	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/22/13	07/22/13 21:18	LS1	KONE-1	1	BWG1589	
2	EPA-200.8	07/26/13	07/29/13 23:01	JSS	PE-EL1	1	BWG1911	



Battelle MHTS  
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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-05	Client Sample Name: JPL-GW, MW-4-1, 7/22/2013 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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-05	Client Sample Name: JPL-GW, MW-4-1, 7/22/2013 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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-05	Client Sample Name: JPL-GW, MW-4-1, 7/22/2013 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		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)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/23/13	07/23/13	14:57	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-05	Client Sample Name: JPL-GW, MW-4-1, 7/22/2013 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	07/23/13	07/23/13 14:57	MGC	MS-V5	1	BWG1569



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-05	Client Sample Name: JPL-GW, MW-4-1, 7/22/2013 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/25/13	07/25/13 18:55	LS1	IC6	1	BWG1834	



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315307-05	Client Sample Name: JPL-GW, MW-4-1, 7/22/2013 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	0.64	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/22/13	07/22/13 21:18	LS1	KONE-1	1	BWG1589	
2	EPA-200.8	07/26/13	07/30/13 16:37	JSS	PE-EL2	1	BWG1911	



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-06	Client Sample Name: JPL-GW, MW-12-5, 7/22/2013 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		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
<b>Carbon tetrachloride</b>	<b>0.37</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Chloroform</b>	<b>0.35</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-06	Client Sample Name: JPL-GW, MW-12-5, 7/22/2013 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	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
<b>Trichloroethene</b>	<b>0.10</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-06	Client Sample Name: JPL-GW, MW-12-5, 7/22/2013 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/23/13	07/23/13	15:20	MGC	MS-V5	1	BWG1569



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-06	Client Sample Name: JPL-GW, MW-12-5, 7/22/2013 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	07/23/13	07/23/13 15:20	MGC	MS-V5	1	BWG1569



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-06	Client Sample Name: JPL-GW, MW-12-5, 7/22/2013 10:50:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.1	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time				Dilution	QC Batch ID
			Analyst	Instrument				
1	EPA-314.0	07/25/13	07/25/13 19:07	LS1	IC6	1	BWG1834	



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-07	Client Sample Name: JPL-GW, MW-12-4, 7/22/2013 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
<b>Carbon tetrachloride</b>	<b>0.77</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	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
<b>Chloroform</b>	<b>0.75</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-07	Client Sample Name: JPL-GW, MW-12-4, 7/22/2013 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
<b>Trichloroethene</b>	<b>0.29</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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	V11	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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Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-07	Client Sample Name: JPL-GW, MW-12-4, 7/22/2013 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		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)	99.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/23/13	07/23/13	15:42	MGC	MS-V5	1	BWG1569



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-07	Client Sample Name: JPL-GW, MW-12-4, 7/22/2013 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	07/23/13	07/23/13 15:42	MGC	MS-V5	1	BWG1569



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505 King Ave.  
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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-07	Client Sample Name: JPL-GW, MW-12-4, 7/22/2013 11:45:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/25/13	07/25/13 19:19	LS1	IC6	1	BWG1834	



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-08	Client Sample Name: JPL-GW, MW-12-3, 7/22/2013 12:40:00PM, 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
<b>Chloroform</b>	<b>2.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-08	Client Sample Name: JPL-GW, MW-12-3, 7/22/2013 12:40:00PM, 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
<b>Styrene</b>	<b>0.080</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-08	Client Sample Name: JPL-GW, MW-12-3, 7/22/2013 12:40:00PM, 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)	106	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/23/13	07/23/13	16:27	MGC	MS-V5	1	BWG1635



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-08	Client Sample Name: JPL-GW, MW-12-3, 7/22/2013 12:40:00PM, 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	07/23/13	07/23/13 16:27	MGC	MS-V5	1	BWG1635



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-08	Client Sample Name: JPL-GW, MW-12-3, 7/22/2013 12:40:00PM, 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		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	
1	EPA-314.0	07/25/13	07/25/13 19:31	LS1	IC6	1	BWG1835	



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Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315307-08	Client Sample Name: JPL-GW, MW-12-3, 7/22/2013 12:40:00PM, 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	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/23/13	07/23/13 07:54	TDC	KONE-1	1	BWG1592	
2	EPA-200.8	07/30/13	07/30/13 16:27	SRM	PE-EL1	1	BWG2096	



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**Reported:** 08/02/2013 16:06  
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**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-09	Client Sample Name: JPL-GW, MW-12-2, 7/22/2013 2:00:00PM, 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		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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-09	Client Sample Name: JPL-GW, MW-12-2, 7/22/2013 2:00:00PM, 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
<b>Styrene</b>	<b>0.070</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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	V11	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-09	Client Sample Name: JPL-GW, MW-12-2, 7/22/2013 2:00:00PM, 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		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)	91.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/23/13	07/23/13	18:42	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-09	Client Sample Name: JPL-GW, MW-12-2, 7/22/2013 2:00:00PM, 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	07/23/13	07/23/13 18:42	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-09	Client Sample Name: JPL-GW, MW-12-2, 7/22/2013 2:00:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	7.2	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/25/13	07/25/13 19:43	LS1	IC6	1		BWG1834



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315307-09	Client Sample Name: JPL-GW, MW-12-2, 7/22/2013 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	1.6	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/23/13	07/23/13 07:54	TDC	KONE-1	1	BWG1592	
2	EPA-200.8	07/30/13	07/30/13 17:01	SRM	PE-EL1	1	BWG2096	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-10	Client Sample Name: JPL-GW, MW-12-1, 7/22/2013 2:40:00PM, 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	V11	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-10	Client Sample Name: JPL-GW, MW-12-1, 7/22/2013 2:40:00PM, 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	V11	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:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315307-10	Client Sample Name: JPL-GW, MW-12-1, 7/22/2013 2:40:00PM, 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)	102	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/23/13	07/23/13	19:05	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315307-10	Client Sample Name: JPL-GW, MW-12-1, 7/22/2013 2:40:00PM, 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	07/23/13	07/23/13 19:05	MGC	MS-V5	1	BWG1569



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315307-10	Client Sample Name: JPL-GW, MW-12-1, 7/22/2013 2:40:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/25/13	07/25/13 20:18	LS1	IC6	1	BWG1834	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315307-10	Client Sample Name: JPL-GW, MW-12-1, 7/22/2013 2:40:00PM, 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	0.95	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/23/13	07/23/13 07:54	TDC	KONE-1	1	BWG1592	
2	EPA-200.8	07/30/13	07/30/13 17:04	SRM	PE-EL1	1	BWG2096	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1569</b>						
Benzene	BWG1569-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1569-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1569-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1569-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1569-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1569-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1569-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1569-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1569-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1569-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1569-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1569-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1569-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1569-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1569-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1569-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1569-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1569-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1569-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1569-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1569-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1569-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1569-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1569-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1569-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1569-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1569-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1569-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1569-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1569-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1569-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1569-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1569-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1569-BLK1	ND	ug/L	0.50	0.14	

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505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1569</b>						
trans-1,3-Dichloropropene	BWG1569-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1569-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1569-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1569-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1569-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1569-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1569-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1569-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1569-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1569-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1569-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1569-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1569-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1569-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1569-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1569-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1569-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1569-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1569-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1569-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1569-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1569-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1569-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1569-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1569-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1569-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1569-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1569-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1569-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1569-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1569-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1569-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1569-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1569-BLK1	ND	ug/L	4.0	0.97	

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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1569</b>						
Ethyl t-butyl ether	BWG1569-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1569-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1569-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1569-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1569-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1569-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1569-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1569-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1569-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1569-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1569-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1569-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1569-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1569-BLK1	107	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1569-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1569-BLK1	93.0	%	80 - 120 (LCL - UCL)		
<b>QC Batch ID: BWG1635</b>						
Benzene	BWG1635-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1635-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1635-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1635-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1635-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1635-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1635-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1635-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1635-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1635-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1635-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1635-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1635-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1635-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1635-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1635-BLK1	ND	ug/L	0.50	0.15	

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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1635</b>						
Dibromochloromethane	BWG1635-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1635-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1635-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1635-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1635-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1635-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1635-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1635-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1635-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1635-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1635-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1635-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1635-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1635-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1635-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1635-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1635-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1635-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	BWG1635-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1635-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1635-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1635-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1635-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1635-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1635-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1635-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1635-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1635-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1635-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1635-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1635-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1635-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1635-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1635-BLK1	ND	ug/L	0.50	0.19	

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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1635</b>						
1,1,1-Trichloroethane	BWG1635-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1635-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1635-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1635-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1635-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1635-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1635-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1635-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1635-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1635-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1635-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1635-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1635-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1635-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1635-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1635-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1635-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1635-BLK1	ND	ug/L	4.0	0.97	
Ethyl t-butyl ether	BWG1635-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1635-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1635-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1635-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1635-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1635-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1635-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1635-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1635-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1635-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1635-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1635-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1635-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1635-BLK1	110	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1635-BLK1	98.9	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1635-BLK1	89.6	%	80 - 120 (LCL - UCL)		

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**Project Number:** 3Q13  
**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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1569</b>									
Benzene	BWG1569-BS1	LCS	24.910	25.000	ug/L	99.6	70 - 130		
Bromodichloromethane	BWG1569-BS1	LCS	28.520	25.000	ug/L	114	70 - 130		
Chlorobenzene	BWG1569-BS1	LCS	25.720	25.000	ug/L	103	70 - 130		
Chloroethane	BWG1569-BS1	LCS	25.500	25.000	ug/L	102	70 - 130		
1,4-Dichlorobenzene	BWG1569-BS1	LCS	28.540	25.000	ug/L	114	70 - 130		
1,1-Dichloroethane	BWG1569-BS1	LCS	25.350	25.000	ug/L	101	70 - 130		
1,1-Dichloroethene	BWG1569-BS1	LCS	25.710	25.000	ug/L	103	70 - 130		
Toluene	BWG1569-BS1	LCS	25.570	25.000	ug/L	102	70 - 130		
Trichloroethene	BWG1569-BS1	LCS	26.400	25.000	ug/L	106	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWG1569-BS1	LCS	10.420	10.000	ug/L	104	75 - 125		
Toluene-d8 (Surrogate)	BWG1569-BS1	LCS	9.7300	10.000	ug/L	97.3	80 - 120		
4-Bromofluorobenzene (Surrogate)	BWG1569-BS1	LCS	10.270	10.000	ug/L	103	80 - 120		
<b>QC Batch ID: BWG1635</b>									
Benzene	BWG1635-BS1	LCS	23.500	25.000	ug/L	94.0	70 - 130		
Bromodichloromethane	BWG1635-BS1	LCS	26.640	25.000	ug/L	107	70 - 130		
Chlorobenzene	BWG1635-BS1	LCS	24.490	25.000	ug/L	98.0	70 - 130		
Chloroethane	BWG1635-BS1	LCS	24.120	25.000	ug/L	96.5	70 - 130		
1,4-Dichlorobenzene	BWG1635-BS1	LCS	26.540	25.000	ug/L	106	70 - 130		
1,1-Dichloroethane	BWG1635-BS1	LCS	23.990	25.000	ug/L	96.0	70 - 130		
1,1-Dichloroethene	BWG1635-BS1	LCS	24.820	25.000	ug/L	99.3	70 - 130		
Toluene	BWG1635-BS1	LCS	24.700	25.000	ug/L	98.8	70 - 130		
Trichloroethene	BWG1635-BS1	LCS	24.560	25.000	ug/L	98.2	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWG1635-BS1	LCS	10.620	10.000	ug/L	106	75 - 125		
Toluene-d8 (Surrogate)	BWG1635-BS1	LCS	10.160	10.000	ug/L	102	80 - 120		
4-Bromofluorobenzene (Surrogate)	BWG1635-BS1	LCS	10.440	10.000	ug/L	104	80 - 120		



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Project Number: 3Q13  
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	Control Limits		
								Percent Recovery	RPD	Percent Recovery
<b>QC Batch ID: BWG1569</b>		Used client sample: Y - Description: MW-4-2, 07/22/2013 08:30								
Benzene	MS	1315307-04	ND	24.830	25.000	ug/L		99.3		70 - 130
	MSD	1315307-04	ND	23.850	25.000	ug/L	4.0	95.4	20	70 - 130
Bromodichloromethane	MS	1315307-04	2.2400	29.750	25.000	ug/L		110		70 - 130
	MSD	1315307-04	2.2400	29.440	25.000	ug/L	1.0	109	20	70 - 130
Chlorobenzene	MS	1315307-04	ND	24.240	25.000	ug/L		97.0		70 - 130
	MSD	1315307-04	ND	23.630	25.000	ug/L	2.5	94.5	20	70 - 130
Chloroethane	MS	1315307-04	ND	24.900	25.000	ug/L		99.6		70 - 130
	MSD	1315307-04	ND	25.510	25.000	ug/L	2.4	102	20	70 - 130
1,4-Dichlorobenzene	MS	1315307-04	ND	28.280	25.000	ug/L		113		70 - 130
	MSD	1315307-04	ND	27.280	25.000	ug/L	3.6	109	20	70 - 130
1,1-Dichloroethane	MS	1315307-04	0.46000	25.720	25.000	ug/L		101		70 - 130
	MSD	1315307-04	0.46000	25.670	25.000	ug/L	0.2	101	20	70 - 130
1,1-Dichloroethene	MS	1315307-04	0.19000	25.560	25.000	ug/L		101		70 - 130
	MSD	1315307-04	0.19000	25.550	25.000	ug/L	0.0	101	20	70 - 130
Toluene	MS	1315307-04	ND	25.380	25.000	ug/L		102		70 - 130
	MSD	1315307-04	ND	23.950	25.000	ug/L	5.8	95.8	20	70 - 130
Trichloroethene	MS	1315307-04	1.1400	25.560	25.000	ug/L		97.7		70 - 130
	MSD	1315307-04	1.1400	25.170	25.000	ug/L	1.5	96.1	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1315307-04	ND	11.010	10.000	ug/L		110		75 - 125
	MSD	1315307-04	ND	11.010	10.000	ug/L	0	110		75 - 125
Toluene-d8 (Surrogate)	MS	1315307-04	ND	10.100	10.000	ug/L		101		80 - 120
	MSD	1315307-04	ND	9.8500	10.000	ug/L	2.5	98.5		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1315307-04	ND	10.510	10.000	ug/L		105		80 - 120
	MSD	1315307-04	ND	10.130	10.000	ug/L	3.7	101		80 - 120
<b>QC Batch ID: BWG1635</b>		Used client sample: Y - Description: MW-12-3, 07/22/2013 12:40								
Benzene	MS	1315307-08	ND	24.550	25.000	ug/L		98.2		70 - 130
	MSD	1315307-08	ND	24.240	25.000	ug/L	1.3	97.0	20	70 - 130
Bromodichloromethane	MS	1315307-08	ND	27.420	25.000	ug/L		110		70 - 130
	MSD	1315307-08	ND	26.950	25.000	ug/L	1.7	108	20	70 - 130
Chlorobenzene	MS	1315307-08	ND	24.460	25.000	ug/L		97.8		70 - 130
	MSD	1315307-08	ND	24.890	25.000	ug/L	1.7	99.6	20	70 - 130
Chloroethane	MS	1315307-08	ND	24.870	25.000	ug/L		99.5		70 - 130
	MSD	1315307-08	ND	24.400	25.000	ug/L	1.9	97.6	20	70 - 130
1,4-Dichlorobenzene	MS	1315307-08	ND	27.970	25.000	ug/L		112		70 - 130
	MSD	1315307-08	ND	28.460	25.000	ug/L	1.7	114	20	70 - 130
1,1-Dichloroethane	MS	1315307-08	ND	25.410	25.000	ug/L		102		70 - 130
	MSD	1315307-08	ND	24.720	25.000	ug/L	2.8	98.9	20	70 - 130

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1635</b>		Used client sample: Y - Description: MW-12-3, 07/22/2013 12:40									
1,1-Dichloroethene	MS	1315307-08	ND	25.540	25.000	ug/L		102		70 - 130	
	MSD	1315307-08	ND	24.830	25.000	ug/L	2.8	99.3	20	70 - 130	
Toluene	MS	1315307-08	ND	24.440	25.000	ug/L		97.8		70 - 130	
	MSD	1315307-08	ND	24.440	25.000	ug/L	0	97.8	20	70 - 130	
Trichloroethene	MS	1315307-08	0.17000	25.170	25.000	ug/L		100		70 - 130	
	MSD	1315307-08	0.17000	24.330	25.000	ug/L	3.4	96.6	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1315307-08	ND	10.480	10.000	ug/L		105		75 - 125	
	MSD	1315307-08	ND	10.460	10.000	ug/L	0.2	105		75 - 125	
Toluene-d8 (Surrogate)	MS	1315307-08	ND	9.9200	10.000	ug/L		99.2		80 - 120	
	MSD	1315307-08	ND	9.7900	10.000	ug/L	1.3	97.9		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1315307-08	ND	9.8000	10.000	ug/L		98.0		80 - 120	
	MSD	1315307-08	ND	10.280	10.000	ug/L	4.8	103		80 - 120	



Battelle MHTS  
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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
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
<b>QC Batch ID: BWG1569</b>						
Chloroacetonitrile	BWG1569-BLK1	0	ug/L			
1-Chlorobutane	BWG1569-BLK1	0	ug/L			
1,1-Dichloropropanone	BWG1569-BLK1	0	ug/L			
Methyl acrylate	BWG1569-BLK1	0	ug/L			
Nitrobenzene	BWG1569-BLK1	0	ug/L			
2-Nitropropane	BWG1569-BLK1	0	ug/L			
<b>QC Batch ID: BWG1635</b>						
Chloroacetonitrile	BWG1635-BLK1	0	ug/L			
1-Chlorobutane	BWG1635-BLK1	0	ug/L			
1,1-Dichloropropanone	BWG1635-BLK1	0	ug/L			
Methyl acrylate	BWG1635-BLK1	0	ug/L			
Nitrobenzene	BWG1635-BLK1	0	ug/L			
2-Nitropropane	BWG1635-BLK1	0	ug/L			



Battelle MHTS  
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Columbus, OH 43201

**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1834</b>						
Perchlorate	BWG1834-BLK1	ND	ug/L	4.0	0.81	
<b>QC Batch ID: BWG1835</b>						
Perchlorate	BWG1835-BLK1	ND	ug/L	4.0	0.81	



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
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	Control Limits		Lab Quals
							RPD	Percent Recovery	
QC Batch ID: BWG1834									
Perchlorate	BWG1834-BS1	LCS	11.473	10.000	ug/L	115		85 - 115	
QC Batch ID: BWG1835									
Perchlorate	BWG1835-BS1	LCS	10.727	10.000	ug/L	107		85 - 115	



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1834</b>		Used client sample: Y - Description: MW-4-2, 07/22/2013 08:30									
Perchlorate	DUP	1315307-04	251.06	237.56		ug/L	5.5		15		
	MS	1315307-04	251.06	788.69	505.05	ug/L		106		80 - 120	
	MSD	1315307-04	251.06	799.46	505.05	ug/L	1.4	109	15	80 - 120	
<b>QC Batch ID: BWG1835</b>		Used client sample: Y - Description: MW-12-3, 07/22/2013 12:40									
Perchlorate	DUP	1315307-08	ND	ND		ug/L			15		
	MS	1315307-08	ND	9.5862	10.101	ug/L		94.9		80 - 120	
	MSD	1315307-08	ND	9.4603	10.101	ug/L	1.3	93.7	15	80 - 120	



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

### Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
<b>QC Batch ID: BWG1589</b>						
Hexavalent Chromium	BWG1589-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1592</b>						
Hexavalent Chromium	BWG1592-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1911</b>						
Total Recoverable Chromium	BWG1911-BLK1	ND	ug/L	3.0	0.50	
<b>QC Batch ID: BWG2096</b>						
Total Recoverable Chromium	BWG2096-BLK1	ND	ug/L	3.0	0.50	



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Reported: 08/02/2013 16:06  
Project: JPL- GW Monitoring Wells  
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Project Manager: David Conner

## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1589</b>									
Hexavalent Chromium	BWG1589-BS1	LCS	0.052072	0.050000	mg/L	104		85 - 115	
<b>QC Batch ID: BWG1592</b>									
Hexavalent Chromium	BWG1592-BS1	LCS	0.051406	0.050000	mg/L	103		85 - 115	
<b>QC Batch ID: BWG1911</b>									
Total Recoverable Chromium	BWG1911-BS1	LCS	37.397	40.000	ug/L	93.5		85 - 115	
<b>QC Batch ID: BWG2096</b>									
Total Recoverable Chromium	BWG2096-BS1	LCS	40.743	40.000	ug/L	102		85 - 115	



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**Reported:** 08/02/2013 16:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1589</b>		Used client sample: Y - Description: MW-4-2, 07/22/2013 08:30								
Hexavalent Chromium	DUP	1315307-04	0.0015560	0.00087200		mg/L	56.3		10	J,A02
	MS	1315307-04	0.0015560	0.057714	0.052632	mg/L		107		85 - 115
	MSD	1315307-04	0.0015560	0.057537	0.052632	mg/L	0.3	106	10	85 - 115
<b>QC Batch ID: BWG1592</b>		Used client sample: Y - Description: MW-12-3, 07/22/2013 12:40								
Hexavalent Chromium	DUP	1315307-08	ND	ND		mg/L			10	
	MS	1315307-08	ND	0.055100	0.052632	mg/L		105		85 - 115
	MSD	1315307-08	ND	0.055068	0.052632	mg/L	0.1	105	10	85 - 115
<b>QC Batch ID: BWG1911</b>		Used client sample: Y - Description: MW-4-2, 07/22/2013 08:30								
Total Recoverable Chromium	DUP	1315307-04	3.1820	3.4350		ug/L	7.6		20	
	MS	1315307-04	3.1820	38.189	40.000	ug/L		87.5		70 - 130
	MSD	1315307-04	3.1820	38.424	40.000	ug/L	0.6	88.1	20	70 - 130
<b>QC Batch ID: BWG2096</b>		Used client sample: Y - Description: MW-12-3, 07/22/2013 12:40								
Total Recoverable Chromium	DUP	1315307-08	ND	ND		ug/L			20	
	MS	1315307-08	ND	40.242	40.000	ug/L		101		70 - 130
	MSD	1315307-08	ND	40.354	40.000	ug/L	0.3	101	20	70 - 130



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**Reported:** 08/02/2013 16:06

Project: JPL- GW Monitoring Wells

Project Number: 3Q13

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.



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 08/05/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1315416

Invoice ID: B151944

Enclosed are the results of analyses for samples received by the laboratory on 7/23/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

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## Chain of Custody Form

# 13-15416

\*Required Fields

Report to:	Battelle MHTS		Project Description: JP-E-GW Monitoring	Analysis Requested		Billing															
Client: Attn:	David Connor		Project Code: 3Q13	Client: SAME Attn: Address: City: State: Zip: City: State: Zip: Are there any tests with holding times? less than or equal to 48 hours?		State: Zip: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No															
Street Address:	505 King Ave.																				
City:	Columbus	State:	OH																		
Phone#:	(614) 424 - 5489	Fax#:	(614) 458 - 5489																		
Email Address:	Samplers(s): Blaine Tech																				
Submission #: _____																					
Sample #	Sample Description		Date	Time	Matrix*	Notes															
-1	TB-7-7/23/13		7-23-13	0650	AQ	<input checked="" type="checkbox"/> SHORT HOLDING TIME T-(Cr+6)															
-2	EB-7-7/23/13		0700		X X X	<input checked="" type="checkbox"/> NO HOLDING TIME DO C1 BOD MBAS GOT															
-3	MW-11-4		0720		X X X																
-4	MW-11-3		0800		X X X																
-5	MW-11-2		0850		X X X																
-6	DUE-6-3Q13		0855		X X X																
-7	MW-11-1		0940		X X X X X X																
-8	MW-21-5		1045		X X X X X X																
-9	MW-21-4		1120		X X X X X X																
-10	DUE-7-3Q13		1125		X X X X X X																
-11	MW-21-3		1200		X X X X X X																
						MS/MSD															
Matrix Types:	S = Soil SL = Sludge DW = Drinking Water VW = Wastewater GW = Groundwater					L = Liquid M = Miscellaneous O = Other															
Turnaround # of working days*	<input type="checkbox"/> 24 Hr Rush		<input type="checkbox"/> 48 Hr Rush	<input type="checkbox"/> 3-5 Day Rush	<input checked="" type="checkbox"/> Normal (10 - Days)	*Additional Charges May Apply															
Lab TAT Approval:																					
Comments:	<p>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)</p> <table border="1"> <tr> <td>MBU Site</td> <td>Cost Center:</td> <td>Global ID:</td> </tr> <tr> <td><input type="checkbox"/> CVX XCR</td> <td>1. Relinquished By: <i>Chad W. Miller</i></td> <td>Date: <i>7-23-13</i> Time: <i>1530</i></td> </tr> <tr> <td><input type="checkbox"/> Geotracker 5 File (CA Default)</td> <td>2. Relinquished By: <i>N. Gage</i></td> <td>Date: <i>7/23/13</i> Time: <i>1605</i></td> </tr> <tr> <td><input type="checkbox"/> Geotracker 2 File</td> <td></td> <td></td> </tr> <tr> <td>Other (Specify) _____</td> <td>3. Relinquished By: <i>N. Gage</i></td> <td>Date: <i>7-23-13</i> Time: <i>1605</i></td> </tr> </table>						MBU Site	Cost Center:	Global ID:	<input type="checkbox"/> CVX XCR	1. Relinquished By: <i>Chad W. Miller</i>	Date: <i>7-23-13</i> Time: <i>1530</i>	<input type="checkbox"/> Geotracker 5 File (CA Default)	2. Relinquished By: <i>N. Gage</i>	Date: <i>7/23/13</i> Time: <i>1605</i>	<input type="checkbox"/> Geotracker 2 File			Other (Specify) _____	3. Relinquished By: <i>N. Gage</i>	Date: <i>7-23-13</i> Time: <i>1605</i>
MBU Site	Cost Center:	Global ID:																			
<input type="checkbox"/> CVX XCR	1. Relinquished By: <i>Chad W. Miller</i>	Date: <i>7-23-13</i> Time: <i>1530</i>																			
<input type="checkbox"/> Geotracker 5 File (CA Default)	2. Relinquished By: <i>N. Gage</i>	Date: <i>7/23/13</i> Time: <i>1605</i>																			
<input type="checkbox"/> Geotracker 2 File																					
Other (Specify) _____	3. Relinquished By: <i>N. Gage</i>	Date: <i>7-23-13</i> Time: <i>1605</i>																			

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## Chain of Custody Form

# 13-152416

\*Required Fields

Report To: Battelle MHTS		Project Description: JP-L-GW Monitoring		Analysis Requested		Billing	
Client:*	David Conner	Attn:*		Client:*	SAME		
Street Address:*	505 King Ave.	City:*	Columbus	Attn:*			
Phone#:*	(614) 424 - 5489	State:*	OH	Address:*			
Email Address:	connerd@battelle.org	Zip:*	43201	City:*			
Submission #: Sample #	Sample Description		Date	Time	Matrix*	Notes	
-12	M10-21-7		7-23-13	1240	X	* Standard Turnaround = 10	
-13	M10-21-1		7/23/13	1330	X		
Comments:		PLEASE NOTIFY WHICH SAMPLES TO USE FOR QC (MS/MSD) 90% Level I & 10% Level IV validation required: Level IV Notated on C of C NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (Inform QC)					
Turnaround # of working days:*		<input type="checkbox"/> 24 Hr Rush	<input type="checkbox"/> 48 Hr Rush	<input type="checkbox"/> 3-5 Day Rush	<input checked="" type="checkbox"/> Normal (10 - Days)	* Additional Charges May Apply	
Lab TAT Approval:							
Matrix Types:		<input type="checkbox"/> S = Soil	<input type="checkbox"/> Sludge	<input type="checkbox"/> DW = Drinking Water	<input type="checkbox"/> WW = Wastewater	<input type="checkbox"/> GW = Groundwater	<input type="checkbox"/> L = Liquid
Global ID:							
Cost Center:							
1. Relinquished By:		Date Time					
2. Relinquished By:		Date Time					
3. Relinquished By:		Date Time					

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## Chain of Custody and Cooler Receipt Form for 1315416 Page 3 of 4

BC LABORATORIES INC.		COOLER RECEIPT FORM			Rev. No. 15	07/01/13	Page 1 Of 2			
Submission #: 13-15416										
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>				
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____										
Custody Seals <input checked="" type="checkbox"/> Ice Chest <input type="checkbox"/> Container <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/>		None <input checked="" type="checkbox"/> Comments: _____								
All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>						
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98 Container: APE Thermometer ID: 207		Date/Time 7-23-13 1405 Temperature: (A) 1.6 °C / (C) 1.7 °C Analyst Init SAS						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
T GENERAL MINERAL/ GENERAL		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	
T CYANIDE										
T NITROGEN FORMS										
T TOTAL SULFIDE										
OZ. NITRATE / NITRITE										
T TOTAL ORGANIC CARBON										
T TOX										
T CHEMICAL OXYGEN DEMAND										
T PHENOLICS										
1ml VOA VIAL TRAVEL BLANK	A 1									
1ml VOA VIAL		A 1 3	A 1 3	A 1 3	A 1 3	A 1 3	A 1 3	A 1 3	A 1 3	
T EPA 413.1, 413.2, 418.1										
T ODOR										
ADIOLOGICAL										
ACTERIOLOGICAL										
1ml VOA VIAL- 504										
T EPA 508/608/8080										
T EPA 515.1/8150										
T EPA 525										
T EPA 525 TRAVEL BLANK										
0ml EPA 547										
0ml EPA 531.1										
F EPA 548										
F EPA 549										
F EPA 632										
F EPA 801SM										
T AMBER										
OZ. JAR										
OZ. JAR										
ML SLEEVE										
B VIAL										
ASTIC BAG										
IRROUS IRON										
ICORE										
IART KIT										
mma Canister										
Comments:										
Sample Numbering Completed By: SAS	Date/Time: 7-23-13 240									
Actual / C = Corrected										

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## Chain of Custody and Cooler Receipt Form for 1315416 Page 4 of 4

IC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 15	07/01/13	Page 2 Of 2		
Submission #: 13-15416								
SHIPPING INFORMATION			SHIPPING CONTAINER		FREE LIQUID			
Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery C Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		YES <input type="checkbox"/> NO <input type="checkbox"/>			
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: _____								
Custody Seals   None <input checked="" type="checkbox"/> Comments: _____								
Samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98	Container: A-PE	Thermometer ID: 207	Date/Time 7-23-13 1405			
		Temperature: (A) 1.6 °C / (C) 17 °C			Analyst Init. LAS			
SAMPLE CONTAINERS		SAMPLE NUMBERS						
		11	12	13	-4	8	9	-10
GENERAL MINERAL/GENERAL		BC	12	B				
PE UNPRESERVED								
INORGANIC CHEMICAL METALS		D	C	C				
CYANIDE								
NITROGEN FORMS								
TOTAL SULFIDE								
NITRATE/NITRITE								
TOTAL ORGANIC CARBON								
TOX								
CHEMICAL OXYGEN DEMAND								
PHENOLICS								
1 VOA VIAL TRAVEL BLANK								
1 VOA VIAL		A-91	A-31	A-31	11	11	11	
EPA 413.1, 413.2, 418.1								
ODOR					101010	10	10	
BIOLOGICAL					101010	10	10	
TERIOLOGICAL					101010	10	10	
1 VOA VIAL 504					101010	10	10	
EPA 508/608/8080					101010	10	10	
EPA 515.1/6150					101010	10	10	
EPA 525					101010	10	10	
EPA 525 TRAVEL BLANK					101010	10	10	
1 EPA 547					101010	10	10	
1 EPA 531.1					101010	10	10	
PA 548					101010	10	10	
PA 549					101010	10	10	
PA 632					101010	10	10	
PA 8015M					101010	10	10	
MBER					101010	10	10	
JAR					101010	10	10	
L JAR					101010	10	10	
SLEEVE					101010	10	10	
VIAL					101010	10	10	
TIC BAG					101010	10	10	
OUS IRON					101010	10	10	
ORE					101010	10	10	
RT KIT					101010	10	10	
na Canister					101010	10	10	
ients:								
e Numbering Completed By: LAS		Date/Time: 7-23-13 2140						
Initial / C - Corrected								

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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315416-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-7-7/23/13 <b>Sampled By:</b> BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 06:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Trip Blank <b>Delivery Work Order:</b> <b>Global ID:</b> 0000000000 <b>Location ID (FieldPoint):</b> TB-7-7/23/13 <b>Matrix:</b> W <b>Sample QC Type (SACode):</b> CS <b>Cooler ID:</b>	
1315416-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> EB-7-7/23/13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 07:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous <b>Delivery Work Order:</b> <b>Global ID:</b> 0000000000 <b>Location ID (FieldPoint):</b> EB-7-7/23/13 <b>Matrix:</b> W <b>Sample QC Type (SACode):</b> CS <b>Cooler ID:</b>	
1315416-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-11-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 07:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous <b>Delivery Work Order:</b> <b>Global ID:</b> 0000000000 <b>Location ID (FieldPoint):</b> MW-11-4 <b>Matrix:</b> W <b>Sample QC Type (SACode):</b> CS <b>Cooler ID:</b>	



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**Reported:** 08/05/2013 15:26  
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**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315416-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-11-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 08:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-11-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315416-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-11-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 08:50 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-11-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315416-06	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> DUPE-6-3Q13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 08:55 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUPE-6-3Q13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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**Reported:** 08/05/2013 15:26  
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## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315416-07	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-11-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 09:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-11-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315416-08	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-21-5 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 10:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315416-09	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-21-4 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 11:20 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
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## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315416-10	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> DUPE-7-3Q13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 11:25 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUPE-7-3Q13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315416-11	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-21-3 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 12:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315416-12	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-21-2 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 12:40 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



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**Reported:** 08/05/2013 15:26  
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**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315416-13	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-21-1 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/23/2013 19:05 <b>Sampling Date:</b> 07/23/2013 13:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-01	Client Sample Name: JPL-GW, TB-7-7/23/13, 7/23/2013 6:50:00AM						
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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-01	Client Sample Name: JPL-GW, TB-7-7/23/13, 7/23/2013 6:50:00AM						
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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-01	Client Sample Name: JPL-GW, TB-7-7/23/13, 7/23/2013 6:50:00AM						
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)	103	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	85.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	13:21	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-01	Client Sample Name: JPL-GW, TB-7-7/23/13, 7/23/2013 6:50:00AM						
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	07/24/13	07/24/13 13:21	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-02	Client Sample Name: JPL-GW, EB-7-7/23/13, 7/23/2013 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

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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-02	Client Sample Name:	JPL-GW, EB-7-7/23/13, 7/23/2013 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
<b>Toluene</b>	<b>0.11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.093</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-02	Client Sample Name: JPL-GW, EB-7-7/23/13, 7/23/2013 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)	112	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	103	%	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		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	13:44	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-02	Client Sample Name: JPL-GW, EB-7-7/23/13, 7/23/2013 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	07/24/13	07/24/13 13:44	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-02	Client Sample Name: JPL-GW, EB-7-7/23/13, 7/23/2013 7:00:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 14:43	LS1	IC6	1	BWG2081	



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-02	Client Sample Name: JPL-GW, EB-7-7/23/13, 7/23/2013 7:00:00AM, 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	07/23/13	07/23/13 22:56	LS1	KONE-1	1	BWG1670
2	EPA-200.8	07/26/13	07/30/13 16:53	JSS	PE-EL2	1	BWG1911



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-03	Client Sample Name: JPL-GW, MW-11-4, 7/23/2013 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		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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-03	Client Sample Name: JPL-GW, MW-11-4, 7/23/2013 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
<b>Styrene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-03	Client Sample Name: JPL-GW, MW-11-4, 7/23/2013 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		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)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	86.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	14:06	MGC	MS-V5	1	BWG1659



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-03	Client Sample Name: JPL-GW, MW-11-4, 7/23/2013 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	07/24/13	07/24/13 14:06	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-03	Client Sample Name: JPL-GW, MW-11-4, 7/23/2013 7:20:00AM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 14:55	LS1	IC6	1	BWG2081	



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-04	Client Sample Name: JPL-GW, MW-11-3, 7/23/2013 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
<b>Chloroform</b>	<b>0.18</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-04	Client Sample Name: JPL-GW, MW-11-3, 7/23/2013 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
<b>Styrene</b>	<b>0.12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.068</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Trichloroethene</b>	<b>0.10</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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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Columbus, OH 43201

**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-04	Client Sample Name: JPL-GW, MW-11-3, 7/23/2013 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)	113	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	14:29	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-04	Client Sample Name: JPL-GW, MW-11-3, 7/23/2013 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	07/24/13	07/24/13 14:29	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-04	Client Sample Name: JPL-GW, MW-11-3, 7/23/2013 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 15:07	LS1	IC6	1	BWG2081	



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-04	Client Sample Name: JPL-GW, MW-11-3, 7/23/2013 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	0.51	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/23/13	07/23/13 22:56	LS1	KONE-1	1	BWG1670	
2	EPA-200.8	07/26/13	07/30/13 16:57	JSS	PE-EL2	1	BWG1911	



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-05	Client Sample Name: JPL-GW, MW-11-2, 7/23/2013 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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-05	Client Sample Name: JPL-GW, MW-11-2, 7/23/2013 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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-05	Client Sample Name: JPL-GW, MW-11-2, 7/23/2013 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)	110	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	86.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	14:51	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-05	Client Sample Name: JPL-GW, MW-11-2, 7/23/2013 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	07/24/13	07/24/13 14:51	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-05	Client Sample Name: JPL-GW, MW-11-2, 7/23/2013 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 15:19	LS1	IC6	1	BWG2081	



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-05	Client Sample Name: JPL-GW, MW-11-2, 7/23/2013 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	07/23/13	07/23/13 22:56	LS1	KONE-1	1	BWG1670
2	EPA-200.8	07/26/13	07/30/13 17:00	JSS	PE-EL2	1	BWG1911



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-06	Client Sample Name: JPL-GW, DUPE-6-3Q13, 7/23/2013 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

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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-06	Client Sample Name: JPL-GW, DUPE-6-3Q13, 7/23/2013 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	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-06	Client Sample Name: JPL-GW, DUPE-6-3Q13, 7/23/2013 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)	117	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	87.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	15:14	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-06	Client Sample Name: JPL-GW, DUPE-6-3Q13, 7/23/2013 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	07/24/13	07/24/13 15:14	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-06	Client Sample Name: JPL-GW, DUPE-6-3Q13, 7/23/2013 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		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	
1	EPA-314.0	07/29/13	07/29/13 15:31	LS1	IC6	1	BWG2081	



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-06	Client Sample Name: JPL-GW, DUPE-6-3Q13, 7/23/2013 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	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/23/13	07/23/13 22:56	LS1	KONE-1	1	BWG1670	
2	EPA-200.8	07/26/13	07/30/13 17:03	JSS	PE-EL2	1	BWG1911	



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-07	Client Sample Name: JPL-GW, MW-11-1, 7/23/2013 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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-07	Client Sample Name: JPL-GW, MW-11-1, 7/23/2013 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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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-07	Client Sample Name: JPL-GW, MW-11-1, 7/23/2013 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		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)	88.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	15:36	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-07	Client Sample Name: JPL-GW, MW-11-1, 7/23/2013 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	07/24/13	07/24/13 15:36	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-07	Client Sample Name: JPL-GW, MW-11-1, 7/23/2013 9:40:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	16	mg/L	0.50	0.067	EPA-300.0	0.15		1
Nitrate as N	0.28	mg/L	0.10	0.025	EPA-300.0	ND		1
Sulfate	36	mg/L	1.0	0.18	EPA-300.0	ND		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	0.021	mg/L	0.020	0.0040	EPA-365.1	ND		4

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-300.0	07/23/13	07/24/13 03:55	LD1	IC5	1	BWG1657
2	EPA-353.2	07/24/13	07/24/13 08:28	TDC	KONE-1	1	BWG1672
3	EPA-314.0	07/29/13	07/29/13 15:43	LS1	IC6	1	BWG2081
4	EPA-365.1	07/24/13	07/24/13 08:00	TDC	KONE-1	1	BWG1673



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-07	Client Sample Name: JPL-GW, MW-11-1, 7/23/2013 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	3.6	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/24/13	07/24/13 07:47	TDC	KONE-1	1	BWG1671
2	EPA-200.8	07/30/13	07/30/13 17:08	SRM	PE-EL1	1	BWG2096



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-08	Client Sample Name: JPL-GW, MW-21-5, 7/23/2013 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		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
<b>Chloroform</b>	<b>6.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.090</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-08	Client Sample Name: JPL-GW, MW-21-5, 7/23/2013 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
<b>Tetrachloroethene</b>	<b>0.91</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.090</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-08	Client Sample Name: JPL-GW, MW-21-5, 7/23/2013 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		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)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	85.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	15:59	MGC	MS-V5	1	BWG1659



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-08	Client Sample Name: JPL-GW, MW-21-5, 7/23/2013 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	07/24/13	07/24/13 15:59	MGC	MS-V5	1	BWG1659



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-08	Client Sample Name: JPL-GW, MW-21-5, 7/23/2013 10:45:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.1	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 15:54	LS1	IC6	1	BWG2081	



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-08	Client Sample Name: JPL-GW, MW-21-5, 7/23/2013 10:45:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0013	mg/L	0.0020	0.00070	EPA-7196	ND	J	1
Total Recoverable Chromium	1.7	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/23/13	07/23/13 23:02	LS1	KONE-1	1	BWG1670
2	EPA-200.8	07/30/13	07/30/13 17:11	SRM	PE-EL1	1	BWG2096



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**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-09	Client Sample Name: JPL-GW, MW-21-4, 7/23/2013 11:20:00AM, 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
<b>Chloroform</b>	<b>9.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-09	Client Sample Name: JPL-GW, MW-21-4, 7/23/2013 11:20:00AM, 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
<b>Tetrachloroethene</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.15</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-09	Client Sample Name: JPL-GW, MW-21-4, 7/23/2013 11:20:00AM, 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)	110	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	89.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	16:21	MGC	MS-V5	1	BWG1659



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## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-09	Client Sample Name: JPL-GW, MW-21-4, 7/23/2013 11:20:00AM, 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	07/24/13	07/24/13 16:21	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-09	Client Sample Name: JPL-GW, MW-21-4, 7/23/2013 11:20:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.0	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 16:30	LS1	IC6	1	BWG2081	



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-09	Client Sample Name: JPL-GW, MW-21-4, 7/23/2013 11:20:00AM, 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	1.6	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/23/13	07/23/13 23:02	LS1	KONE-1	1	BWG1670
2	EPA-200.8	07/30/13	07/30/13 17:14	SRM	PE-EL1	1	BWG2096



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-10	Client Sample Name: JPL-GW, DUPE-7-3Q13, 7/23/2013 11:25:00AM, 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		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
<b>Chloroform</b>	<b>9.9</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-10	Client Sample Name: JPL-GW, DUPE-7-3Q13, 7/23/2013 11:25:00AM, 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
<b>Tetrachloroethene</b>	<b>1.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-10	Client Sample Name: JPL-GW, DUPE-7-3Q13, 7/23/2013 11:25:00AM, 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		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)	91.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	16:44	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-10	Client Sample Name: JPL-GW, DUPE-7-3Q13, 7/23/2013 11:25:00AM, 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	07/24/13	07/24/13 16:44	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-10	Client Sample Name: JPL-GW, DUPE-7-3Q13, 7/23/2013 11:25:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.2	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 16:42	LS1	IC6	1	BWG2081	



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-10	Client Sample Name: JPL-GW, DUPE-7-3Q13, 7/23/2013 11:25:00AM, 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	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/23/13	07/23/13 23:02	LS1	KONE-1	1	BWG1670
2	EPA-200.8	07/30/13	07/30/13 17:17	SRM	PE-EL1	1	BWG2096



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-11	Client Sample Name: JPL-GW, MW-21-3, 7/23/2013 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		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
<b>Chloroform</b>	<b>3.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>1,1-Dichloroethane</b>	<b>0.28</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>1.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-11	Client Sample Name: JPL-GW, MW-21-3, 7/23/2013 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
<b>Methyl t-butyl ether</b>	<b>0.34</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Tetrachloroethene</b>	<b>12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>1.9</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-11	Client Sample Name: JPL-GW, MW-21-3, 7/23/2013 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		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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	86.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	08:26	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-11	Client Sample Name: JPL-GW, MW-21-3, 7/23/2013 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	07/24/13	07/24/13 08:26	MGC	MS-V5	1	BWG1659



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505 King Ave.  
Columbus, OH 43201

Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-11	Client Sample Name: JPL-GW, MW-21-3, 7/23/2013 12:00:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.9	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 16:54	LS1	IC6	1	BWG2081	



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-11	Client Sample Name: JPL-GW, MW-21-3, 7/23/2013 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	0.98	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/23/13	07/23/13 22:56	LS1	KONE-1	1	BWG1670
2	EPA-200.8	07/30/13	08/02/13 02:30	SRM	PE-EL2	1	BWG2098



Battelle MHTS  
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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-12	Client Sample Name: JPL-GW, MW-21-2, 7/23/2013 12:40:00PM, 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
<b>Chloroform</b>	<b>0.63</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.19</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-12	Client Sample Name: JPL-GW, MW-21-2, 7/23/2013 12:40:00PM, 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
<b>Methyl t-butyl ether</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Tetrachloroethene</b>	<b>2.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.40</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-12	Client Sample Name: JPL-GW, MW-21-2, 7/23/2013 12:40:00PM, 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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	85.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	17:06	MGC	MS-V5	1	BWG1659



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-12	Client Sample Name: JPL-GW, MW-21-2, 7/23/2013 12:40:00PM, 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	07/24/13	07/24/13 17:06	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-12	Client Sample Name: JPL-GW, MW-21-2, 7/23/2013 12:40:00PM, 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				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 18:05	LS1	IC6	1	BWG2082	



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-12	Client Sample Name: JPL-GW, MW-21-2, 7/23/2013 12:40:00PM, 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	1.2	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/23/13	07/23/13 23:02	LS1	KONE-1	1	BWG1670
2	EPA-200.8	07/30/13	08/02/13 02:49	SRM	PE-EL2	1	BWG2098



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-13	Client Sample Name: JPL-GW, MW-21-1, 7/23/2013 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
<b>Chloroform</b>	<b>2.1</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	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:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-13	Client Sample Name: JPL-GW, MW-21-1, 7/23/2013 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
<b>Tetrachloroethene</b>	<b>0.86</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.17</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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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Columbus, OH 43201

**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315416-13	Client Sample Name: JPL-GW, MW-21-1, 7/23/2013 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		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)	99.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	87.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/24/13	07/24/13	17:29	MGC	MS-V5	1	BWG1659



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Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315416-13	Client Sample Name: JPL-GW, MW-21-1, 7/23/2013 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	07/24/13	07/24/13 17:29	MGC	MS-V5	1	BWG1659



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505 King Ave.  
Columbus, OH 43201

Reported: 08/05/2013 15:26  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315416-13	Client Sample Name: JPL-GW, MW-21-1, 7/23/2013 1:30:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.1	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run				QC	Batch ID
			Date/Time	Analyst	Instrument	Dilution		
1	EPA-314.0	07/29/13	07/29/13 18:16	LS1	IC6	1	BWG2082	



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Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315416-13	Client Sample Name: JPL-GW, MW-21-1, 7/23/2013 1:30:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00070	mg/L	0.0020	0.00070	EPA-7196	ND	J	1
Total Recoverable Chromium	1.4	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC Batch ID
			Date/Time				
1	EPA-7196	07/23/13	07/23/13 23:02	LS1	KONE-1	1	BWG1670
2	EPA-200.8	07/30/13	08/02/13 02:59	SRM	PE-EL2	1	BWG2098



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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
<b>QC Batch ID: BWG1659</b>						
Benzene	BWG1659-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1659-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1659-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1659-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1659-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1659-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1659-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1659-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1659-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1659-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1659-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1659-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1659-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1659-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1659-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1659-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1659-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1659-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1659-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1659-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1659-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1659-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1659-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1659-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1659-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1659-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1659-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1659-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1659-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1659-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1659-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1659-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1659-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1659-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
<b>QC Batch ID: BWG1659</b>						
trans-1,3-Dichloropropene	BWG1659-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1659-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1659-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1659-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1659-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1659-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1659-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1659-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1659-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1659-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1659-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1659-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1659-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1659-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1659-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1659-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1659-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1659-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1659-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1659-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1659-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1659-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1659-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1659-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1659-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1659-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1659-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1659-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1659-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1659-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1659-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1659-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1659-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1659-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
<b>QC Batch ID: BWG1659</b>						
Ethyl t-butyl ether	BWG1659-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1659-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1659-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1659-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1659-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1659-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1659-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1659-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1659-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1659-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1659-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1659-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1659-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1659-BLK1	112	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1659-BLK1	101	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1659-BLK1	92.0	%	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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1659</b>									
Benzene	BWG1659-BS1	LCS	23.950	25.000	ug/L	95.8	70 - 130		
Bromodichloromethane	BWG1659-BS1	LCS	27.660	25.000	ug/L	111	70 - 130		
Chlorobenzene	BWG1659-BS1	LCS	24.230	25.000	ug/L	96.9	70 - 130		
Chloroethane	BWG1659-BS1	LCS	24.450	25.000	ug/L	97.8	70 - 130		
1,4-Dichlorobenzene	BWG1659-BS1	LCS	27.060	25.000	ug/L	108	70 - 130		
1,1-Dichloroethane	BWG1659-BS1	LCS	24.730	25.000	ug/L	98.9	70 - 130		
1,1-Dichloroethene	BWG1659-BS1	LCS	24.940	25.000	ug/L	99.8	70 - 130		
Toluene	BWG1659-BS1	LCS	25.100	25.000	ug/L	100	70 - 130		
Trichloroethene	BWG1659-BS1	LCS	24.500	25.000	ug/L	98.0	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BWG1659-BS1	LCS	10.650	10.000	ug/L	106	75 - 125		
Toluene-d8 (Surrogate)	BWG1659-BS1	LCS	10.220	10.000	ug/L	102	80 - 120		
4-Bromofluorobenzene (Surrogate)	BWG1659-BS1	LCS	10.210	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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1659</b>		Used client sample: Y - Description: MW-21-3, 07/23/2013 12:00								
Benzene	MS	1315416-11	ND	24.590	25.000	ug/L		98.4		70 - 130
	MSD	1315416-11	ND	23.930	25.000	ug/L	2.7	95.7	20	70 - 130
Bromodichloromethane	MS	1315416-11	ND	28.030	25.000	ug/L		112		70 - 130
	MSD	1315416-11	ND	28.360	25.000	ug/L	1.2	113	20	70 - 130
Chlorobenzene	MS	1315416-11	ND	24.920	25.000	ug/L		99.7		70 - 130
	MSD	1315416-11	ND	23.730	25.000	ug/L	4.9	94.9	20	70 - 130
Chloroethane	MS	1315416-11	ND	25.030	25.000	ug/L		100		70 - 130
	MSD	1315416-11	ND	25.010	25.000	ug/L	0.1	100	20	70 - 130
1,4-Dichlorobenzene	MS	1315416-11	ND	28.340	25.000	ug/L		113		70 - 130
	MSD	1315416-11	ND	27.770	25.000	ug/L	2.0	111	20	70 - 130
1,1-Dichloroethane	MS	1315416-11	0.28000	25.030	25.000	ug/L		99.0		70 - 130
	MSD	1315416-11	0.28000	25.030	25.000	ug/L	0	99.0	20	70 - 130
1,1-Dichloroethene	MS	1315416-11	ND	25.380	25.000	ug/L		102		70 - 130
	MSD	1315416-11	ND	24.850	25.000	ug/L	2.1	99.4	20	70 - 130
Toluene	MS	1315416-11	ND	25.370	25.000	ug/L		101		70 - 130
	MSD	1315416-11	ND	24.850	25.000	ug/L	2.1	99.4	20	70 - 130
Trichloroethene	MS	1315416-11	1.8600	26.380	25.000	ug/L		98.1		70 - 130
	MSD	1315416-11	1.8600	26.280	25.000	ug/L	0.4	97.7	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	1315416-11	ND	10.580	10.000	ug/L		106		75 - 125
	MSD	1315416-11	ND	10.300	10.000	ug/L	2.7	103		75 - 125
Toluene-d8 (Surrogate)	MS	1315416-11	ND	10.140	10.000	ug/L		101		80 - 120
	MSD	1315416-11	ND	10.040	10.000	ug/L	1.0	100		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	1315416-11	ND	10.800	10.000	ug/L		108		80 - 120
	MSD	1315416-11	ND	9.8600	10.000	ug/L	9.1	98.6		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
<b>QC Batch ID: BWG1659</b>						
Chloroacetonitrile	BWG1659-BLK1	0	ug/L			
1-Chlorobutane	BWG1659-BLK1	0	ug/L			
1,1-Dichloropropane	BWG1659-BLK1	0	ug/L			
Methyl acrylate	BWG1659-BLK1	0	ug/L			
Nitrobenzene	BWG1659-BLK1	0	ug/L			
2-Nitropropane	BWG1659-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
<b>QC Batch ID: BWG1657</b>						
Chloride	BWG1657-BLK1	0.14700	mg/L	0.50	0.067	J
Nitrate as N	BWG1657-BLK1	ND	mg/L	0.10	0.025	
Sulfate	BWG1657-BLK1	ND	mg/L	1.0	0.18	
<b>QC Batch ID: BWG1672</b>						
Nitrite as N	BWG1672-BLK1	0.0093080	mg/L	0.050	0.0013	J
<b>QC Batch ID: BWG1673</b>						
ortho-Phosphate as P	BWG1673-BLK1	ND	mg/L	0.020	0.0040	
<b>QC Batch ID: BWG2081</b>						
Perchlorate	BWG2081-BLK1	ND	ug/L	4.0	0.81	
<b>QC Batch ID: BWG2082</b>						
Perchlorate	BWG2082-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1657</b>									
Chloride	BWG1657-BS1	LCS	51.470	50.000	mg/L	103		90 - 110	
Nitrate as N	BWG1657-BS1	LCS	5.0570	5.0000	mg/L	101		90 - 110	
Sulfate	BWG1657-BS1	LCS	101.98	100.00	mg/L	102		90 - 110	
<b>QC Batch ID: BWG1672</b>									
Nitrite as N	BWG1672-BS1	LCS	0.50901	0.50000	mg/L	102		90 - 110	
<b>QC Batch ID: BWG1673</b>									
ortho-Phosphate as P	BWG1673-BS1	LCS	0.19989	0.20000	mg/L	99.9		90 - 110	
<b>QC Batch ID: BWG2081</b>									
Perchlorate	BWG2081-BS1	LCS	10.549	10.000	ug/L	105		85 - 115	
<b>QC Batch ID: BWG2082</b>									
Perchlorate	BWG2082-BS1	LCS	11.115	10.000	ug/L	111		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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1657</b>		Used client sample: N								
Chloride	DUP	1315408-04	25.942	26.035		mg/L	0.4		10	
	MS	1315408-04	25.942	82.740	50.505	mg/L		112		80 - 120
	MSD	1315408-04	25.942	82.945	50.505	mg/L	0.2	113	10	80 - 120
Nitrate as N	DUP	1315408-04	12.744	12.772		mg/L	0.2		10	
	MS	1315408-04	12.744	18.032	5.0505	mg/L		105		80 - 120
	MSD	1315408-04	12.744	18.142	5.0505	mg/L	0.6	107	10	80 - 120
Sulfate	DUP	1315408-04	132.64	133.16		mg/L	0.4		10	
	MS	1315408-04	132.64	243.72	101.01	mg/L		110		80 - 120
	MSD	1315408-04	132.64	244.75	101.01	mg/L	0.4	111	10	80 - 120
<b>QC Batch ID: BWG1672</b>		Used client sample: Y - Description: MW-11-1, 07/23/2013 09:40								
Nitrite as N	DUP	1315416-07	ND	0.0086730		mg/L			10	J
	MS	1315416-07	ND	0.52796	0.52632	mg/L		100		90 - 110
	MSD	1315416-07	ND	0.53211	0.52632	mg/L	0.8	101	10	90 - 110
<b>QC Batch ID: BWG1673</b>		Used client sample: Y - Description: MW-11-1, 07/23/2013 09:40								
ortho-Phosphate as P	DUP	1315416-07	0.020977	0.020759		mg/L	1.0		10	
	MS	1315416-07	0.020977	0.23208	0.21053	mg/L		100		90 - 110
	MSD	1315416-07	0.020977	0.22933	0.21053	mg/L	1.2	99.0	10	90 - 110
<b>QC Batch ID: BWG2081</b>		Used client sample: Y - Description: MW-21-3, 07/23/2013 12:00								
Perchlorate	DUP	1315416-11	2.9243	2.8249		ug/L	3.5		15	J
	MS	1315416-11	2.9243	12.619	10.101	ug/L		96.0		80 - 120
	MSD	1315416-11	2.9243	12.207	10.101	ug/L	3.3	91.9	15	80 - 120
<b>QC Batch ID: BWG2082</b>		Used client sample: N								
Perchlorate	DUP	1315534-01	5.1895	5.0167		ug/L	3.4		15	
	MS	1315534-01	5.1895	15.044	10.101	ug/L		97.6		80 - 120
	MSD	1315534-01	5.1895	15.001	10.101	ug/L	0.3	97.1	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
<b>QC Batch ID: BWG1670</b>						
Hexavalent Chromium	BWG1670-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1671</b>						
Hexavalent Chromium	BWG1671-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG1911</b>						
Total Recoverable Chromium	BWG1911-BLK1	ND	ug/L	3.0	0.50	
<b>QC Batch ID: BWG2096</b>						
Total Recoverable Chromium	BWG2096-BLK1	ND	ug/L	3.0	0.50	
<b>QC Batch ID: BWG2098</b>						
Total Recoverable Chromium	BWG2098-BLK1	ND	ug/L	3.0	0.50	



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Columbus, OH 43201

**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Metals Analysis

### Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1670</b>									
Hexavalent Chromium	BWG1670-BS1	LCS	0.051218	0.050000	mg/L	102		85 - 115	
<b>QC Batch ID: BWG1671</b>									
Hexavalent Chromium	BWG1671-BS1	LCS	0.051997	0.050000	mg/L	104		85 - 115	
<b>QC Batch ID: BWG1911</b>									
Total Recoverable Chromium	BWG1911-BS1	LCS	37.397	40.000	ug/L	93.5		85 - 115	
<b>QC Batch ID: BWG2096</b>									
Total Recoverable Chromium	BWG2096-BS1	LCS	40.743	40.000	ug/L	102		85 - 115	
<b>QC Batch ID: BWG2098</b>									
Total Recoverable Chromium	BWG2098-BS1	LCS	42.728	40.000	ug/L	107		85 - 115	



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Metals Analysis

### Quality Control Report - Precision & Accuracy

Constituent	Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1670</b>		Used client sample: Y - Description: MW-21-3, 07/23/2013 12:00								
Hexavalent Chromium	DUP	1315416-11	ND	ND		mg/L		10		
	MS	1315416-11	ND	0.057063	0.052632	mg/L		108	85 - 115	
	MSD	1315416-11	ND	0.057085	0.052632	mg/L	0.0	108	10	85 - 115
<b>QC Batch ID: BWG1671</b>		Used client sample: Y - Description: MW-11-1, 07/23/2013 09:40								
Hexavalent Chromium	DUP	1315416-07	ND	ND		mg/L		10		
	MS	1315416-07	ND	0.053881	0.052632	mg/L		102	85 - 115	
	MSD	1315416-07	ND	0.053587	0.052632	mg/L	0.5	102	10	85 - 115
<b>QC Batch ID: BWG1911</b>		Used client sample: Y - Description: MW-4-2, 07/22/2013 08:30								
Total Recoverable Chromium	DUP	1315307-04	3.1820	3.4350		ug/L	7.6	20		
	MS	1315307-04	3.1820	38.189	40.000	ug/L		87.5	70 - 130	
	MSD	1315307-04	3.1820	38.424	40.000	ug/L	0.6	88.1	20	70 - 130
<b>QC Batch ID: BWG2096</b>		Used client sample: Y - Description: MW-12-3, 07/22/2013 12:40								
Total Recoverable Chromium	DUP	1315307-08	ND	ND		ug/L		20		
	MS	1315307-08	ND	40.242	40.000	ug/L		101	70 - 130	
	MSD	1315307-08	ND	40.354	40.000	ug/L	0.3	101	20	70 - 130
<b>QC Batch ID: BWG2098</b>		Used client sample: Y - Description: MW-21-3, 07/23/2013 12:00								
Total Recoverable Chromium	DUP	1315416-11	0.98200	1.1790		ug/L	18.2	20		J
	MS	1315416-11	0.98200	39.246	40.000	ug/L		95.7	70 - 130	
	MSD	1315416-11	0.98200	41.595	40.000	ug/L	5.8	102	20	70 - 130



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**Reported:** 08/05/2013 15:26  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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.



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 08/07/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1315509

Invoice ID: B152090

Enclosed are the results of analyses for samples received by the laboratory on 7/24/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

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Page 1 of 42

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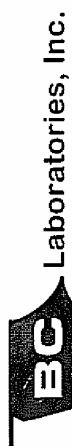
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## Chain of Custody and Cooler Receipt Form for 1315509 Page 1 of 2

## Chain of Custody Form



\*Required Fields

Report To: Client: Battelle MHTS		Project Description: JPL-GW Monitoring		Analysis Requested		Billing	
Attn: David Conner		Project Code: 3Q13		Client: SAME		Attn: _____	Time: _____
Street Address: 505 King Ave.		City: Columbus	State: OH	Address: _____		City: _____	Time: _____
Phone#: (614) 424 - 5489	Fax#: (614) 458-5489	Sampler(s): Blaine Tech		State: _____	Zip: _____	Are there any tests with holding times? less than or equal to 48 hours?	
Email Address: connerd@battelle.org		Submission #: 3-15509	Sample Description	Date	Time	Matrix*	
-1 TB-8-7/24/13		7-24-13	0800	AQ	X	Notes	
-2 MW-13		0900	X	X	X		
-3 MW-15		1010	X	X	X		
-4 MW-16		1215	X	X	X		
-5 MW-18		1315	X	X	X		
CHK BY DISTRIBUTION						HOLDING TIME	
SAJ						CD	OP
SUB-OUT						CD	SS
DW = Sludge		DW = Drinking Water	WW = Wastewater	GW = Groundwater	L = Liquid	M = Miscellaneous	O = Other
Matrix Types:		SL	DW	WW	GW	M	O
Turnaround # of working days:		<input type="checkbox"/> 24 Hr Rush	<input type="checkbox"/> 48 Hr Rush	<input type="checkbox"/> 3-5 Day Rush	<input checked="" type="checkbox"/> Normal (10 - Days)	* Additional Charges May Apply	
Lab TAT Approval:							
Comments: PLEASE NOTE 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)							
1. Relinquished By:		Cost Center:		Global ID:			
2. Relinquished By:							
3. Relinquished By:							

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## Chain of Custody and Cooler Receipt Form for 1315509 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM				Rev. No. 15	07/01/13	Page _____ Of _____		
Submission #: 13-15509										
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____				<b>SHIPPING CONTAINER</b> Ice Chest <input type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>			
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals Ice Chest <input type="checkbox"/> Containers <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input type="checkbox"/> Comments: All samples received? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> All samples containers intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>										
<b>COC Received</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.96 Container: Qtpc Thermometer ID: 207 Temperature: (A) 3.7 °C / (C) 3.8 °C				Date/Time 7/24/13 Analyst Init K1Q 1910				
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
T GENERAL MINERAL/GENERAL	B	A	B	B						
T PE UNPRESERVED										
T INORGANIC CHEMICAL METALS										
T INORGANIC CHEMICAL METALS	C	B	C	C						
T CYANIDE										
T NITROGEN FORMS										
T TOTAL SULFIDE										
02. NITRATE / NITRITE										
T TOTAL ORGANIC CARBON										
T TOX										
T CHEMICAL OXYGEN DEMAND										
LA PHENOLICS										
0ml VOA VIAL TRAVEL BLANK	A(1)									
0ml VOA VIAL		A(3)		A(3)	A(3)					
T EPA 413.1, 413.2, 418.1										
T ODOOR										
ADIOLOGICAL										
ACTERIOLOGICAL										
0ml VOA VIAL- 504										
T EPA 508/608/8080										
T EPA 515.1/8150										
T EPA 525										
T EPA 525 TRAVEL BLANK										
0ml EPA 547										
0ml EPA 531.1										
T EPA 548										
T EPA 549										
T EPA 632										
T EPA 801SM										
T AMBER										
OZ. JAR										
OZ. JAR										
JL SLEEVE										
B VIAL										
ASTIC BAG										
RROUS IRON										
CORE										
ART KIT										
mma Canister										
Comments:										
Sample Numbering Completed By: K1Q Date/Time: 7/24/13 @ 19:35										
Actual / C = Corrected										



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information			
1315509-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-8-7/24/13 <b>Sampled By:</b> BAT	<b>Receive Date:</b> 07/24/2013 19:10 <b>Sampling Date:</b> 07/24/2013 08:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-8-7/24/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1315509-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-13 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/24/2013 19:10 <b>Sampling Date:</b> 07/24/2013 09:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-13 Matrix: W Sample QC Type (SACode): CS Cooler ID:		
1315509-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-15 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/24/2013 19:10 <b>Sampling Date:</b> 07/24/2013 10:10 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-15 Matrix: W Sample QC Type (SACode): CS Cooler ID:		



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315509-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-16 <b>Sampled By:</b> Blaine Tech of BAT		<b>Receive Date:</b> 07/24/2013 19:10 <b>Sampling Date:</b> 07/24/2013 12:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-16 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315509-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-8 <b>Sampled By:</b> Blaine Tech of BAT		<b>Receive Date:</b> 07/24/2013 19:10 <b>Sampling Date:</b> 07/24/2013 13:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-8 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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Columbus, OH 43201

**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-01	Client Sample Name: JPL-GW, TB-8-7/24/13, 7/24/2013 8:00:00AM						
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	V11	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	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-01	Client Sample Name: JPL-GW, TB-8-7/24/13, 7/24/2013 8:00:00AM						
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	V11	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	V11	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	V11	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:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-01	Client Sample Name: JPL-GW, TB-8-7/24/13, 7/24/2013 8:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND	V11	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	V11	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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	91.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/29/13	07/29/13	12:18	MGC	MS-V5	1	BWG1983



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Reported: 08/07/2013 9:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315509-01	Client Sample Name: JPL-GW, TB-8-7/24/13, 7/24/2013 8:00:00AM						
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	07/29/13	07/29/13 12:18	MGC	MS-V5	1	BWG1983



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-02	Client Sample Name: JPL-GW, MW-13, 7/24/2013 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
<b>Bromodichloromethane</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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
<b>Carbon tetrachloride</b>	<b>0.64</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	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
<b>Chloroform</b>	<b>7.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND	V11	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	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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
<b>1,1-Dichloroethane</b>	<b>0.21</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	<b>J</b>	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>0.48</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	<b>J</b>	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:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-02	Client Sample Name: JPL-GW, MW-13, 7/24/2013 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	V11	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	V11	1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>0.93</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>0.24</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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	V11	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:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-02	Client Sample Name: JPL-GW, MW-13, 7/24/2013 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	V11	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	V11	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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	88.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/29/13	07/29/13	10:03	MGC	MS-V5	1	BWG1983



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315509-02	Client Sample Name: JPL-GW, MW-13, 7/24/2013 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	07/29/13	07/29/13 10:03	MGC	MS-V5	1	BWG1983



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315509-02	Client Sample Name: JPL-GW, MW-13, 7/24/2013 9:00:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	65	mg/L	0.50	0.067	EPA-300.0	0.12		1
Nitrate as N	5.0	mg/L	0.10	0.025	EPA-300.0	ND		1
Sulfate	53	mg/L	1.0	0.18	EPA-300.0	ND		1
Nitrite as N	ND	mg/L	0.050	0.012	EPA-353.2	ND		2
Perchlorate	1200	ug/L	400	81	EPA-314.0	ND	A01	3
ortho-Phosphate as P	0.037	mg/L	0.020	0.0040	EPA-365.1	ND		4

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-300.0	07/25/13	07/25/13	13:38	LD1	IC1	1	BWG1805
2	EPA-353.2	07/25/13	07/25/13	08:17	TDC	KONE-1	1	BWG1778
3	EPA-314.0	07/26/13	07/26/13	21:03	LS1	IC6	100	BWG1950
4	EPA-365.1	07/25/13	07/25/13	08:56	TDC	KONE-1	1	BWG1776



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Reported: 08/07/2013 9:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315509-02	Client Sample Name: JPL-GW, MW-13, 7/24/2013 9:00:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0042	mg/L	0.0020	0.00070	EPA-7196	ND		1
Total Recoverable Chromium	140	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	07/25/13	07/25/13 08:07	TDC	KONE-1	1	BWG1785
2	EPA-200.8	07/30/13	07/30/13 17:20	SRM	PE-EL1	1	BWG2096



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Reported: 08/07/2013 9:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315509-03	Client Sample Name: JPL-GW, MW-15, 7/24/2013 10:10:00AM, 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	4.2	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/25/13	07/25/13 08:07	TDC	KONE-1	1	BWG1785	
2	EPA-200.8	07/30/13	07/30/13 17:23	SRM	PE-EL1	1	BWG2096	



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-04	Client Sample Name: JPL-GW, MW-16, 7/24/2013 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
<b>Bromodichloromethane</b>	<b>12</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	ND		1
<b>Bromoform</b>	<b>4.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.27</b>	<b>EPA-524.2</b>	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
<b>Chloroform</b>	<b>7.9</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND	V11	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
<b>Dibromochloromethane</b>	<b>11</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	ND	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-04	Client Sample Name: JPL-GW, MW-16, 7/24/2013 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	V11	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	V11	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	V11	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-04	Client Sample Name: JPL-GW, MW-16, 7/24/2013 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	V11	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	V11	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)	94.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	86.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/29/13	07/29/13	12:40	MGC	MS-V5	1	BWG1983



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Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315509-04	Client Sample Name: JPL-GW, MW-16, 7/24/2013 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	07/29/13	07/29/13 12:40	MGC	MS-V5	1	BWG1983



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315509-04	Client Sample Name: JPL-GW, MW-16, 7/24/2013 12:15:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	75	mg/L	0.50	0.067	EPA-300.0	0.12		1
Nitrate as N	1.4	mg/L	0.10	0.025	EPA-300.0	ND		1
Sulfate	41	mg/L	1.0	0.18	EPA-300.0	ND		1
Nitrite as N	ND	mg/L	0.050	0.012	EPA-353.2	ND		2
Perchlorate	2.0	ug/L	4.0	0.81	EPA-314.0	ND	J	3
ortho-Phosphate as P	0.27	mg/L	0.020	0.0040	EPA-365.1	ND		4

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-300.0	07/25/13	07/25/13	13:55	LD1	IC1	1	BWG1805
2	EPA-353.2	07/25/13	07/25/13	08:17	TDC	KONE-1	1	BWG1778
3	EPA-314.0	07/26/13	07/26/13	21:15	LS1	IC6	1	BWG1950
4	EPA-365.1	07/25/13	07/25/13	08:56	TDC	KONE-1	1	BWG1776



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Reported: 08/07/2013 9:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315509-04	Client Sample Name: JPL-GW, MW-16, 7/24/2013 12:15:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.014	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	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/25/13	07/25/13 08:07	TDC	KONE-1	1	BWG1785	
2	EPA-200.8	07/30/13	07/30/13 17:26	SRM	PE-EL1	1	BWG2096	



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**Reported:** 08/07/2013 9:06  
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**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-05	Client Sample Name: JPL-GW, MW-8, 7/24/2013 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	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	V11	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	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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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Columbus, OH 43201

**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-05	Client Sample Name:	JPL-GW, MW-8, 7/24/2013 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	V11	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	V11	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	<b>0.70</b>	ug/L	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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	V11	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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Columbus, OH 43201

**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315509-05	Client Sample Name: JPL-GW, MW-8, 7/24/2013 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	V11	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	V11	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)	106	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	86.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/29/13	07/29/13	13:03	MGC	MS-V5	1	BWG1983



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315509-05	Client Sample Name: JPL-GW, MW-8, 7/24/2013 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	07/29/13	07/29/13 13:03	MGC	MS-V5	1	BWG1983



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315509-05	Client Sample Name: JPL-GW, MW-8, 7/24/2013 1:15:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	12	mg/L	0.50	0.067	EPA-300.0	0.12		1
Nitrate as N	0.28	mg/L	0.10	0.025	EPA-300.0	ND		1
Sulfate	24	mg/L	1.0	0.18	EPA-300.0	ND		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	ND	mg/L	0.020	0.0040	EPA-365.1	ND		4

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-300.0	07/25/13	07/25/13	14:12	LD1	IC1	1	BWG1805
2	EPA-353.2	07/25/13	07/25/13	08:17	TDC	KONE-1	1	BWG1778
3	EPA-314.0	07/26/13	07/26/13	18:05	LS1	IC6	1	BWG1950
4	EPA-365.1	07/25/13	07/25/13	08:57	TDC	KONE-1	1	BWG1776



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Reported: 08/07/2013 9:06  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315509-05	Client Sample Name: JPL-GW, MW-8, 7/24/2013 1:15:00PM, 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	1.5	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/25/13	07/25/13 08:07	TDC	KONE-1	1	BWG1785	
2	EPA-200.8	07/30/13	08/02/13 03:02	SRM	PE-EL2	1	BWG2098	



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**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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
<b>QC Batch ID: BWG1983</b>						
Benzene	BWG1983-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1983-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1983-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1983-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1983-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1983-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1983-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1983-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1983-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1983-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1983-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1983-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1983-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1983-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1983-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1983-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1983-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1983-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1983-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1983-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
<b>QC Batch ID: BWG1983</b>						
trans-1,3-Dichloropropene	BWG1983-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1983-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1983-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1983-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1983-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1983-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1983-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1983-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1983-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1983-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1983-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1983-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1983-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1983-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1983-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1983-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1983-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1983-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1983-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1983-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1983-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
<b>QC Batch ID: BWG1983</b>						
Ethyl t-butyl ether	BWG1983-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1983-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1983-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1983-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1983-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1983-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1983-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1983-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1983-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1983-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1983-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1983-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1983-BLK1	112	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1983-BLK1	103	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1983-BLK1	88.0	%	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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1983</b>									
Benzene	BWG1983-BS1	LCS	26.470	25.000	ug/L	106		70 - 130	
Bromodichloromethane	BWG1983-BS1	LCS	30.840	25.000	ug/L	123		70 - 130	
Chlorobenzene	BWG1983-BS1	LCS	26.820	25.000	ug/L	107		70 - 130	
Chloroethane	BWG1983-BS1	LCS	27.420	25.000	ug/L	110		70 - 130	
1,4-Dichlorobenzene	BWG1983-BS1	LCS	30.720	25.000	ug/L	123		70 - 130	
1,1-Dichloroethane	BWG1983-BS1	LCS	27.320	25.000	ug/L	109		70 - 130	
1,1-Dichloroethene	BWG1983-BS1	LCS	28.240	25.000	ug/L	113		70 - 130	
Toluene	BWG1983-BS1	LCS	27.180	25.000	ug/L	109		70 - 130	
Trichloroethene	BWG1983-BS1	LCS	27.640	25.000	ug/L	111		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BWG1983-BS1	LCS	10.770	10.000	ug/L	108		75 - 125	
Toluene-d8 (Surrogate)	BWG1983-BS1	LCS	10.130	10.000	ug/L	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	BWG1983-BS1	LCS	10.560	10.000	ug/L	106		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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1983</b>		Used client sample: Y - Description: MW-13, 07/24/2013 09:00									
Benzene	MS	1315509-02	ND	26.040	25.000	ug/L		104		70 - 130	
	MSD	1315509-02	ND	23.520	25.000	ug/L	10.2	94.1	20	70 - 130	
Bromodichloromethane	MS	1315509-02	0.24000	30.480	25.000	ug/L		121		70 - 130	
	MSD	1315509-02	0.24000	26.970	25.000	ug/L	12.2	107	20	70 - 130	
Chlorobenzene	MS	1315509-02	ND	26.970	25.000	ug/L		108		70 - 130	
	MSD	1315509-02	ND	24.300	25.000	ug/L	10.4	97.2	20	70 - 130	
Chloroethane	MS	1315509-02	ND	27.040	25.000	ug/L		108		70 - 130	
	MSD	1315509-02	ND	24.400	25.000	ug/L	10.3	97.6	20	70 - 130	
1,4-Dichlorobenzene	MS	1315509-02	ND	30.620	25.000	ug/L		122		70 - 130	
	MSD	1315509-02	ND	26.780	25.000	ug/L	13.4	107	20	70 - 130	
1,1-Dichloroethane	MS	1315509-02	0.21000	26.930	25.000	ug/L		107		70 - 130	
	MSD	1315509-02	0.21000	24.600	25.000	ug/L	9.0	97.6	20	70 - 130	
1,1-Dichloroethene	MS	1315509-02	0.48000	27.800	25.000	ug/L		109		70 - 130	
	MSD	1315509-02	0.48000	25.410	25.000	ug/L	9.0	99.7	20	70 - 130	
Toluene	MS	1315509-02	ND	27.410	25.000	ug/L		110		70 - 130	
	MSD	1315509-02	ND	24.260	25.000	ug/L	12.2	97.0	20	70 - 130	
Trichloroethene	MS	1315509-02	0.24000	27.660	25.000	ug/L		110		70 - 130	
	MSD	1315509-02	0.24000	24.070	25.000	ug/L	13.9	95.3	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1315509-02	ND	10.520	10.000	ug/L		105		75 - 125	
	MSD	1315509-02	ND	10.380	10.000	ug/L	1.3	104		75 - 125	
Toluene-d8 (Surrogate)	MS	1315509-02	ND	10.500	10.000	ug/L		105		80 - 120	
	MSD	1315509-02	ND	10.170	10.000	ug/L	3.2	102		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1315509-02	ND	10.560	10.000	ug/L		106		80 - 120	
	MSD	1315509-02	ND	10.160	10.000	ug/L	3.9	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
<b>QC Batch ID: BWG1983</b>						
Chloroacetonitrile	BWG1983-BLK1	0	ug/L			
1-Chlorobutane	BWG1983-BLK1	0	ug/L			
1,1-Dichloropropane	BWG1983-BLK1	0	ug/L			
Methyl acrylate	BWG1983-BLK1	0	ug/L			
Nitrobenzene	BWG1983-BLK1	0	ug/L			
2-Nitropropane	BWG1983-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
<b>QC Batch ID: BWG1776</b>						
ortho-Phosphate as P	BWG1776-BLK1	ND	mg/L	0.020	0.0040	
<b>QC Batch ID: BWG1778</b>						
Nitrite as N	BWG1778-BLK1	0.0048250	mg/L	0.050	0.0013	J
<b>QC Batch ID: BWG1805</b>						
Chloride	BWG1805-BLK1	0.11800	mg/L	0.50	0.067	J
Nitrate as N	BWG1805-BLK1	ND	mg/L	0.10	0.025	
Sulfate	BWG1805-BLK1	ND	mg/L	1.0	0.18	
<b>QC Batch ID: BWG1950</b>						
Perchlorate	BWG1950-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1776</b>									
ortho-Phosphate as P	BWG1776-BS1	LCS	0.20850	0.20000	mg/L	104		90 - 110	
<b>QC Batch ID: BWG1778</b>									
Nitrite as N	BWG1778-BS1	LCS	0.52727	0.50000	mg/L	105		90 - 110	
<b>QC Batch ID: BWG1805</b>									
Chloride	BWG1805-BS1	LCS	51.839	50.000	mg/L	104		90 - 110	
Nitrate as N	BWG1805-BS1	LCS	5.0820	5.0000	mg/L	102		90 - 110	
Sulfate	BWG1805-BS1	LCS	102.95	100.00	mg/L	103		90 - 110	
<b>QC Batch ID: BWG1950</b>									
Perchlorate	BWG1950-BS1	LCS	10.956	10.000	ug/L	110		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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1776</b>		Used client sample: Y - Description: MW-13, 07/24/2013 09:00								
ortho-Phosphate as P	DUP	1315509-02	0.036958	0.036271		mg/L	1.9		10	
	MS	1315509-02	0.036958	0.25145	0.21053	mg/L		102		90 - 110
	MSD	1315509-02	0.036958	0.25246	0.21053	mg/L	0.4	102	10	90 - 110
<b>QC Batch ID: BWG1778</b>		Used client sample: Y - Description: MW-13, 07/24/2013 09:00								
Nitrite as N	DUP	1315509-02	ND	0.0077590		mg/L			10	J
	MS	1315509-02	ND	0.52259	0.52632	mg/L		99.3		90 - 110
	MSD	1315509-02	ND	0.52465	0.52632	mg/L	0.4	99.7	10	90 - 110
<b>QC Batch ID: BWG1805</b>		Used client sample: N								
Chloride	DUP	1315541-01	2.8710	2.8660		mg/L	0.2		10	
	MS	1315541-01	2.8710	55.803	50.505	mg/L		105		80 - 120
	MSD	1315541-01	2.8710	55.837	50.505	mg/L	0.1	105	10	80 - 120
Nitrate as N	DUP	1315541-01	0.077000	0.086000		mg/L	11.0		10	J,A02
	MS	1315541-01	0.077000	5.2828	5.0505	mg/L		103		80 - 120
	MSD	1315541-01	0.077000	5.2717	5.0505	mg/L	0.2	103	10	80 - 120
Sulfate	DUP	1315541-01	1.5230	1.4760		mg/L	3.1		10	
	MS	1315541-01	1.5230	105.92	101.01	mg/L		103		80 - 120
	MSD	1315541-01	1.5230	105.82	101.01	mg/L	0.1	103	10	80 - 120
<b>QC Batch ID: BWG1950</b>		Used client sample: Y - Description: EW-2, 07/25/2013 13:20								
Perchlorate	DUP	1315663-06	27.436	28.242		ug/L	2.9		15	
	MS	1315663-06	27.436	79.849	50.505	ug/L		104		80 - 120
	MSD	1315663-06	27.436	80.973	50.505	ug/L	1.4	106	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
<b>QC Batch ID: BWG1785</b>						
Hexavalent Chromium	BWG1785-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG2096</b>						
Total Recoverable Chromium	BWG2096-BLK1	ND	ug/L	3.0	0.50	
<b>QC Batch ID: BWG2098</b>						
Total Recoverable Chromium	BWG2098-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1785</b>									
Hexavalent Chromium	BWG1785-BS1	LCS	0.052642	0.050000	mg/L	105		85 - 115	
<b>QC Batch ID: BWG2096</b>									
Total Recoverable Chromium	BWG2096-BS1	LCS	40.743	40.000	ug/L	102		85 - 115	
<b>QC Batch ID: BWG2098</b>									
Total Recoverable Chromium	BWG2098-BS1	LCS	42.728	40.000	ug/L	107		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	<u>Control Limits</u>		
									RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1785</b>		Used client sample: Y - Description: MW-13, 07/24/2013 09:00									
Hexavalent Chromium	DUP	1315509-02	0.0042020	0.0042300		mg/L	0.7		10		
	MS	1315509-02	0.0042020	0.057634	0.052632	mg/L		102		85 - 115	
	MSD	1315509-02	0.0042020	0.057599	0.052632	mg/L	0.1	101	10	85 - 115	
<b>QC Batch ID: BWG2096</b>		Used client sample: Y - Description: MW-12-3, 07/22/2013 12:40									
Total Recoverable Chromium	DUP	1315307-08	ND	ND		ug/L			20		
	MS	1315307-08	ND	40.242	40.000	ug/L		101		70 - 130	
	MSD	1315307-08	ND	40.354	40.000	ug/L	0.3	101	20	70 - 130	
<b>QC Batch ID: BWG2098</b>		Used client sample: Y - Description: MW-21-3, 07/23/2013 12:00									
Total Recoverable Chromium	DUP	1315416-11	0.98200	1.1790		ug/L	18.2		20		J
	MS	1315416-11	0.98200	39.246	40.000	ug/L		95.7		70 - 130	
	MSD	1315416-11	0.98200	41.595	40.000	ug/L	5.8	102	20	70 - 130	



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/07/2013 9:06  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**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.



**Laboratories, Inc.**

Environmental Testing Laboratory Since 1949

Date of Report: 08/08/2013

David Conner

Battelle MHTS

505 King Ave.  
Columbus, OH 43201

Project: JPL- GW Monitoring Wells

BC Work Order: 1315617

Invoice ID: B152192

Enclosed are the results of analyses for samples received by the laboratory on 7/25/2013. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Misty Orton  
Client Service Rep

Authorized Signature

Certifications: CA ELAP #1186; NV #CA00014

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## Chain of Custody Form

**\*Required Fields**

Report To: Battelle MHTS		Project Description: JPL-GW Monitoring		Analysis Requested	
Client: * David Conner	Attn: * Street Address: * 505 King Ave.	City: * Columbus State: * OH Zip: * 43201	Project Code: * 3Q13		
Phone#: * 614 ) 424 - 5469 Fax#: 614 ) 458- 5469	Email Address: connerd@battelle.org	Sampler (s): * Blaine Tech			
Submission #: 13-15 [017]	Sample Description	Date	Time	Matrix*	
-1	TB-9-7/25/13	7-25-13	0720	4Q	
-2	MW-6	1	0815	X X X X X X	
-3	MW-5		0945	X X X X X X	
-4	MW-10		1100	X X X X X X	
-5	MW-7	✓	1330	X X X X X X	
CHIRY DISTRIBUTION					
Matrix Types:		S = Soil	SL = Sludge	DW = Drinking Water	WW = Wastewater
Turnaround # of working days: *		<input type="checkbox"/> 24 Hr Rush	<input type="checkbox"/> 48 Hr Rush	<input type="checkbox"/> 3-5 Day Rush	<input checked="" type="checkbox"/> Normal (10 - Days)
Lab TAT Approval: _____		* Additional Charges May Apply			
Comments:		PLEASE NOTE WHICH SAMPLES TO USE FOR QC (MS/MSD) 90% Level III and 10% Level IV data validation required; Level IV Notated on G of C NOTE: ALL ANALYSIS REQUIRED TO HAVE CALIBRATION SUMMARIES (inform QC)			
		Global ID: _____ Cost Center: _____ 1. Relinquished By: <u>John C. M.</u> Date: <u>7/25/13</u> Time: <u>1525</u> 1. Received By: <u>Nicole</u> Date: <u>7/25/13</u> Time: <u>1525</u> 2. Relinquished By: <u>Nicole</u> Date: <u>7/25/13</u> Time: <u>1600</u> 2. Received By: <u>John C. M.</u> Date: <u>7/25/13</u> Time: <u>1600</u> 3. Relinquished By: <u>John C. M.</u> Date: <u>7/25/13</u> Time: <u>1600</u> 3. Received By: <u>Nicole</u> Date: <u>7/25/13</u> Time: <u>1600</u>			

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## Chain of Custody and Cooler Receipt Form for 1315617 Page 2 of 2

BC LABORATORIES INC.		COOLER RECEIPT FORM		Rev. No. 15	07/01/13	Page 1 Of 1				
Submission #: 13-15617										
<b>SHIPPING INFORMATION</b> Federal Express <input type="checkbox"/> UPS <input checked="" type="checkbox"/> Hand Delivery BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____			<b>SHIPPING CONTAINER</b> Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		<b>FREE LIQUID</b> YES <input type="checkbox"/> NO <input type="checkbox"/>					
Refrigerant: Ice <input checked="" type="checkbox"/> Blue Ice <input type="checkbox"/> None <input type="checkbox"/> Other <input type="checkbox"/> Comments: Custody Seals: Ice Chest <input type="checkbox"/> Container <input type="checkbox"/> None <input checked="" type="checkbox"/> Comments: Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Intact? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>										
COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		Emissivity: 0.98 Container: QTPC Thermometer ID: 207 Temperature: (A) 21 °C / (C) 22 °C		Description(s) match COC? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Date/Time 7/25/13 Analyst Init K1Q 1915						
SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
' GENERAL MINERAL/ GENERAL	B	B	B	B						
' PE UNPRESERVED										
' INORGANIC CHEMICAL METALS										
' INORGANIC CHEMICAL METALS	C	C	C	C						
' CYANIDE										
' NITROGEN FORMS										
' TOTAL SULFIDE										
' NITRATE / NITRITE										
' TOTAL ORGANIC CARBON										
' TOX										
' CHEMICAL OXYGEN DEMAND										
A PHENOLICS										
ml VOA VIAL TRAVEL BLANK	A(1)									
ml VOA VIAL	(1)	A(3)	A(3)	A(3)	A(3)	(1)	(1)	(1)	(1)	(1)
' EPA 413.1, 413.2, 418.1										
ODOR										
DIOLOGICAL										
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										
DZ. JAR										
IL SLEEVE										
B VIAL										
ASTIC BAG										
RROUS IRON										
CORE										
ART KIT										
mma Canister										
Comments:										
Sample Numbering Completed By:	K1Q		Date/Time: 7/25/13 @ 2020							
Actual / C = Corrected										



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
1315617-01	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> TB-9-7/25/13 <b>Sampled By:</b> BAT	<b>Receive Date:</b> 07/25/2013 19:15 <b>Sampling Date:</b> 07/25/2013 07:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-9-7/25/13 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315617-02	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-6 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/25/2013 19:15 <b>Sampling Date:</b> 07/25/2013 08:15 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-6 Matrix: W Sample QC Type (SACode): CS Cooler ID:	
1315617-03	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-5 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/25/2013 19:15 <b>Sampling Date:</b> 07/25/2013 09:45 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-5 Matrix: W Sample QC Type (SACode): CS Cooler ID:	



Battelle MHTS  
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Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	
1315617-04	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-10 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/25/2013 19:15 <b>Sampling Date:</b> 07/25/2013 11:00 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-10 Matrix: W Sample QC Type (SACode): CS Cooler ID:
1315617-05	<b>COC Number:</b> --- <b>Project Number:</b> JPL-GW <b>Sampling Location:</b> --- <b>Sampling Point:</b> MW-7 <b>Sampled By:</b> Blaine Tech of BAT	<b>Receive Date:</b> 07/25/2013 19:15 <b>Sampling Date:</b> 07/25/2013 13:30 <b>Sample Depth:</b> --- <b>Lab Matrix:</b> Water <b>Sample Type:</b> Aqueous Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-7 Matrix: W Sample QC Type (SACode): CS Cooler ID:



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505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-01	Client Sample Name: JPL-GW, TB-9-7/25/13, 7/25/2013 7:00:00AM						
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	V11	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	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-01	Client Sample Name: JPL-GW, TB-9-7/25/13, 7/25/2013 7:00:00AM						
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	V11	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	V11	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	V11	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:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-01	Client Sample Name: JPL-GW, TB-9-7/25/13, 7/25/2013 7:00:00AM						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.21	EPA-524.2	ND	V11	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	V11	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)	104	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	86.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-524.2	07/29/13	07/29/13	13:25	MGC	MS-V5	1	BWG1983



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315617-01	Client Sample Name: JPL-GW, TB-9-7/25/13, 7/25/2013 7:00:00AM						
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	07/29/13	07/29/13 13:25	MGC	MS-V5	1	BWG1983



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-02	Client Sample Name: JPL-GW, MW-6, 7/25/2013 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	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
<b>Chloroform</b>	<b>0.80</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND	V11	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	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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
<b>1,1-Dichloroethane</b>	<b>0.26</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>1,1-Dichloroethene</b>	<b>0.31</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.18</b>	<b>EPA-524.2</b>	ND	J	1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.085	EPA-524.2	ND		1
<b>trans-1,2-Dichloroethene</b>	<b>0.22</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.15</b>	<b>EPA-524.2</b>	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-02	Client Sample Name: JPL-GW, MW-6, 7/25/2013 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	V11	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	V11	1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.3</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>4.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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	V11	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:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-02	Client Sample Name: JPL-GW, MW-6, 7/25/2013 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	V11	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	V11	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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	85.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/29/13	07/29/13	13:48	MGC	MS-V5	1	BWG1983



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**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315617-02	Client Sample Name: JPL-GW, MW-6, 7/25/2013 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	07/29/13	07/29/13 13:48	MGC	MS-V5	1	BWG1983



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Columbus, OH 43201

Reported: 08/08/2013 8:46  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315617-02	Client Sample Name: JPL-GW, MW-6, 7/25/2013 8:15:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.5	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	07/31/13	07/31/13 18:13	LS1	IC6	1	BWG2278



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Reported: 08/08/2013 8:46  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315617-02	Client Sample Name: JPL-GW, MW-6, 7/25/2013 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	2.9	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/26/13	07/26/13 07:58	TDC	KONE-1	1	BWG2047	
2	EPA-200.8	07/30/13	08/02/13 03:08	SRM	PE-EL2	1	BWG2098	



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**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-03	Client Sample Name: JPL-GW, MW-5, 7/25/2013 9:45:00AM, 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	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	V11	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	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-03	Client Sample Name: JPL-GW, MW-5, 7/25/2013 9:45:00AM, 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	V11	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	V11	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	V11	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:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-03	Client Sample Name: JPL-GW, MW-5, 7/25/2013 9:45:00AM, 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	V11	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	V11	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)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	87.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/29/13	07/29/13	14:10	MGC	MS-V5	1	BWG1983



Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315617-03	Client Sample Name: JPL-GW, MW-5, 7/25/2013 9:45:00AM, 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	07/29/13	07/29/13 14:10	MGC	MS-V5	1	BWG1983



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Reported: 08/08/2013 8:46  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315617-03	Client Sample Name: JPL-GW, MW-5, 7/25/2013 9:45:00AM, 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		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	
1	EPA-314.0	07/31/13	07/31/13 18:25	LS1	IC6	1	BWG2278	



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Reported: 08/08/2013 8:46  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315617-03	Client Sample Name: JPL-GW, MW-5, 7/25/2013 9:45:00AM, 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	0.83	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/26/13	07/26/13 07:58	TDC	KONE-1	1	BWG2047	
2	EPA-200.8	07/30/13	08/02/13 03:12	SRM	PE-EL2	1	BWG2098	



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**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-04	Client Sample Name: JPL-GW, MW-10, 7/25/2013 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	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
<b>Chloroform</b>	<b>1.2</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND	V11	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	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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
<b>1,1-Dichloroethane</b>	<b>0.23</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.11</b>	<b>EPA-524.2</b>	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
<b>cis-1,2-Dichloroethene</b>	<b>0.14</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	ND	J	1
<b>trans-1,2-Dichloroethene</b>	<b>0.25</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.15</b>	<b>EPA-524.2</b>	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:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-04	Client Sample Name: JPL-GW, MW-10, 7/25/2013 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	V11	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	V11	1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
<b>Tetrachloroethene</b>	<b>1.0</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.13</b>	<b>EPA-524.2</b>	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
<b>Trichloroethene</b>	<b>9.8</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.085</b>	<b>EPA-524.2</b>	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	V11	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-04	Client Sample Name: JPL-GW, MW-10, 7/25/2013 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	V11	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	V11	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)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	88.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/29/13	07/29/13	14:33	MGC	MS-V5	1	BWG1983



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**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315617-04	Client Sample Name: JPL-GW, MW-10, 7/25/2013 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	07/29/13	07/29/13 14:33	MGC	MS-V5	1	BWG1983



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Reported: 08/08/2013 8:46  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Water Analysis (General Chemistry)

BCL Sample ID:	1315617-04	Client Sample Name: JPL-GW, MW-10, 7/25/2013 11:00:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	9.0	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	07/31/13	07/31/13 22:44	LS1	IC6	1	BWG2278



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Reported: 08/08/2013 8:46  
Project: JPL- GW Monitoring Wells  
Project Number: 3Q13  
Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315617-04	Client Sample Name: JPL-GW, MW-10, 7/25/2013 11:00:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0019	mg/L	0.0020	0.00070	EPA-7196	ND	J	1
Total Recoverable Chromium	3.3	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run	Analyst	Instrument	Dilution	QC	Batch ID
			Date/Time					
1	EPA-7196	07/26/13	07/26/13 08:08	TDC	KONE-1	1	BWG2047	
2	EPA-200.8	07/30/13	08/02/13 03:15	SRM	PE-EL2	1	BWG2098	



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**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-05	Client Sample Name: JPL-GW, MW-7, 7/25/2013 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
<b>Bromodichloromethane</b>	<b>0.92</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.14</b>	<b>EPA-524.2</b>	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
<b>Chloroform</b>	<b>5.4</b>	<b>ug/L</b>	<b>0.50</b>	<b>0.12</b>	<b>EPA-524.2</b>	ND		1
Chloromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND	V11	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	V11	1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.44	EPA-524.2	ND	V11	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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Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-05	Client Sample Name: JPL-GW, MW-7, 7/25/2013 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	V11	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	V11	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	V11	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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Battelle MHTS  
505 King Ave.  
Columbus, OH 43201

**Reported:** 08/08/2013 8:46  
**Project:** JPL- GW Monitoring Wells  
**Project Number:** 3Q13  
**Project Manager:** David Conner

## Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	1315617-05	Client Sample Name: JPL-GW, MW-7, 7/25/2013 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	V11	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	V11	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)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	87.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC Batch ID
			Date/Time					
1	EPA-524.2	07/29/13	07/29/13	14:55	MGC	MS-V5	1	BWG1983



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## Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID:	1315617-05	Client Sample Name: JPL-GW, MW-7, 7/25/2013 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	07/29/13	07/29/13 14:55	MGC	MS-V5	1	BWG1983



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## Water Analysis (General Chemistry)

BCL Sample ID:	1315617-05	Client Sample Name: JPL-GW, MW-7, 7/25/2013 1:30:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	73	mg/L	0.50	0.067	EPA-300.0	0.11		1
Nitrate as N	1.2	mg/L	0.10	0.025	EPA-300.0	ND		1
Sulfate	41	mg/L	1.0	0.18	EPA-300.0	ND		1
Nitrite as N	ND	mg/L	0.050	0.012	EPA-353.2	ND		2
Perchlorate	4.0	ug/L	4.0	0.81	EPA-314.0	ND		3
ortho-Phosphate as P	0.0071	mg/L	0.020	0.0040	EPA-365.1	ND	J	4

Run #	Method	Prep Date	Run Date/Time		Analyst	Instrument	Dilution	QC Batch ID
			Date	Time				
1	EPA-300.0	07/25/13	07/26/13	04:38	LD1	IC5	1	BWG1945
2	EPA-353.2	07/26/13	07/26/13	08:55	TDC	KONE-1	1	BWG2045
3	EPA-314.0	07/31/13	07/31/13	18:49	LS1	IC6	1	BWG2278
4	EPA-365.1	07/26/13	07/26/13	08:38	TDC	KONE-1	1	BWG2229



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Project Manager: David Conner

## Metals Analysis

BCL Sample ID:	1315617-05	Client Sample Name: JPL-GW, MW-7, 7/25/2013 1:30:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0039	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	07/26/13	07/26/13 08:23	TDC	KONE-1	1	BWG2047
2	EPA-200.8	07/30/13	08/02/13 03:18	SRM	PE-EL2	1	BWG2098



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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
<b>QC Batch ID: BWG1983</b>						
Benzene	BWG1983-BLK1	ND	ug/L	0.50	0.083	
Bromobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.13	
Bromochloromethane	BWG1983-BLK1	ND	ug/L	0.50	0.24	
Bromodichloromethane	BWG1983-BLK1	ND	ug/L	0.50	0.14	
Bromoform	BWG1983-BLK1	ND	ug/L	0.50	0.27	
Bromomethane	BWG1983-BLK1	ND	ug/L	1.0	0.25	
n-Butylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.11	
sec-Butylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.15	
tert-Butylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.13	
Carbon tetrachloride	BWG1983-BLK1	ND	ug/L	0.50	0.18	
Chlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.093	
Chloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.14	
Chloroform	BWG1983-BLK1	ND	ug/L	0.50	0.12	
Chloromethane	BWG1983-BLK1	ND	ug/L	0.50	0.14	
2-Chlorotoluene	BWG1983-BLK1	ND	ug/L	0.50	0.20	
4-Chlorotoluene	BWG1983-BLK1	ND	ug/L	0.50	0.15	
Dibromochloromethane	BWG1983-BLK1	ND	ug/L	0.50	0.13	
1,2-Dibromo-3-chloropropane	BWG1983-BLK1	ND	ug/L	1.0	0.44	
1,2-Dibromoethane	BWG1983-BLK1	ND	ug/L	0.50	0.16	
Dibromomethane	BWG1983-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.072	
1,3-Dichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.15	
1,4-Dichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.062	
Dichlorodifluoromethane	BWG1983-BLK1	ND	ug/L	0.50	0.099	
1,1-Dichloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.18	
cis-1,2-Dichloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.085	
trans-1,2-Dichloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloropropane	BWG1983-BLK1	ND	ug/L	0.50	0.13	
1,3-Dichloropropane	BWG1983-BLK1	ND	ug/L	0.50	0.086	
2,2-Dichloropropane	BWG1983-BLK1	ND	ug/L	0.50	0.13	
1,1-Dichloropropene	BWG1983-BLK1	ND	ug/L	0.50	0.085	
cis-1,3-Dichloropropene	BWG1983-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
<b>QC Batch ID: BWG1983</b>						
trans-1,3-Dichloropropene	BWG1983-BLK1	ND	ug/L	0.50	0.079	
Ethylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.098	
Hexachlorobutadiene	BWG1983-BLK1	ND	ug/L	0.50	0.17	
Isopropylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	BWG1983-BLK1	ND	ug/L	0.50	0.12	
Methylene chloride	BWG1983-BLK1	ND	ug/L	0.50	0.48	
Methyl t-butyl ether	BWG1983-BLK1	ND	ug/L	0.50	0.11	
Naphthalene	BWG1983-BLK1	ND	ug/L	0.50	0.36	
n-Propylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.11	
Styrene	BWG1983-BLK1	ND	ug/L	0.50	0.068	
1,1,1,2-Tetrachloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.18	
1,1,2,2-Tetrachloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.13	
Toluene	BWG1983-BLK1	ND	ug/L	0.50	0.093	
1,2,3-Trichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.16	
1,2,4-Trichlorobenzene	BWG1983-BLK1	ND	ug/L	0.50	0.19	
1,1,1-Trichloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.11	
1,1,2-Trichloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.16	
Trichloroethene	BWG1983-BLK1	ND	ug/L	0.50	0.085	
Trichlorofluoromethane	BWG1983-BLK1	ND	ug/L	0.50	0.13	
1,2,3-Trichloropropane	BWG1983-BLK1	ND	ug/L	1.0	0.24	
1,1,2-Trichloro-1,2,2-trifluoroethane	BWG1983-BLK1	ND	ug/L	0.50	0.15	
1,2,4-Trimethylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.12	
1,3,5-Trimethylbenzene	BWG1983-BLK1	ND	ug/L	0.50	0.12	
Vinyl chloride	BWG1983-BLK1	ND	ug/L	0.50	0.12	
Acetone	BWG1983-BLK1	ND	ug/L	10	4.6	
Acrylonitrile	BWG1983-BLK1	ND	ug/L	5.0	1.2	
Allyl chloride	BWG1983-BLK1	ND	ug/L	5.0	0.80	
t-Amyl Methyl ether	BWG1983-BLK1	ND	ug/L	0.50	0.25	
t-Butyl alcohol	BWG1983-BLK1	ND	ug/L	10	9.4	
Carbon disulfide	BWG1983-BLK1	ND	ug/L	1.0	0.38	
trans-1,4-Dichloro-2-butene	BWG1983-BLK1	ND	ug/L	5.0	1.4	
Diethyl ether	BWG1983-BLK1	ND	ug/L	2.0	0.21	
Ethyl methacrylate	BWG1983-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
<b>QC Batch ID: BWG1983</b>						
Ethyl t-butyl ether	BWG1983-BLK1	ND	ug/L	0.50	0.18	
Hexachloroethane	BWG1983-BLK1	ND	ug/L	0.50	0.16	
2-Hexanone	BWG1983-BLK1	ND	ug/L	10	3.4	
Methacrylonitrile	BWG1983-BLK1	ND	ug/L	10	1.7	
Methyl ethyl ketone	BWG1983-BLK1	ND	ug/L	10	2.5	
Methyl iodide	BWG1983-BLK1	ND	ug/L	2.0	0.47	
Methyl isobutyl ketone	BWG1983-BLK1	ND	ug/L	10	2.1	
Methyl methacrylate	BWG1983-BLK1	ND	ug/L	5.0	1.5	
Pentachloroethane	BWG1983-BLK1	ND	ug/L	2.0	0.43	
Propionitrile	BWG1983-BLK1	ND	ug/L	20	4.2	
Tetrahydrofuran	BWG1983-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	BWG1983-BLK1	ND	ug/L	0.50	0.28	
o-Xylene	BWG1983-BLK1	ND	ug/L	0.50	0.082	
1,2-Dichloroethane-d4 (Surrogate)	BWG1983-BLK1	112	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	BWG1983-BLK1	103	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BWG1983-BLK1	88.0	%	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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1983</b>									
Benzene	BWG1983-BS1	LCS	26.470	25.000	ug/L	106		70 - 130	
Bromodichloromethane	BWG1983-BS1	LCS	30.840	25.000	ug/L	123		70 - 130	
Chlorobenzene	BWG1983-BS1	LCS	26.820	25.000	ug/L	107		70 - 130	
Chloroethane	BWG1983-BS1	LCS	27.420	25.000	ug/L	110		70 - 130	
1,4-Dichlorobenzene	BWG1983-BS1	LCS	30.720	25.000	ug/L	123		70 - 130	
1,1-Dichloroethane	BWG1983-BS1	LCS	27.320	25.000	ug/L	109		70 - 130	
1,1-Dichloroethene	BWG1983-BS1	LCS	28.240	25.000	ug/L	113		70 - 130	
Toluene	BWG1983-BS1	LCS	27.180	25.000	ug/L	109		70 - 130	
Trichloroethene	BWG1983-BS1	LCS	27.640	25.000	ug/L	111		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BWG1983-BS1	LCS	10.770	10.000	ug/L	108		75 - 125	
Toluene-d8 (Surrogate)	BWG1983-BS1	LCS	10.130	10.000	ug/L	101		80 - 120	
4-Bromofluorobenzene (Surrogate)	BWG1983-BS1	LCS	10.560	10.000	ug/L	106		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	Control Limits			
								Percent Recovery	RPD	Percent Recovery	Lab Quals
<b>QC Batch ID: BWG1983</b>		Used client sample: Y - Description: MW-13, 07/24/2013 09:00									
Benzene	MS	1315509-02	ND	26.040	25.000	ug/L		104		70 - 130	
	MSD	1315509-02	ND	23.520	25.000	ug/L	10.2	94.1	20	70 - 130	
Bromodichloromethane	MS	1315509-02	0.24000	30.480	25.000	ug/L		121		70 - 130	
	MSD	1315509-02	0.24000	26.970	25.000	ug/L	12.2	107	20	70 - 130	
Chlorobenzene	MS	1315509-02	ND	26.970	25.000	ug/L		108		70 - 130	
	MSD	1315509-02	ND	24.300	25.000	ug/L	10.4	97.2	20	70 - 130	
Chloroethane	MS	1315509-02	ND	27.040	25.000	ug/L		108		70 - 130	
	MSD	1315509-02	ND	24.400	25.000	ug/L	10.3	97.6	20	70 - 130	
1,4-Dichlorobenzene	MS	1315509-02	ND	30.620	25.000	ug/L		122		70 - 130	
	MSD	1315509-02	ND	26.780	25.000	ug/L	13.4	107	20	70 - 130	
1,1-Dichloroethane	MS	1315509-02	0.21000	26.930	25.000	ug/L		107		70 - 130	
	MSD	1315509-02	0.21000	24.600	25.000	ug/L	9.0	97.6	20	70 - 130	
1,1-Dichloroethene	MS	1315509-02	0.48000	27.800	25.000	ug/L		109		70 - 130	
	MSD	1315509-02	0.48000	25.410	25.000	ug/L	9.0	99.7	20	70 - 130	
Toluene	MS	1315509-02	ND	27.410	25.000	ug/L		110		70 - 130	
	MSD	1315509-02	ND	24.260	25.000	ug/L	12.2	97.0	20	70 - 130	
Trichloroethene	MS	1315509-02	0.24000	27.660	25.000	ug/L		110		70 - 130	
	MSD	1315509-02	0.24000	24.070	25.000	ug/L	13.9	95.3	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	MS	1315509-02	ND	10.520	10.000	ug/L		105		75 - 125	
	MSD	1315509-02	ND	10.380	10.000	ug/L	1.3	104		75 - 125	
Toluene-d8 (Surrogate)	MS	1315509-02	ND	10.500	10.000	ug/L		105		80 - 120	
	MSD	1315509-02	ND	10.170	10.000	ug/L	3.2	102		80 - 120	
4-Bromofluorobenzene (Surrogate)	MS	1315509-02	ND	10.560	10.000	ug/L		106		80 - 120	
	MSD	1315509-02	ND	10.160	10.000	ug/L	3.9	102		80 - 120	



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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
<b>QC Batch ID: BWG1983</b>						
Chloroacetonitrile	BWG1983-BLK1	0	ug/L			
1-Chlorobutane	BWG1983-BLK1	0	ug/L			
1,1-Dichloropropane	BWG1983-BLK1	0	ug/L			
Methyl acrylate	BWG1983-BLK1	0	ug/L			
Nitrobenzene	BWG1983-BLK1	0	ug/L			
2-Nitropropane	BWG1983-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
<b>QC Batch ID: BWG1945</b>						
Chloride	BWG1945-BLK1	0.11300	mg/L	0.50	0.067	J
Nitrate as N	BWG1945-BLK1	ND	mg/L	0.10	0.025	
Sulfate	BWG1945-BLK1	ND	mg/L	1.0	0.18	
<b>QC Batch ID: BWG2045</b>						
Nitrite as N	BWG2045-BLK1	0.0046060	mg/L	0.050	0.0013	J
<b>QC Batch ID: BWG2229</b>						
ortho-Phosphate as P	BWG2229-BLK1	ND	mg/L	0.020	0.0040	
<b>QC Batch ID: BWG2278</b>						
Perchlorate	BWG2278-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG1945</b>									
Chloride	BWG1945-BS1	LCS	51.433	50.000	mg/L	103		90 - 110	
Nitrate as N	BWG1945-BS1	LCS	5.1760	5.0000	mg/L	104		90 - 110	
Sulfate	BWG1945-BS1	LCS	102.56	100.00	mg/L	103		90 - 110	
<b>QC Batch ID: BWG2045</b>									
Nitrite as N	BWG2045-BS1	LCS	0.48589	0.50000	mg/L	97.2		90 - 110	
<b>QC Batch ID: BWG2229</b>									
ortho-Phosphate as P	BWG2229-BS1	LCS	0.19014	0.20000	mg/L	95.1		90 - 110	
<b>QC Batch ID: BWG2278</b>									
Perchlorate	BWG2278-BS1	LCS	10.989	10.000	ug/L	110		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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG1945</b>		Used client sample: N								
Chloride	DUP	1315591-01	26.033	25.773		mg/L	1.0		10	
	MS	1315591-01	26.033	78.004	50.505	mg/L		103		80 - 120
	MSD	1315591-01	26.033	78.009	50.505	mg/L	0.0	103	10	80 - 120
Nitrate as N	DUP	1315591-01	2.2160	2.2450		mg/L	1.3		10	
	MS	1315591-01	2.2160	7.2333	5.0505	mg/L		99.3		80 - 120
	MSD	1315591-01	2.2160	7.1889	5.0505	mg/L	0.6	98.5	10	80 - 120
Sulfate	DUP	1315591-01	128.45	128.57		mg/L	0.1		10	
	MS	1315591-01	128.45	230.48	101.01	mg/L		101		80 - 120
	MSD	1315591-01	128.45	230.69	101.01	mg/L	0.1	101	10	80 - 120
<b>QC Batch ID: BWG2045</b>		Used client sample: Y - Description: MW-7, 07/25/2013 13:30								
Nitrite as N	DUP	1315617-05	ND	0.0024210		mg/L			10	J
	MS	1315617-05	ND	0.52817	0.52632	mg/L		100		90 - 110
	MSD	1315617-05	ND	0.52815	0.52632	mg/L	0.0	100	10	90 - 110
<b>QC Batch ID: BWG2229</b>		Used client sample: Y - Description: MW-7, 07/25/2013 13:30								
ortho-Phosphate as P	DUP	1315617-05	0.0071240	0.0078630		mg/L	9.9		10	J
	MS	1315617-05	0.0071240	0.21880	0.21053	mg/L		101		90 - 110
	MSD	1315617-05	0.0071240	0.21885	0.21053	mg/L	0.0	101	10	90 - 110
<b>QC Batch ID: BWG2278</b>		Used client sample: Y - Description: MW-6, 07/25/2013 08:15								
Perchlorate	DUP	1315617-02	3.4665	3.1260		ug/L	10.3		15	J
	MS	1315617-02	3.4665	13.343	10.101	ug/L		97.8		80 - 120
	MSD	1315617-02	3.4665	13.408	10.101	ug/L	0.5	98.4	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
<b>QC Batch ID: BWG2047</b>						
Hexavalent Chromium	BWG2047-BLK1	ND	mg/L	0.0020	0.00070	
<b>QC Batch ID: BWG2098</b>						
Total Recoverable Chromium	BWG2098-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	Control Limits		Lab Quals
							RPD	Percent Recovery	
<b>QC Batch ID: BWG2047</b>									
Hexavalent Chromium	BWG2047-BS1	LCS	0.053257	0.050000	mg/L	107		85 - 115	
<b>QC Batch ID: BWG2098</b>									
Total Recoverable Chromium	BWG2098-BS1	LCS	42.728	40.000	ug/L	107		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	Control Limits		
								Percent Recovery	Percent RPD	Lab Quals
<b>QC Batch ID: BWG2047</b>		Used client sample: N								
Hexavalent Chromium	DUP	1315588-01	ND	0.00097700		mg/L		10		J
	MS	1315588-01	ND	0.057193	0.052632	mg/L		109	85 - 115	
	MSD	1315588-01	ND	0.056837	0.052632	mg/L	0.6	108	10	85 - 115
<b>QC Batch ID: BWG2098</b>		Used client sample: Y - Description: MW-21-3, 07/23/2013 12:00								
Total Recoverable Chromium	DUP	1315416-11	0.98200	1.1790		ug/L	18.2	20		J
	MS	1315416-11	0.98200	39.246	40.000	ug/L		95.7	70 - 130	
	MSD	1315416-11	0.98200	41.595	40.000	ug/L	5.8	102	20	70 - 130



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## 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.