

ATTACHMENT 3: LABORATORY ANALYTICAL REPORTS

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



Date of Report: 11/12/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive

Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2031442

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 10/26/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda

Client Service Rep

Stuart Buttram

Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	8

Sample Results

2031442-01 - TB-1-102620	
Volatile Organic Analysis (EPA Method 524.2).....	13
Volatile Organic Analysis (EPA Method 524.2) TICs.....	16
2031442-02 - MW-20-5	
Volatile Organic Analysis (EPA Method 524.2).....	17
Volatile Organic Analysis (EPA Method 524.2) TICs.....	20
Water Analysis (General Chemistry).....	21
Metals Analysis.....	22
2031442-03 - MW-20-4	
Volatile Organic Analysis (EPA Method 524.2).....	23
Volatile Organic Analysis (EPA Method 524.2) TICs.....	26
Water Analysis (General Chemistry).....	27
Metals Analysis.....	28
2031442-04 - MW-20-3	
Volatile Organic Analysis (EPA Method 524.2).....	29
Volatile Organic Analysis (EPA Method 524.2) TICs.....	32
Water Analysis (General Chemistry).....	33
Metals Analysis.....	34
2031442-05 - MW-20-2	
Volatile Organic Analysis (EPA Method 524.2).....	35
Volatile Organic Analysis (EPA Method 524.2) TICs.....	38
Water Analysis (General Chemistry).....	39
Metals Analysis.....	40
2031442-06 - DUP-1-4Q20	
Volatile Organic Analysis (EPA Method 524.2).....	41
Volatile Organic Analysis (EPA Method 524.2) TICs.....	44
Water Analysis (General Chemistry).....	45
Metals Analysis.....	46
2031442-07 - MW-19-5	
Volatile Organic Analysis (EPA Method 524.2).....	47
Volatile Organic Analysis (EPA Method 524.2) TICs.....	50
Water Analysis (General Chemistry).....	51
Metals Analysis.....	52
2031442-08 - MW-19-4	
Volatile Organic Analysis (EPA Method 524.2).....	53
Volatile Organic Analysis (EPA Method 524.2) TICs.....	56
Water Analysis (General Chemistry).....	57
Metals Analysis.....	58
2031442-09 - MW-19-3	
Volatile Organic Analysis (EPA Method 524.2).....	59
Volatile Organic Analysis (EPA Method 524.2) TICs.....	62
Water Analysis (General Chemistry).....	63
Metals Analysis.....	64
2031442-10 - DUP-2-4Q20	
Volatile Organic Analysis (EPA Method 524.2).....	65
Volatile Organic Analysis (EPA Method 524.2) TICs.....	68
Water Analysis (General Chemistry).....	69
Metals Analysis.....	70
2031442-11 - MW-19-2	
Volatile Organic Analysis (EPA Method 524.2).....	71

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.



Table of Contents

Volatile Organic Analysis (EPA Method 524.2) TICs.....	74
Water Analysis (General Chemistry).....	75
Metals Analysis.....	76
2031442-12 - MW-19-1	
Volatile Organic Analysis (EPA Method 524.2).....	77
Volatile Organic Analysis (EPA Method 524.2) TICs.....	80
Water Analysis (General Chemistry).....	81
Metals Analysis.....	82
2031442-13 - EB-1-102620	
Volatile Organic Analysis (EPA Method 524.2).....	83
Volatile Organic Analysis (EPA Method 524.2) TICs.....	86
Water Analysis (General Chemistry).....	87
Metals Analysis.....	88
2031442-14 - SB-1-102620	
Volatile Organic Analysis (EPA Method 524.2).....	89
Volatile Organic Analysis (EPA Method 524.2) TICs.....	92
Water Analysis (General Chemistry).....	93
Metals Analysis.....	94
Quality Control Reports	
Volatile Organic Analysis (EPA Method 524.2)	
Method Blank Analysis.....	95
Laboratory Control Sample.....	98
Precision and Accuracy.....	99
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	100
Water Analysis (General Chemistry)	
Method Blank Analysis.....	101
Laboratory Control Sample.....	102
Precision and Accuracy.....	103
Metals Analysis	
Method Blank Analysis.....	104
Laboratory Control Sample.....	105
Precision and Accuracy.....	106
Notes	
Notes and Definitions.....	107



Chain of Custody Form

Page 1 of 2

Required Fields

Client: Tidewater, Inc.
 Attn: David Conner
 Street Address: 3761 Allucks Drive
 City: Powell State: OH Zip: 43065
 Phone: 626 1288 Fax: 614 792-2897
 Email Address: david.conner@tideh2o.net
 Submission #: 10-31442

Project Description: JPL-GW Monitoring
 Project Code: 4Q20
 Sampler(s): Blaine Tech

Billing
 Client: Tidewater
 Attn: David Conner
 Address: 3761 Allucks Drive
 City: Powell State: OH Zip: 43065
 Are there any tests with holding times? less than or equal to 48 hours?
 Yes No
 *Standard Turnaround = 10

Sample #	Sample Description	Date	Time	Matrix*
-1	TB-1-102620	10/26/20	0700	GW
-2	MW-20-5	08/09/20	0900	GW
-3	MW-20-4	08/09/20	0945	GW
-4	MW-20-3		0935	GW
-5	MW-20-2		1010	GW
-6	DIP-1-4(20)		1020	GW
-7	MW-19-5		1240	GW
-8	MW-19-4		1310	GW
-9	MW-19-3		1335	GW
-10	DIP-2-4(20)		1345	GW
-11	MW-19-2		1435	GW

Analysis Requested

Orthophosphate 365.1	
Cl, NO3, NO2, SO4	
Hexavalent Cr6 -218.6 (mg/L)	
Perchlorate	
TRM: Cr	
VOCs EPA 524.2	X

Notes
 NO SHORT HOLDING TIME
 CR'S NO. NO. OF SS
 DO CL BGD MBAS COT
 CHIK BY DISTRIBUTION
 SUBMITTER
 SUB OUT

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

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

Lab TAT Approval: _____ *Additional Charges May Apply

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

Cost Center:
 1. Requisitioned By: [Signature] Date: 10/26/20 Time: 1715
 2. Requisitioned By: [Signature] Date: 10/26/20 Time: 1730
 3. Requisitioned By: [Signature] Date: 10/26/20 Time: 1935

Global ID:
 1. Received By: [Signature] Date: 10-26-20 Time: 1719
 2. Received By: [Signature] Date: 10-26-20 Time: 1730
 3. Received By: [Signature] Date: 10-26-20 Time: 1935

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

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.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 2

Submission #: 20-31442

SHIPPING INFORMATION
 Fed Ex UPS Ontrac Hand Delivery
 BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER
 Ice Chest None Box
 Other (Specify) _____

FREE LIQUID
 YES NO
 W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

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

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

COC Received YES NO
 Emissivity: 0.98 Container: PE Thermometer ID: 208
 Temperature: (A) 0.8 °C / (C) 0.6 °C Date/Time: 10/26/10
 Analyst Init: BSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PR UNPRES		D	D	D	D	D	D	D	D	
4oz / 8oz PE UNPRES										
2oz Cr ⁶⁺		E	E	E	E	E	E	E	E	
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz (16oz)		F	F	F	F	F	F	F	F	
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PLA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK <u>094</u>		A								
40ml VOA VIAL <u>092</u>		A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 503/008/0030										
QT EPA 515.18150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: CAB Date/Time: 10/27/10 0820

= Actual / C = Corrected

Rev 21 05/23/2010
 (S:\WPDec\WordPerfect\LAB_COCS\FORMS\SA\MFCrev 20)



BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 of 2

Submission #: 20-3442

SHIPPING INFORMATION
 Fed Ex UPS Ontrac Hand Delivery
 BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER
 Ice Chest None Box
 Other (Specify) _____

FREE LIQUID
 YES NO
 W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

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

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

COC Received YES NO
 Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time: 10/26/20
 Temperature: (A) 2.3 °C / (C) 2.1 °C Analyst Init: BSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	D	D	D	D						D
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶⁺	E	E	E	E						E
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	F	F	F	F						F
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	MU	A-C	A-C	A-C	A-C					A-C
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 503/618/8090										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____
 Sample Numbering Completed By: UBS Date/Time: 10/27/20 0820
 A = Actual / C = Corrected

Rev 21 06/23/2016
 G:\WPDec\Word\PerfectLAB_COCS\FORM\21SAMRECrev 201



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031442-01	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: TB-1-102620 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Trip Blank Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-1-102620 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2031442-02	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-20-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 08:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

2031442-03	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-20-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 09:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031442-04	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-20-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 09:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

2031442-05	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-20-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 10:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-20-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

2031442-06	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: DUP-1-4Q20 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 10:20 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-1-4Q20 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031442-07	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-19-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 12:40 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

2031442-08	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-19-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 13:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

2031442-09	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-19-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 13:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031442-10	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: DUP-2-4Q20 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 13:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-2-4Q20 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	--

2031442-11	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-19-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 14:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

2031442-12	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: MW-19-1 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 15:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-19-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031442-13	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: EB-1-102620 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 17:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-1-102620 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

2031442-14	COC Number: --- Project Number: GW Monitoring Sampling Location: --- Sampling Point: SB-1-102620 Sampled By: Blaine Tech of BTST	Receive Date: 10/26/2020 19:55 Sampling Date: 10/26/2020 14:50 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): SB-1-102620 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-01	Client Sample Name: GW Monitoring, TB-1-102620, 10/26/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031442-01) and Client Sample Name (GW Monitoring, TB-1-102620, 10/26/2020 7:00:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-01	Client Sample Name: GW Monitoring, TB-1-102620, 10/26/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 10:08	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-01	Client Sample Name: GW Monitoring, TB-1-102620, 10/26/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	10:08	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-02	Client Sample Name: GW Monitoring, MW-20-5, 10/26/2020 8:10:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-02	Client Sample Name: GW Monitoring, MW-20-5, 10/26/2020 8:10:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 07:19	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-02	Client Sample Name: GW Monitoring, MW-20-5, 10/26/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	07:19	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-02	Client Sample Name: GW Monitoring, MW-20-5, 10/26/2020 8:10:00AM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 00:12	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-02	Client Sample Name: GW Monitoring, MW-20-5, 10/26/2020 8:10:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00017	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	0.51		2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 03:29		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 10:05	11/03/20 21:08		ARD	PE-EL4	1	B091423	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-03	Client Sample Name: GW Monitoring, MW-20-4, 10/26/2020 9:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031442-03) and Client Sample Name (GW Monitoring, MW-20-4, 10/26/2020 9:00:00AM, Blaine Tech)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-03	Client Sample Name: GW Monitoring, MW-20-4, 10/26/2020 9:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 10:32	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-03	Client Sample Name: GW Monitoring, MW-20-4, 10/26/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	10:32	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-03	Client Sample Name: GW Monitoring, MW-20-4, 10/26/2020 9:00:00AM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 01:18	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-03	Client Sample Name: GW Monitoring, MW-20-4, 10/26/2020 9:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00016	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	0.82	ug/L	3.0	0.50	EPA-200.8	0.51	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 04:17		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/03/20 21:11		ARD	PE-EL4	1	B091423	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-04	Client Sample Name: GW Monitoring, MW-20-3, 10/26/2020 9:35:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-04	Client Sample Name: GW Monitoring, MW-20-3, 10/26/2020 9:35:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	0.33	ug/L	0.50	0.12	EPA-524.2	ND	J	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.42	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	0.68	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-04	Client Sample Name: GW Monitoring, MW-20-3, 10/26/2020 9:35:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 10:56	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-04	Client Sample Name: GW Monitoring, MW-20-3, 10/26/2020 9:35:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	10:56	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-04	Client Sample Name: GW Monitoring, MW-20-3, 10/26/2020 9:35:00AM, 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	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 01:35	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-04	Client Sample Name: GW Monitoring, MW-20-3, 10/26/2020 9:35:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00021	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	0.92	ug/L	3.0	0.50	EPA-200.8	0.51	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 05:05		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/03/20 21:13		ARD	PE-EL4	1	B091423	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-05	Client Sample Name: GW Monitoring, MW-20-2, 10/26/2020 10:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.41	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-05		Client Sample Name: GW Monitoring, MW-20-2, 10/26/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.24	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	0.48	ug/L	0.50	0.48	EPA-524.2	ND	J	1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-05	Client Sample Name: GW Monitoring, MW-20-2, 10/26/2020 10:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 11:21	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-05	Client Sample Name: GW Monitoring, MW-20-2, 10/26/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	11:21	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-05	Client Sample Name: GW Monitoring, MW-20-2, 10/26/2020 10:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.6	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 02:41	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-05	Client Sample Name: GW Monitoring, MW-20-2, 10/26/2020 10:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000095	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	ND	ug/L	3.0	0.50	EPA-200.8	0.51		2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 05:14		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/03/20 21:15		ARD	PE-EL4	1	B091423	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-06	Client Sample Name: GW Monitoring, DUP-1-4Q20, 10/26/2020 10:20:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	0.84	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.15	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-06	Client Sample Name: GW Monitoring, DUP-1-4Q20, 10/26/2020 10:20:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	0.23	ug/L	0.50	0.15	EPA-524.2	ND	J	1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	1.7	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	2.4	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	1.5	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	9.4	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-06	Client Sample Name: GW Monitoring, DUP-1-4Q20, 10/26/2020 10:20:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	0.13	ug/L	0.50	0.13	EPA-524.2	ND	J	1
1,2-Dichloroethane-d4 (Surrogate)	99.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 11:45	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-06	Client Sample Name: GW Monitoring, DUP-1-4Q20, 10/26/2020 10:20:00AM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	11:45	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-06	Client Sample Name: GW Monitoring, DUP-1-4Q20, 10/26/2020 10:20:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	9.8	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 02:58	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-06	Client Sample Name: GW Monitoring, DUP-1-4Q20, 10/26/2020 10:20:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00011	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 05:24		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/05/20 21:45		ARD	PE-EL2	1	B091427	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031442-07	Client Sample Name:	GW Monitoring, MW-19-5, 10/26/2020 12:40:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1	
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1	
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1	
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chloroform	1.9	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1	
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1	
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1	
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1	
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1	
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1	
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-07	Client Sample Name: GW Monitoring, MW-19-5, 10/26/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.39	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-07	Client Sample Name: GW Monitoring, MW-19-5, 10/26/2020 12:40:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 12:09	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-07	Client Sample Name: GW Monitoring, MW-19-5, 10/26/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	12:09	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-07	Client Sample Name: GW Monitoring, MW-19-5, 10/26/2020 12:40:00PM, 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	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 03:15	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-07	Client Sample Name: GW Monitoring, MW-19-5, 10/26/2020 12:40:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0024	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	2.3	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 05:33		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/05/20 22:00		ARD	PE-EL2	1	B091427	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031442-08	Client Sample Name:	GW Monitoring, MW-19-4, 10/26/2020 1:10:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1	
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1	
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1	
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chloroform	2.1	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1	
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1	
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1	
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1	
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1	
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1	
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-08		Client Sample Name: GW Monitoring, MW-19-4, 10/26/2020 1:10:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.50	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.23	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-08	Client Sample Name: GW Monitoring, MW-19-4, 10/26/2020 1:10:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 12:33	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-08	Client Sample Name: GW Monitoring, MW-19-4, 10/26/2020 1:10:00PM, 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	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 12:33	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-08	Client Sample Name: GW Monitoring, MW-19-4, 10/26/2020 1:10:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.2	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 03:31	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-08	Client Sample Name: GW Monitoring, MW-19-4, 10/26/2020 1:10:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0026	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 05:43		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/05/20 22:02		ARD	PE-EL2	1	B091427	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-09	Client Sample Name: GW Monitoring, MW-19-3, 10/26/2020 1:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	2.3	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-09	Client Sample Name: GW Monitoring, MW-19-3, 10/26/2020 1:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.90	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.38	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-09	Client Sample Name: GW Monitoring, MW-19-3, 10/26/2020 1:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.7	%	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	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 12:57	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-09	Client Sample Name: GW Monitoring, MW-19-3, 10/26/2020 1:35:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	12:57	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-09	Client Sample Name: GW Monitoring, MW-19-3, 10/26/2020 1:35:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 03:48	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-09	Client Sample Name: GW Monitoring, MW-19-3, 10/26/2020 1:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0020	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	2.7	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 05:53		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/05/20 22:04		ARD	PE-EL2	1	B091427	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031442-10							
Client Sample Name:	GW Monitoring, DUP-2-4Q20, 10/26/2020 1:45:00PM, Blaine Tech							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	1.6	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-10		Client Sample Name: GW Monitoring, DUP-2-4Q20, 10/26/2020 1:45:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.58	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.25	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-10	Client Sample Name: GW Monitoring, DUP-2-4Q20, 10/26/2020 1:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 13:21	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-10	Client Sample Name: GW Monitoring, DUP-2-4Q20, 10/26/2020 1:45:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	13:21	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-10	Client Sample Name: GW Monitoring, DUP-2-4Q20, 10/26/2020 1:45:00PM, 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 04:04	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-10	Client Sample Name: GW Monitoring, DUP-2-4Q20, 10/26/2020 1:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0022	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	2.7	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 06:02		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/05/20 22:05		ARD	PE-EL2	1	B091427	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-11	Client Sample Name: GW Monitoring, MW-19-2, 10/26/2020 2:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	1.0	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-11		Client Sample Name: GW Monitoring, MW-19-2, 10/26/2020 2:35:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.85	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.48	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-11	Client Sample Name: GW Monitoring, MW-19-2, 10/26/2020 2:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 13:46	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-11	Client Sample Name: GW Monitoring, MW-19-2, 10/26/2020 2:35:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	13:46	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-11	Client Sample Name: GW Monitoring, MW-19-2, 10/26/2020 2:35:00PM, 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 04:21	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-11	Client Sample Name: GW Monitoring, MW-19-2, 10/26/2020 2:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00043	mg/L	0.00020	0.000020	EPA-218.6	ND		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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 06:12		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 10:05	11/05/20 22:07		ARD	PE-EL2	1	B091427	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-12	Client Sample Name: GW Monitoring, MW-19-1, 10/26/2020 3:00:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	1.3	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-12	Client Sample Name: GW Monitoring, MW-19-1, 10/26/2020 3:00:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	0.37	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-12	Client Sample Name: GW Monitoring, MW-19-1, 10/26/2020 3:00:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 14:10	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-12	Client Sample Name: GW Monitoring, MW-19-1, 10/26/2020 3:00:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	14:10	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-12	Client Sample Name: GW Monitoring, MW-19-1, 10/26/2020 3:00:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 04:37	SAV	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-12	Client Sample Name: GW Monitoring, MW-19-1, 10/26/2020 3:00:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000079	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 07:00		SAV	IC-4	1	B091490	No Prep
2	EPA-200.8	11/02/20 10:05	11/05/20 22:09		ARD	PE-EL2	1	B091427	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031442-13) and Client Sample Name (GW Monitoring, EB-1-102620, 10/26/2020 5:00:00PM, Blaine Tech)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various organic compounds and their detection results.

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031442-13	Client Sample Name:	GW Monitoring, EB-1-102620, 10/26/2020 5:00:00PM, 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	0.13	EPA-524.2	ND		1	
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1	
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1	
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1	
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1	
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1	
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1	
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1	
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1	
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1	
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
Acetone	92	ug/L	10	6.6	EPA-524.2	ND		1	
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1	
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1	
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1	
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1	
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-13	Client Sample Name: GW Monitoring, EB-1-102620, 10/26/2020 5:00:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	9.4	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.3	%	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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 14:34	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-13	Client Sample Name: GW Monitoring, EB-1-102620, 10/26/2020 5:00:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	14:34	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-13	Client Sample Name: GW Monitoring, EB-1-102620, 10/26/2020 5:00:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 15:30	KB1	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-13	Client Sample Name: GW Monitoring, EB-1-102620, 10/26/2020 5:00:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00018	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 06:41		SAV	IC-4	1	B091490	No Prep
2	EPA-200.8	11/02/20 10:05	11/05/20 22:11		ARD	PE-EL2	1	B091427	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-14	Client Sample Name: GW Monitoring, SB-1-102620, 10/26/2020 2:50:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-14	Client Sample Name: GW Monitoring, SB-1-102620, 10/26/2020 2:50:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	82	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031442-14	Client Sample Name: GW Monitoring, SB-1-102620, 10/26/2020 2:50:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	9.7	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20 14:58	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031442-14	Client Sample Name: GW Monitoring, SB-1-102620, 10/26/2020 2:50:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/29/20 06:00	10/29/20	14:58	MGC	MS-V5	1	B091109	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031442-14	Client Sample Name: GW Monitoring, SB-1-102620, 10/26/2020 2:50:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/04/20 22:00	11/05/20 15:47	KB1	IC6	1	B091807	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031442-14	Client Sample Name: GW Monitoring, SB-1-102620, 10/26/2020 2:50:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00016	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	0.55	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 06:50		SAV	IC-4	1	B091490	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 22:37		ARD	PE-EL2	1	B091465	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091109						
Benzene	B091109-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091109-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091109-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091109-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091109-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091109-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091109-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091109-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091109-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091109-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091109-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091109-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091109-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091109-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091109-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091109-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B091109-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091109-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091109-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091109-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091109-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091109-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091109-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091109-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091109-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091109-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091109-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091109-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091109-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091109-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091109-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091109-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091109-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091109-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091109						
trans-1,3-Dichloropropene	B091109-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091109-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091109-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091109-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091109-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091109-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091109-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091109-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091109-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091109-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091109-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2-Tetrachloroethane	B091109-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091109-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091109-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091109-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091109-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B091109-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B091109-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B091109-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B091109-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B091109-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B091109-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B091109-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B091109-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B091109-BLK1	ND	ug/L	0.50	0.18	
Acetone	B091109-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B091109-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B091109-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B091109-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B091109-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B091109-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B091109-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B091109-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B091109-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091109						
Ethyl t-butyl ether	B091109-BLK1	ND	ug/L	0.50	0.32	
Hexachloroethane	B091109-BLK1	ND	ug/L	0.50	0.11	
2-Hexanone	B091109-BLK1	ND	ug/L	10	5.0	
Methacrylonitrile	B091109-BLK1	ND	ug/L	10	2.3	
Methyl ethyl ketone	B091109-BLK1	ND	ug/L	5.0	3.3	
Methyl iodide	B091109-BLK1	ND	ug/L	2.0	1.1	
Methyl isobutyl ketone	B091109-BLK1	ND	ug/L	5.0	2.4	
Methyl methacrylate	B091109-BLK1	ND	ug/L	5.0	1.2	
Pentachloroethane	B091109-BLK1	ND	ug/L	2.0	0.63	
Propionitrile	B091109-BLK1	ND	ug/L	20	6.2	
Tetrahydrofuran	B091109-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	B091109-BLK1	ND	ug/L	0.50	0.34	
o-Xylene	B091109-BLK1	ND	ug/L	0.50	0.13	
1,2-Dichloroethane-d4 (Surrogate)	B091109-BLK1	91.1	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B091109-BLK1	98.5	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B091109-BLK1	98.1	%	80 - 120 (LCL - UCL)		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B091109										
Benzene	B091109-BS1	LCS	23.990	25.000	ug/L	96.0		70 - 130		
Bromodichloromethane	B091109-BS1	LCS	23.800	25.000	ug/L	95.2		70 - 130		
Chlorobenzene	B091109-BS1	LCS	23.760	25.000	ug/L	95.0		70 - 130		
Chloroethane	B091109-BS1	LCS	25.770	25.000	ug/L	103		70 - 130		
1,4-Dichlorobenzene	B091109-BS1	LCS	23.660	25.000	ug/L	94.6		70 - 130		
1,1-Dichloroethane	B091109-BS1	LCS	24.120	25.000	ug/L	96.5		70 - 130		
1,1-Dichloroethene	B091109-BS1	LCS	24.520	25.000	ug/L	98.1		70 - 130		
Toluene	B091109-BS1	LCS	23.890	25.000	ug/L	95.6		70 - 130		
Trichloroethene	B091109-BS1	LCS	22.600	25.000	ug/L	90.4		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091109-BS1	LCS	9.2400	10.000	ug/L	92.4		75 - 125		
Toluene-d8 (Surrogate)	B091109-BS1	LCS	9.8200	10.000	ug/L	98.2		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091109-BS1	LCS	10.030	10.000	ug/L	100		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B091109		Used client sample: Y - Description: MW-20-5, 10/26/2020 08:10								
Benzene	MS	2031442-02	ND	24.480	25.000	ug/L		97.9		70 - 130
	MSD	2031442-02	ND	24.620	25.000	ug/L	0.6	98.5	20	70 - 130
Bromodichloromethane	MS	2031442-02	ND	24.670	25.000	ug/L		98.7		70 - 130
	MSD	2031442-02	ND	24.250	25.000	ug/L	1.7	97.0	20	70 - 130
Chlorobenzene	MS	2031442-02	ND	24.310	25.000	ug/L		97.2		70 - 130
	MSD	2031442-02	ND	23.690	25.000	ug/L	2.6	94.8	20	70 - 130
Chloroethane	MS	2031442-02	ND	26.090	25.000	ug/L		104		70 - 130
	MSD	2031442-02	ND	26.130	25.000	ug/L	0.2	105	20	70 - 130
1,4-Dichlorobenzene	MS	2031442-02	ND	24.020	25.000	ug/L		96.1		70 - 130
	MSD	2031442-02	ND	23.230	25.000	ug/L	3.3	92.9	20	70 - 130
1,1-Dichloroethane	MS	2031442-02	ND	24.620	25.000	ug/L		98.5		70 - 130
	MSD	2031442-02	ND	24.650	25.000	ug/L	0.1	98.6	20	70 - 130
1,1-Dichloroethene	MS	2031442-02	ND	25.360	25.000	ug/L		101		70 - 130
	MSD	2031442-02	ND	25.130	25.000	ug/L	0.9	101	20	70 - 130
Toluene	MS	2031442-02	ND	25.120	25.000	ug/L		100		70 - 130
	MSD	2031442-02	ND	24.550	25.000	ug/L	2.3	98.2	20	70 - 130
Trichloroethene	MS	2031442-02	ND	23.720	25.000	ug/L		94.9		70 - 130
	MSD	2031442-02	ND	23.520	25.000	ug/L	0.8	94.1	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2031442-02	ND	9.1100	10.000	ug/L		91.1		75 - 125
	MSD	2031442-02	ND	9.2800	10.000	ug/L	1.8	92.8		75 - 125
Toluene-d8 (Surrogate)	MS	2031442-02	ND	9.7600	10.000	ug/L		97.6		80 - 120
	MSD	2031442-02	ND	9.9300	10.000	ug/L	1.7	99.3		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2031442-02	ND	9.5600	10.000	ug/L		95.6		80 - 120
	MSD	2031442-02	ND	9.4600	10.000	ug/L	1.1	94.6		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091109						
Chloroacetonitrile	B091109-BLK1	0	ug/L			
1-Chlorobutane	B091109-BLK1	0	ug/L			
1,1-Dichloropropanone	B091109-BLK1	0	ug/L			
Methyl acrylate	B091109-BLK1	0	ug/L			
Nitrobenzene	B091109-BLK1	0	ug/L			
2-Nitropropane	B091109-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091807						
Perchlorate	B091807-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091807										
Perchlorate	B091807-BS1	LCS	9.6769	10.000	ug/L	96.8		85	115	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
QC Batch ID: B091807		Used client sample: Y - Description: MW-20-5, 10/26/2020 08:10								
Perchlorate	DUP	2031442-02	ND	ND		ug/L			15	
	MS	2031442-02	ND	10.141	10.101	ug/L		100		80 - 120
	MSD	2031442-02	ND	10.298	10.101	ug/L	1.5	102	15	80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091423						
Total Recoverable Chromium	B091423-BLK1	0.51100	ug/L	3.0	0.50	J
QC Batch ID: B091427						
Total Recoverable Chromium	B091427-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B091465						
Total Recoverable Chromium	B091465-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B091488						
Hexavalent Chromium	B091488-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B091489						
Hexavalent Chromium	B091489-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B091490						
Hexavalent Chromium	B091490-BLK1	ND	mg/L	0.00020	0.000020	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091423										
Total Recoverable Chromium	B091423-BS1	LCS	41.082	40.000	ug/L	103		85	115	
QC Batch ID: B091427										
Total Recoverable Chromium	B091427-BS1	LCS	43.739	40.000	ug/L	109		85	115	
QC Batch ID: B091465										
Total Recoverable Chromium	B091465-BS1	LCS	44.490	40.000	ug/L	111		85	115	
QC Batch ID: B091488										
Hexavalent Chromium	B091488-BS1	LCS	0.020509	0.020000	mg/L	103		90	110	
QC Batch ID: B091489										
Hexavalent Chromium	B091489-BS1	LCS	0.020632	0.020000	mg/L	103		90	110	
QC Batch ID: B091490										
Hexavalent Chromium	B091490-BS1	LCS	0.020557	0.020000	mg/L	103		90	110	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	Percent Recovery	
QC Batch ID: B091423		Used client sample: N								
Total Recoverable Chromium	DUP	2031413-01	3.2380	2.4700		ug/L	26.9		20	J,A02
	MS	2031413-01	3.2380	41.447	40.000	ug/L		95.5	70 - 130	
	MSD	2031413-01	3.2380	43.258	40.000	ug/L	4.3	100	20 70 - 130	
QC Batch ID: B091427		Used client sample: Y - Description: DUP-1-4Q20, 10/26/2020 10:20								
Total Recoverable Chromium	DUP	2031442-06	1.6430	1.6110		ug/L	2.0		20	J
	MS	2031442-06	1.6430	42.642	40.000	ug/L		102	70 - 130	
	MSD	2031442-06	1.6430	43.586	40.000	ug/L	2.2	105	20 70 - 130	
QC Batch ID: B091465		Used client sample: N								
Total Recoverable Chromium	DUP	2031578-04	ND	0.59500		ug/L			20	J
	MS	2031578-04	ND	38.888	40.000	ug/L		97.2	70 - 130	
	MSD	2031578-04	ND	38.551	40.000	ug/L	0.9	96.4	20 70 - 130	
QC Batch ID: B091488		Used client sample: N								
Hexavalent Chromium	DUP	2031578-04	0.00040800	0.00038500		mg/L	5.8		10	
	MS	2031578-04	0.00040800	0.019962	0.020202	mg/L		96.8	90 - 110	
	MSD	2031578-04	0.00040800	0.020748	0.020202	mg/L	3.9	101	10 90 - 110	
QC Batch ID: B091489		Used client sample: N								
Hexavalent Chromium	DUP	2031578-07	0.00071800	0.00072100		mg/L	0.4		10	
	MS	2031578-07	0.00071800	0.020942	0.020202	mg/L		100	90 - 110	
	MSD	2031578-07	0.00071800	0.020273	0.020202	mg/L	3.2	96.8	10 90 - 110	
QC Batch ID: B091490		Used client sample: Y - Description: MW-19-1, 10/26/2020 15:00								
Hexavalent Chromium	DUP	2031442-12	0.000079000	0.000080000		mg/L	1.3		10	J
	MS	2031442-12	0.000079000	0.019073	0.020202	mg/L		94.0	90 - 110	
	MSD	2031442-12	0.000079000	0.019630	0.020202	mg/L	2.9	96.8	10 90 - 110	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/12/2020 19:34
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 11/16/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive
Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2031578

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 10/27/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Stuart Buttram
Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	7

Sample Results

2031578-01 - TB-2-102720	
Volatile Organic Analysis (EPA Method 524.2).....	11
Volatile Organic Analysis (EPA Method 524.2) TICs.....	14
2031578-02 - MW-14-5	
Volatile Organic Analysis (EPA Method 524.2).....	15
Volatile Organic Analysis (EPA Method 524.2) TICs.....	18
Water Analysis (General Chemistry).....	19
Metals Analysis.....	20
2031578-03 - MW-14-4	
Volatile Organic Analysis (EPA Method 524.2).....	21
Volatile Organic Analysis (EPA Method 524.2) TICs.....	24
Water Analysis (General Chemistry).....	25
Metals Analysis.....	26
2031578-04 - MW-14-3	
Volatile Organic Analysis (EPA Method 524.2).....	27
Volatile Organic Analysis (EPA Method 524.2) TICs.....	30
Water Analysis (General Chemistry).....	31
Metals Analysis.....	32
2031578-05 - MW-14-2	
Volatile Organic Analysis (EPA Method 524.2).....	33
Volatile Organic Analysis (EPA Method 524.2) TICs.....	36
Water Analysis (General Chemistry).....	37
Metals Analysis.....	38
2031578-06 - MW-25-5	
Volatile Organic Analysis (EPA Method 524.2).....	39
Volatile Organic Analysis (EPA Method 524.2) TICs.....	42
Water Analysis (General Chemistry).....	43
Metals Analysis.....	44
2031578-07 - MW-25-4	
Volatile Organic Analysis (EPA Method 524.2).....	45
Volatile Organic Analysis (EPA Method 524.2) TICs.....	48
Water Analysis (General Chemistry).....	49
Metals Analysis.....	50
2031578-08 - MW-25-3	
Volatile Organic Analysis (EPA Method 524.2).....	51
Volatile Organic Analysis (EPA Method 524.2) TICs.....	54
Water Analysis (General Chemistry).....	55
Metals Analysis.....	56
2031578-09 - MW-25-2	
Volatile Organic Analysis (EPA Method 524.2).....	57
Volatile Organic Analysis (EPA Method 524.2) TICs.....	60
Water Analysis (General Chemistry).....	61
Metals Analysis.....	62
2031578-10 - MW-25-1	
Volatile Organic Analysis (EPA Method 524.2).....	63
Volatile Organic Analysis (EPA Method 524.2) TICs.....	66
Water Analysis (General Chemistry).....	67
Metals Analysis.....	68
2031578-11 - EB-2-102720	
Volatile Organic Analysis (EPA Method 524.2).....	69

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.



Table of Contents

Volatile Organic Analysis (EPA Method 524.2) TICs.....	72
Water Analysis (General Chemistry).....	73
Metals Analysis.....	74
Quality Control Reports	
Volatile Organic Analysis (EPA Method 524.2)	
Method Blank Analysis.....	75
Laboratory Control Sample.....	80
Precision and Accuracy.....	81
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	83
Water Analysis (General Chemistry)	
Method Blank Analysis.....	84
Laboratory Control Sample.....	85
Precision and Accuracy.....	86
Metals Analysis	
Method Blank Analysis.....	87
Laboratory Control Sample.....	88
Precision and Accuracy.....	89
Notes	
Notes and Definitions.....	90



Chain of Custody Form



Page 1 of 1

2031578

Report To: Tidewater, Inc.
 Client: David Conner
 Attn: David Conner
 Street Address: 3761 Allucks Drive
 City: Powell State: OH Zip: 43085
 Phone: 628 1288 Fax: 614 792-2887
 Email Address: david.conner@tlden2o.net

Project Description: JPL-GW Monitoring
 Project Code: 4020
 Sampler(s): Blaine Tech

Analysis Requested:
 VOCs EPA 524.2
 TRM: Cr
 Perchlorate
 Hexavalent Cr6 - 218.6 (mg/L)
 Cl, NO3, NO2, SO4
 Orthophosphate 365.1

Billing:
 Client: Tidewater
 Attn: David Conner
 Address: 3761 Allucks Drive
 City: Powell State: OH Zip: 43085
 Are there any tests with holding times?
 Yes No
 *Standard Turnaround = 10

Sample #	Sample Description	Date	Time	Matrix*
-1	TB-2-102720	10/27/20	0700	GW
-2	MW-14-5	10/27/20	0748	GW
-3	MW-14-4	10/27/20	0816	GW
-4	MW-14-3	10/27/20	0855	GW
-5	MW-14-2	10/27/20	1000	GW
-6	MW-25-5	10/27/20	1135	GW
-7	MW-25-4	10/27/20	1152	GW
-8	MW-25-3	10/27/20	1310	GW
-9	MW-25-2	10/27/20	1345	GW
-10	MW-25-1	10/27/20	1414	GW
-11	EB-2-102720	10/27/20	1445	GW

Notes:
 MS/MSD + level 4
 MS/MSD + level 4 (F14)

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

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

Lab TAT Approval: _____ * Additional Charges May Apply

Comments:
 PLEASE NOTATE WHICH SAMPLES TO USE FOR
 OC (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: [Signature] Date: 10/27/20 Time: 1520
 2. Relinquishing By: [Signature] Date: 10-27-20 Time: 1055
 3. Relinquishing By: [Signature] Date: 10-27-20 Time: 2055

Global ID: [Signature] Date: 10-27-20 Time: 1520

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

TRIBUTION

SHORT HOLDING TIME

DO Cl₂ BOD MBAS COT

NO₂ NO₃ OP SS

SUB OUT



BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 Of 2

Submission #: 20-31578

SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/> W / S
--	--	--	--	--

Refrigerant: Ice Blue Ice None Other Comments: _____

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

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

COC Received YES NO Emissivity: 298 Container: PE Thermometer ID: 208 Date/Time: 10/27/20
 Temperature: (A) .5 °C / (C) .3 °C Analyst Init: BS

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES		D	D	GH	D	D	GH	D		
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁴		F	F	KL	F	F	KL	F		
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz		E	E	IS	E	E	SI	E		
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A									
40ml VOA VIAL		ABC	ABC	A-F	ABC	ABC	A-F	ABC		
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 505/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 801SM										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____
 Sample Numbering Completed By: CM Date/Time: 10/28/20 1000
 A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Page 3 of 3

Submission #: 20-31578

SHIPPING INFORMATION: Fed Ex UPS Ontrac Hand Delivery BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER: Ice Chest None Box Other (Specify) _____

FREE LIQUID: YES NO W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

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

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

COC Received: YES NO Emissivity: 0.98 Container: PE Thermometer ID: 200 Date/Time: 10/29/20 Analyst Init: GSP

Temperature: (A) 8 °C / (C) 46 °C

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES								D	D	D
4oz / 8oz / 16oz PE UNPRES								F	F	F
2oz Cr ⁶⁺								E	E	E
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL								ABC	ABC	ABC
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/603/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: Amz Date/Time: 10/29/20 1000 Rev 21 05/23/2016

A = Actual / C = Corrected

IS/AN/P/Dev/Were/Perfect/LAB_DOC/SIFORMS/GAMREC/Dev 20



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031578-01	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: TB-2-102720 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Trip Blank Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-2-102720 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	--

2031578-02	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-14-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 07:48 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031578-03	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-14-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 08:16 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031578-04	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-14-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 08:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031578-05	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-14-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 10:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-14-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031578-06	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-25-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 11:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031578-07	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-25-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 11:52 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031578-08	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-25-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 13:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031578-09	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-25-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 13:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031578-10	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-25-1 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 14:14 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-25-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031578-11	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: EB-2-102720 Sampled By: Blaine Tech of BTST	Receive Date: 10/27/2020 20:55 Sampling Date: 10/27/2020 14:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-2-102720 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-01	Client Sample Name: NASA/JPL, TB-2-102720, 10/27/2020 7:00:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-01	Client Sample Name: NASA/JPL, TB-2-102720, 10/27/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-01	Client Sample Name: NASA/JPL, TB-2-102720, 10/27/2020 7:00:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.0	%	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	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 09:24	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-01	Client Sample Name: NASA/JPL, TB-2-102720, 10/27/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	09:24	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-02 Client Sample Name: NASA/JPL, MW-14-5, 10/27/2020 7:48:00AM, Blaine Tech

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various organic compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-02 Client Sample Name: NASA/JPL, MW-14-5, 10/27/2020 7:48:00AM, Blaine Tech

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-02 Client Sample Name: NASA/JPL, MW-14-5, 10/27/2020 7:48:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 09:48	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-02	Client Sample Name: NASA/JPL, MW-14-5, 10/27/2020 7:48:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	09:48	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-02	Client Sample Name: NASA/JPL, MW-14-5, 10/27/2020 7:48:00AM, 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	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 03:16	CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-02	Client Sample Name: NASA/JPL, MW-14-5, 10/27/2020 7:48:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00031	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 01:53		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 23:15		ARD	PE-EL2	1	B091466	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-03 **Client Sample Name:** NASA/JPL, MW-14-4, 10/27/2020 8:16:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.36	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	0.22	ug/L	0.50	0.16	EPA-524.2	ND	J	1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.22	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-03 Client Sample Name: NASA/JPL, MW-14-4, 10/27/2020 8:16:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.41	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.46	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-03 **Client Sample Name:** NASA/JPL, MW-14-4, 10/27/2020 8:16:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 10:12	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-03	Client Sample Name: NASA/JPL, MW-14-4, 10/27/2020 8:16:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	10:12	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-03	Client Sample Name: NASA/JPL, MW-14-4, 10/27/2020 8:16:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	4.7	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 03:33	CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-03	Client Sample Name: NASA/JPL, MW-14-4, 10/27/2020 8:16:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0026	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 02:02		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 23:17		ARD	PE-EL2	1	B091466	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-04 **Client Sample Name:** NASA/JPL, MW-14-3, 10/27/2020 8:55:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.39	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.27	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-04 Client Sample Name: NASA/JPL, MW-14-3, 10/27/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.51	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.78	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-04 **Client Sample Name:** NASA/JPL, MW-14-3, 10/27/2020 8:55:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 07:00	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-04	Client Sample Name: NASA/JPL, MW-14-3, 10/27/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	07:00	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-04	Client Sample Name: NASA/JPL, MW-14-3, 10/27/2020 8:55:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	4.7	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 02:11	CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-04	Client Sample Name: NASA/JPL, MW-14-3, 10/27/2020 8:55:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00041	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 01:14		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 22:23		ARD	PE-EL2	1	B091465	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031578-05) and Client Sample Name (NASA/JPL, MW-14-2, 10/27/2020 10:00:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various organic compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-05		Client Sample Name: NASA/JPL, MW-14-2, 10/27/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.27	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	1.2	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-05	Client Sample Name: NASA/JPL, MW-14-2, 10/27/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 10:36	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-05	Client Sample Name: NASA/JPL, MW-14-2, 10/27/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	10:36	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-05	Client Sample Name: NASA/JPL, MW-14-2, 10/27/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	3.8	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 04:39	CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-05	Client Sample Name: NASA/JPL, MW-14-2, 10/27/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00064	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	0.57	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 02:12		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 23:19		ARD	PE-EL2	1	B091466	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-06		Client Sample Name: NASA/JPL, MW-25-5, 10/27/2020 11:35:00AM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031578-06) and Client Sample Name (NASA/JPL, MW-25-5, 10/27/2020 11:35:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-06	Client Sample Name: NASA/JPL, MW-25-5, 10/27/2020 11:35:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 11:00	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-06	Client Sample Name: NASA/JPL, MW-25-5, 10/27/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	11:00	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-06	Client Sample Name: NASA/JPL, MW-25-5, 10/27/2020 11:35:00AM, 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	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 04:56		CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-06	Client Sample Name: NASA/JPL, MW-25-5, 10/27/2020 11:35:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00012	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	0.62	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 02:22		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 23:20		ARD	PE-EL2	1	B091466	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-07 Client Sample Name: NASA/JPL, MW-25-4, 10/27/2020 11:52:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031578-07) and Client Sample Name (NASA/JPL, MW-25-4, 10/27/2020 11:52:00AM, Blaine Tech)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-07	Client Sample Name: NASA/JPL, MW-25-4, 10/27/2020 11:52:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 11:15	10/30/20 13:25	MGC	MS-V5	1	B091237	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-07	Client Sample Name: NASA/JPL, MW-25-4, 10/27/2020 11:52:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 11:15	10/30/20	13:25	MGC	MS-V5	1	B091237	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-07	Client Sample Name: NASA/JPL, MW-25-4, 10/27/2020 11:52:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	8.5	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 15:06	CMM	IC6	1	B092032	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-07	Client Sample Name: NASA/JPL, MW-25-4, 10/27/2020 11:52:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00072	mg/L	0.00020	0.000020	EPA-218.6	ND		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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 03:38		SAV	IC-4	1	B091489	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 22:59		ARD	PE-EL2	1	B091466	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-08 **Client Sample Name:** NASA/JPL, MW-25-3, 10/27/2020 1:10:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.32	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-08 Client Sample Name: NASA/JPL, MW-25-3, 10/27/2020 1:10:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.60	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-08 **Client Sample Name:** NASA/JPL, MW-25-3, 10/27/2020 1:10:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 11:24	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-08	Client Sample Name: NASA/JPL, MW-25-3, 10/27/2020 1:10:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	11:24	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-08	Client Sample Name: NASA/JPL, MW-25-3, 10/27/2020 1:10:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	9.8	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 05:12	CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-08	Client Sample Name: NASA/JPL, MW-25-3, 10/27/2020 1:10:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0030	mg/L	0.00020	0.000020	EPA-218.6	ND		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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 02:50		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 23:22		ARD	PE-EL2	1	B091466	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-09 Client Sample Name: NASA/JPL, MW-25-2, 10/27/2020 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.27	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-09 Client Sample Name: NASA/JPL, MW-25-2, 10/27/2020 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.45	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.33	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-09 **Client Sample Name:** NASA/JPL, MW-25-2, 10/27/2020 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.9	%	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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 11:49	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-09	Client Sample Name: NASA/JPL, MW-25-2, 10/27/2020 1:45:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	11:49	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-09	Client Sample Name: NASA/JPL, MW-25-2, 10/27/2020 1:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	12	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 05:28	CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-09	Client Sample Name: NASA/JPL, MW-25-2, 10/27/2020 1:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0018	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 03:00		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 23:24		ARD	PE-EL2	1	B091466	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-10 Client Sample Name: NASA/JPL, MW-25-1, 10/27/2020 2:14:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.83	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-10	Client Sample Name: NASA/JPL, MW-25-1, 10/27/2020 2:14:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	0.53	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	1.7	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-10	Client Sample Name: NASA/JPL, MW-25-1, 10/27/2020 2:14:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.3	%	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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 12:13	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-10	Client Sample Name: NASA/JPL, MW-25-1, 10/27/2020 2:14:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	12:13	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-10	Client Sample Name: NASA/JPL, MW-25-1, 10/27/2020 2:14:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	6.8	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 05:45		CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-10	Client Sample Name: NASA/JPL, MW-25-1, 10/27/2020 2:14:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00066	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 03:10		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 23:26		ARD	PE-EL2	1	B091466	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-11	Client Sample Name: NASA/JPL, EB-2-102720, 10/27/2020 2:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-11 **Client Sample Name:** NASA/JPL, EB-2-102720, 10/27/2020 2:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	82	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031578-11	Client Sample Name: NASA/JPL, EB-2-102720, 10/27/2020 2:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	9.2	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20 12:37	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031578-11	Client Sample Name: NASA/JPL, EB-2-102720, 10/27/2020 2:45:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	10/30/20 06:00	10/30/20	12:37	MGC	MS-V5	1	B091236	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031578-11	Client Sample Name: NASA/JPL, EB-2-102720, 10/27/2020 2:45:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/05/20 22:00	11/06/20 04:23	CMM	IC6	1	B092031	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031578-11	Client Sample Name: NASA/JPL, EB-2-102720, 10/27/2020 2:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00015	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 03:19		SAV	IC-4	1	B091488	No Prep
2	EPA-200.8	11/02/20 17:15	11/05/20 23:27		ARD	PE-EL2	1	B091466	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091236						
Benzene	B091236-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091236-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091236-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091236-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091236-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091236-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091236-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091236-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091236-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091236-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091236-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091236-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091236-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091236-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091236-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091236-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B091236-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091236-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091236-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091236-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091236-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091236-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091236-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091236-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091236-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091236-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091236-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091236-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091236-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091236-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091236-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091236-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091236-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091236-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091236						
trans-1,3-Dichloropropene	B091236-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091236-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091236-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091236-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091236-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091236-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091236-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091236-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091236-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091236-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091236-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B091236-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091236-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091236-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091236-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091236-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B091236-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B091236-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B091236-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B091236-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B091236-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B091236-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B091236-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B091236-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B091236-BLK1	ND	ug/L	0.50	0.18	
Acetone	B091236-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B091236-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B091236-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B091236-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B091236-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B091236-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B091236-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B091236-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B091236-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Table with 7 columns: Constituent, QC Sample ID, MB Result, Units, PQL, MDL, Lab Quals. Includes two sections for QC Batch IDs B091236 and B091237 with various chemical constituents and their results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091237						
Dibromochloromethane	B091237-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091237-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091237-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091237-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091237-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091237-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091237-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091237-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091237-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091237-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091237-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091237-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091237-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091237-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091237-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091237-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091237-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091237-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	B091237-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091237-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091237-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091237-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091237-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091237-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091237-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091237-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091237-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091237-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091237-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B091237-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091237-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091237-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091237-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091237-BLK1	ND	ug/L	0.50	0.15	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Table with 7 columns: Constituent, QC Sample ID, MB Result, Units, PQL, MDL, Lab Quals. Includes a QC Batch ID: B091237 and a list of 30 chemical constituents with their respective results and limits.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B091236										
Benzene	B091236-BS1	LCS	24.770	25.000	ug/L	99.1		70 - 130		
Bromodichloromethane	B091236-BS1	LCS	24.380	25.000	ug/L	97.5		70 - 130		
Chlorobenzene	B091236-BS1	LCS	24.500	25.000	ug/L	98.0		70 - 130		
Chloroethane	B091236-BS1	LCS	25.950	25.000	ug/L	104		70 - 130		
1,4-Dichlorobenzene	B091236-BS1	LCS	23.640	25.000	ug/L	94.6		70 - 130		
1,1-Dichloroethane	B091236-BS1	LCS	25.580	25.000	ug/L	102		70 - 130		
1,1-Dichloroethene	B091236-BS1	LCS	25.920	25.000	ug/L	104		70 - 130		
Toluene	B091236-BS1	LCS	24.680	25.000	ug/L	98.7		70 - 130		
Trichloroethene	B091236-BS1	LCS	24.270	25.000	ug/L	97.1		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091236-BS1	LCS	9.0800	10.000	ug/L	90.8		75 - 125		
Toluene-d8 (Surrogate)	B091236-BS1	LCS	10.000	10.000	ug/L	100		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091236-BS1	LCS	9.9000	10.000	ug/L	99.0		80 - 120		

QC Batch ID: B091237										
Benzene	B091237-BS1	LCS	24.570	25.000	ug/L	98.3		70 - 130		
Bromodichloromethane	B091237-BS1	LCS	24.590	25.000	ug/L	98.4		70 - 130		
Chlorobenzene	B091237-BS1	LCS	23.810	25.000	ug/L	95.2		70 - 130		
Chloroethane	B091237-BS1	LCS	26.570	25.000	ug/L	106		70 - 130		
1,4-Dichlorobenzene	B091237-BS1	LCS	23.160	25.000	ug/L	92.6		70 - 130		
1,1-Dichloroethane	B091237-BS1	LCS	25.280	25.000	ug/L	101		70 - 130		
1,1-Dichloroethene	B091237-BS1	LCS	25.970	25.000	ug/L	104		70 - 130		
Toluene	B091237-BS1	LCS	23.980	25.000	ug/L	95.9		70 - 130		
Trichloroethene	B091237-BS1	LCS	24.790	25.000	ug/L	99.2		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091237-BS1	LCS	9.6500	10.000	ug/L	96.5		75 - 125		
Toluene-d8 (Surrogate)	B091237-BS1	LCS	9.9900	10.000	ug/L	99.9		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091237-BS1	LCS	9.9700	10.000	ug/L	99.7		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Qualls. Includes QC Batch ID: B091236 and Used client sample: Y - Description: MW-14-3, 10/27/2020 08:55.

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Qualls. Includes QC Batch ID: B091237 and Used client sample: Y - Description: MW-25-4, 10/27/2020 11:52.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab Quals
								Percent Recovery	Percent Recovery	
QC Batch ID: B091237		Used client sample: Y - Description: MW-25-4, 10/27/2020 11:52								
1,1-Dichloroethene	MS	2031578-07	ND	25.680	25.000	ug/L		103		70 - 130
	MSD	2031578-07	ND	25.230	25.000	ug/L	1.8	101	20	70 - 130
Toluene	MS	2031578-07	ND	24.400	25.000	ug/L		97.6		70 - 130
	MSD	2031578-07	ND	24.170	25.000	ug/L	0.9	96.7	20	70 - 130
Trichloroethene	MS	2031578-07	ND	23.870	25.000	ug/L		95.5		70 - 130
	MSD	2031578-07	ND	24.080	25.000	ug/L	0.9	96.3	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2031578-07	ND	9.8300	10.000	ug/L		98.3		75 - 125
	MSD	2031578-07	ND	9.5600	10.000	ug/L	2.8	95.6		75 - 125
Toluene-d8 (Surrogate)	MS	2031578-07	ND	9.8100	10.000	ug/L		98.1		80 - 120
	MSD	2031578-07	ND	9.8300	10.000	ug/L	0.2	98.3		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2031578-07	ND	10.000	10.000	ug/L		100		80 - 120
	MSD	2031578-07	ND	9.8900	10.000	ug/L	1.1	98.9		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091236						
Chloroacetonitrile	B091236-BLK1	0	ug/L			
1-Chlorobutane	B091236-BLK1	0	ug/L			
1,1-Dichloropropanone	B091236-BLK1	0	ug/L			
Methyl acrylate	B091236-BLK1	0	ug/L			
Nitrobenzene	B091236-BLK1	0	ug/L			
2-Nitropropane	B091236-BLK1	0	ug/L			
QC Batch ID: B091237						
Chloroacetonitrile	B091237-BLK1	0	ug/L			
1-Chlorobutane	B091237-BLK1	0	ug/L			
1,1-Dichloropropanone	B091237-BLK1	0	ug/L			
Methyl acrylate	B091237-BLK1	0	ug/L			
Nitrobenzene	B091237-BLK1	0	ug/L			
2-Nitropropane	B091237-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092031						
Perchlorate	B092031-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: B092032						
Perchlorate	B092032-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Quals
								Percent Recovery	RPD		
QC Batch ID: B092031											
Perchlorate	B092031-BS1	LCS	9.4916	10.000	ug/L	94.9		85	115		
QC Batch ID: B092032											
Perchlorate	B092032-BS1	LCS	10.021	10.000	ug/L	100		85	115		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
QC Batch ID: B092031		Used client sample: Y - Description: MW-14-3, 10/27/2020 08:55								
Perchlorate	DUP	2031578-04	4.7103	4.8381		ug/L	2.7		15	
	MS	2031578-04	4.7103	14.291	10.101	ug/L		94.9	80 - 120	
	MSD	2031578-04	4.7103	14.637	10.101	ug/L	2.4	98.3	15 80 - 120	
QC Batch ID: B092032		Used client sample: Y - Description: MW-25-4, 10/27/2020 11:52								
Perchlorate	DUP	2031578-07	8.5081	8.3575		ug/L	1.8		15	
	MS	2031578-07	8.5081	18.011	10.000	ug/L		95.0	80 - 120	
	MSD	2031578-07	8.5081	18.261	10.101	ug/L	1.4	96.6	15 80 - 120	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091465						
Total Recoverable Chromium	B091465-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B091466						
Total Recoverable Chromium	B091466-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B091488						
Hexavalent Chromium	B091488-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B091489						
Hexavalent Chromium	B091489-BLK1	ND	mg/L	0.00020	0.000020	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091465										
Total Recoverable Chromium	B091465-BS1	LCS	44.490	40.000	ug/L	111		85 - 115		
QC Batch ID: B091466										
Total Recoverable Chromium	B091466-BS1	LCS	40.350	40.000	ug/L	101		85 - 115		
QC Batch ID: B091488										
Hexavalent Chromium	B091488-BS1	LCS	0.020509	0.020000	mg/L	103		90 - 110		
QC Batch ID: B091489										
Hexavalent Chromium	B091489-BS1	LCS	0.020632	0.020000	mg/L	103		90 - 110		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	Percent Recovery	
QC Batch ID: B091465		Used client sample: Y - Description: MW-14-3, 10/27/2020 08:55								
Total Recoverable Chromium	DUP	2031578-04	ND	0.59500		ug/L			20	J
	MS	2031578-04	ND	38.888	40.000	ug/L		97.2	70 - 130	
	MSD	2031578-04	ND	38.551	40.000	ug/L	0.9	96.4	20 70 - 130	
QC Batch ID: B091466		Used client sample: Y - Description: MW-25-4, 10/27/2020 11:52								
Total Recoverable Chromium	DUP	2031578-07	1.4240	1.6430		ug/L	14.3		20	J
	MS	2031578-07	1.4240	41.304	40.000	ug/L		99.7	70 - 130	
	MSD	2031578-07	1.4240	43.314	40.000	ug/L	4.8	105	20 70 - 130	
QC Batch ID: B091488		Used client sample: Y - Description: MW-14-3, 10/27/2020 08:55								
Hexavalent Chromium	DUP	2031578-04	0.00040800	0.00038500		mg/L	5.8		10	
	MS	2031578-04	0.00040800	0.019962	0.020202	mg/L		96.8	90 - 110	
	MSD	2031578-04	0.00040800	0.020748	0.020202	mg/L	3.9	101	10 90 - 110	
QC Batch ID: B091489		Used client sample: Y - Description: MW-25-4, 10/27/2020 11:52								
Hexavalent Chromium	DUP	2031578-07	0.00071800	0.00072100		mg/L	0.4		10	
	MS	2031578-07	0.00071800	0.020942	0.020202	mg/L		100	90 - 110	
	MSD	2031578-07	0.00071800	0.020273	0.020202	mg/L	3.2	96.8	10 90 - 110	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 15:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 11/16/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive

Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2031670

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 10/28/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda

Client Service Rep

Stuart Buttram

Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	9

Sample Results

2031670-01 - TB-3-102820	
Volatile Organic Analysis (EPA Method 524.2).....	14
Volatile Organic Analysis (EPA Method 524.2) TICs.....	17
2031670-02 - MW-22-5	
Volatile Organic Analysis (EPA Method 524.2).....	18
Volatile Organic Analysis (EPA Method 524.2) TICs.....	21
Water Analysis (General Chemistry).....	22
Metals Analysis.....	23
2031670-03 - MW-22-4	
Volatile Organic Analysis (EPA Method 524.2).....	24
Volatile Organic Analysis (EPA Method 524.2) TICs.....	27
Water Analysis (General Chemistry).....	28
Metals Analysis.....	29
2031670-04 - MW-22-3	
Volatile Organic Analysis (EPA Method 524.2).....	30
Volatile Organic Analysis (EPA Method 524.2) TICs.....	33
Water Analysis (General Chemistry).....	34
Metals Analysis.....	35
2031670-05 - MW-22-2	
Volatile Organic Analysis (EPA Method 524.2).....	36
Volatile Organic Analysis (EPA Method 524.2) TICs.....	39
Water Analysis (General Chemistry).....	40
Metals Analysis.....	41
2031670-06 - MW-22-1	
Volatile Organic Analysis (EPA Method 524.2).....	42
Volatile Organic Analysis (EPA Method 524.2) TICs.....	45
Water Analysis (General Chemistry).....	46
Metals Analysis.....	47
2031670-07 - MW-24-4	
Volatile Organic Analysis (EPA Method 524.2).....	48
Volatile Organic Analysis (EPA Method 524.2) TICs.....	51
Water Analysis (General Chemistry).....	52
Metals Analysis.....	53
2031670-08 - MW-24-5	
Volatile Organic Analysis (EPA Method 524.2).....	54
Volatile Organic Analysis (EPA Method 524.2) TICs.....	57
Water Analysis (General Chemistry).....	58
Metals Analysis.....	59
2031670-09 - MW-24-3	
Volatile Organic Analysis (EPA Method 524.2).....	60
Volatile Organic Analysis (EPA Method 524.2) TICs.....	63
Water Analysis (General Chemistry).....	64
Metals Analysis.....	65
2031670-10 - DUP-3-4Q20	
Volatile Organic Analysis (EPA Method 524.2).....	66
Volatile Organic Analysis (EPA Method 524.2) TICs.....	69
Water Analysis (General Chemistry).....	70
Metals Analysis.....	71
2031670-11 - MW-24-2	
Volatile Organic Analysis (EPA Method 524.2).....	72

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.



Table of Contents

Volatile Organic Analysis (EPA Method 524.2) TICs.....	75
Water Analysis (General Chemistry).....	76
Metals Analysis.....	77
2031670-12 - SB-2-102820	
Volatile Organic Analysis (EPA Method 524.2).....	78
Volatile Organic Analysis (EPA Method 524.2) TICs.....	81
Water Analysis (General Chemistry).....	82
Metals Analysis.....	83
2031670-13 - MW-24-1	
Volatile Organic Analysis (EPA Method 524.2).....	84
Volatile Organic Analysis (EPA Method 524.2) TICs.....	87
Water Analysis (General Chemistry).....	88
Metals Analysis.....	89
2031670-14 - EB-3-102820	
Volatile Organic Analysis (EPA Method 524.2).....	90
Volatile Organic Analysis (EPA Method 524.2) TICs.....	93
Water Analysis (General Chemistry).....	94
Metals Analysis.....	95
Quality Control Reports	
Volatile Organic Analysis (EPA Method 524.2)	
Method Blank Analysis.....	96
Laboratory Control Sample.....	99
Precision and Accuracy.....	100
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	101
Water Analysis (General Chemistry)	
Method Blank Analysis.....	102
Laboratory Control Sample.....	103
Precision and Accuracy.....	104
Metals Analysis	
Method Blank Analysis.....	105
Laboratory Control Sample.....	106
Precision and Accuracy.....	107
Notes	
Notes and Definitions.....	108

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.



Page 1 of 2

Chain of Custody Form



Required Fields

Report To: Client: Tidewater, Inc. Attn: David Conner
 Street Address: 3761 Attucks Drive City: Powell State: OH Zip: 43065
 Phone: 626 1298 Fax: 614 792-2897
 Email Address: david.conner@btiden20.net
 Submission #: 20-31670

Project Description: JPL-GW Monitoring
 Project Code: 4Q20
 Sampler (s): Blaine Tech

Analysis Requested

Orthophosphate 365.1					
CL, NO3, NO2, SO4					
Hexavalent Cr-218.6 (mg/L)					
Perchlorate					
TRM: C					
VOCs EPA 524.2	X				

Billing

Client: Tidewater
 Attn: David Conner
 Address: 3761 Attucks Drive
 City: Powell State: OH Zip: 43065
 Are there any tests with holding times? less than or equal to 48 hours?
 Yes No
 *Standard Turnaround = 10

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

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

Lab TAT Approval: _____ *Additional Charges May Apply

Sample #	Sample Description	Date	Time	Matrix*
-1	TB-3-102820	10/28/20	0700	GW
-2	MW-22-5		0755	GW
-3	MW-22-4		0830	GW
-4	MW-22-3		0905	GW
-5	MW-22-2		1005	GW
-6	MW-22-1		1100	GW
-7	MW-24-4		1238	GW
-8	MW-24-5		1255	GW
-9	MW-24-3		1345	GW
-10	DUP-3-4020		1355	GW
-11	MW-24-2		1515	GW

Notes:
 CHK BY DISTRIBUTION
 GSA MW-22-5
 Level 4 - MTS/MJD
 SHORT HOLDING TIME
 Cl- NO2 NO3 OP SS
 DO Cl- BOD MBAS GOT

Global ID:

1. Received By: [Signature]	Date: 10/28/20	Time: 1620
2. Received By: [Signature]	Date: 10-28-20	Time: 59
3. Received By: [Signature]	Date: 10/28/20	Time: 1700

Cost Center:

1. Relinquished By: [Signature]	Date: 10/28/20	Time: 1620
2. Relinquished By: [Signature]	Date: 10-28-20	Time: 59
3. Relinquished By: [Signature]	Date: 10/28/20	Time: 1840

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)

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

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.

Chain of Custody Form



Page 2 of 2

Report To: Tidewater, Inc.
Client: David Conner
Street Address: 3761 Alibucks Drive
City: Powell
State: OH
Zip: 43065
Phone: 626 1 298 5715
Fax: 614 792 2897
Email Address: david.conner@tideh2o.net
Submission #: 20-31670

Project Description: JPL-GW Monitoring
Project Code: 4020
Sampler(s): Baisine Tech

Sample #	Sample Description	Date	Time	Matrix*	
				GW	WW
-12	SB-2-102820	10/28/20	1510	GW	X
-13	MW-24-1	10/28/20	1550	GW	X
-14	EB-3-102820	10/28/20	1840	GW	X

Analysis Requested

Analysis Requested	Matrix*
VOCs EPA 524.2	X
TRM: Cr	X
Perchlorate	X
Hexavalent Cr6 -218.6 (mg/L)	X
Cl, NO3, NO2, SO4	X
Orthophosphate 365.1	X

Billing

Client: Tidewater
Attn: David Conner
Address: 3761 Alibucks Drive
City: Powell
State: OH
Zip: 43065

Are there any tests with holding times?
 Yes NO
less than or equal to 48 hours?
 *Standard Turnaround = 10

Notes

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

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

Lab TAT Approval: _____ * Additional Charges May Apply

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

Global ID:

1. Relinquished By: _____
 Date: 10/28/20 Time: 1620

2. Received By: _____
 Date: 10/28/20 Time: 1700

3. Relinquished By: _____
 Date: 10/28/20 Time: 1840

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



BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 3

Submission #: 20-31670

SHIPPING INFORMATION: Fed Ex, UPS, Ontrac, Hand Delivery, BC Lab Field Service. SHIPPING CONTAINER: Ice Chest, None, Box, Other. FREE LIQUID: YES, NO, W/S.

Refrigerant: Ice, Blue Ice, None, Other. Comments:

Custody Seals: Ice Chest, Containers, None. Intact? Yes/No.

All samples received? Yes/No. All samples containers intact? Yes/No. Description(s) match COC? Yes/No.

COC Received: YES/NO. Emissivity: 0.98. Container: PE. Thermometer ID: 208. Date/Time: 10/28/2016. Analyst Init: GSP. Temperature: (A) 0.5 °C / (C) 0.3 °C.

Table with columns for SAMPLE CONTAINERS and SAMPLE NUMBERS (1-10). Rows include various sample types like QT PE UNPRES, INORGANIC CHEMICAL METALS, PT CYANIDE, etc. Handwritten data includes 'A' in column 1 and 'ABC' in columns 2-10 for the 40ml VOA VIAL row.

Comments: Sample Numbering Completed By: GSP Date/Time: 10/28/2016 Rev 21 06/23/2016



BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 of 3

Submission #: 2031670

SHIPPING INFORMATION: Fed Ex UPS Ontrac Hand Delivery BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER: Ice Chest None Box Other (Specify) _____

FREE LIQUID: YES NO W / S _____

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers Non Comments: _____

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

COC Received: YES NO

Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time: 10/28/18 1840

Temperature: (A) 0.5 °C / (C) 0.3 °C Analyst Init: GSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	E	E	E	E						
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶	D	D	D	D						
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	F	F	F	F						
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PLA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC	ABC	ABC	ABC						
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 503/604/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 5015M										
QT EPA 8270										
Box / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: GSP Date/Time: 10/28 2030

A = Actual / C = Corrected

Rev 21 05/23/2016
DRAWPDoc/WorPerfecLAB_COCSFORMMSISAMRCEver 20



BC LABORATORIES INC. COOLER RECEIPT FORM Page 3 of 3

Submission #: 2031670

SHIPPING INFORMATION: Fed Ex UPS Ontrac Hand Delivery BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER: Ice Chest None Box Other (Specify) _____

FREE LIQUID: YES NO W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None Comments: _____

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

COC Received: YES NO Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time: 10/28/1840

Temperature: (A) 3.7 °C / (C) 3.5 °C Analyst Init: GSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES		E	E	J	E	E	F	E	E	E
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶⁺		D	D	GH	D	D	D	D	D	D
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz		F	F	KL	F	F	F	F	F	F
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/509/5080										
QT EPA 515.1/5150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 5015M										
QT EPA 5270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: GSP Date/Time: 10/28/2030 Rev 21 05/23/2016

λ = Actual / C = Corrected

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031670-01	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: TB-3-102820 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Blank Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-3-102820 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031670-02	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-22-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 07:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-22-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031670-03	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-22-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 08:30 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-22-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031670-04	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-22-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 09:05 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-22-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031670-05	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-22-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 10:05 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-22-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031670-06	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-22-1 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 11:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-22-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031670-07	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-24-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 12:38 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031670-08	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-24-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 12:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031670-09	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-24-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 13:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031670-10	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: DUP-3-4Q20 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 13:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-3-4Q20 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2031670-11	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-24-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 15:15 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031670-12	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: SB-2-102820 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 15:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): SB-2-102820 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031670-13	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-24-1 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 15:50 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-24-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031670-14	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: EB-3-102820 Sampled By: Blaine Tech of BTST	Receive Date: 10/28/2020 18:40 Sampling Date: 10/28/2020 16:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-3-102820 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-01	Client Sample Name: NASA/JPL, TB-3-102820, 10/28/2020 7:00:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-01	Client Sample Name: NASA/JPL, TB-3-102820, 10/28/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-01	Client Sample Name: NASA/JPL, TB-3-102820, 10/28/2020 7:00:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 15:29	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-01	Client Sample Name: NASA/JPL, TB-3-102820, 10/28/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	15:29	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-02 Client Sample Name: NASA/JPL, MW-22-5, 10/28/2020 7:55:00AM, Blaine Tech

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-02 Client Sample Name: NASA/JPL, MW-22-5, 10/28/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	0.56	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-02	Client Sample Name: NASA/JPL, MW-22-5, 10/28/2020 7:55:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 15:53	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-02	Client Sample Name: NASA/JPL, MW-22-5, 10/28/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	15:53	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-02	Client Sample Name: NASA/JPL, MW-22-5, 10/28/2020 7:55:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20	13:47	SAV	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-02	Client Sample Name: NASA/JPL, MW-22-5, 10/28/2020 7:55:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00017	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 11:49		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 18:15		ARD	PE-EL4	1	B091503	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-03 Client Sample Name: NASA/JPL, MW-22-4, 10/28/2020 8:30:00AM, Blaine Tech

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-03 Client Sample Name: NASA/JPL, MW-22-4, 10/28/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-03 **Client Sample Name:** NASA/JPL, MW-22-4, 10/28/2020 8:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 16:17	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-03	Client Sample Name: NASA/JPL, MW-22-4, 10/28/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 16:17		MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-03	Client Sample Name: NASA/JPL, MW-22-4, 10/28/2020 8:30:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 14:03		KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-03	Client Sample Name: NASA/JPL, MW-22-4, 10/28/2020 8:30:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0029	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	2.0	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20	11:58	SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20	18:17	ARD	PE-EL4	1	B091503	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-04 Client Sample Name: NASA/JPL, MW-22-3, 10/28/2020 9:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-04 Client Sample Name: NASA/JPL, MW-22-3, 10/28/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-04 **Client Sample Name:** NASA/JPL, MW-22-3, 10/28/2020 9:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 13:04	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-04	Client Sample Name: NASA/JPL, MW-22-3, 10/28/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	13:04	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-04	Client Sample Name: NASA/JPL, MW-22-3, 10/28/2020 9:05:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 12:40		SAV	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-04	Client Sample Name: NASA/JPL, MW-22-3, 10/28/2020 9:05:00AM, Blaine Tech							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0025	mg/L	0.00020	0.000020	EPA-218.6	ND		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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 11:10		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 17:54		ARD	PE-EL4	1	B091503	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-05 Client Sample Name: NASA/JPL, MW-22-2, 10/28/2020 10:05:00AM, Blaine Tech

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-05 **Client Sample Name:** NASA/JPL, MW-22-2, 10/28/2020 10:05:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-05	Client Sample Name: NASA/JPL, MW-22-2, 10/28/2020 10:05:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 16:41	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-05	Client Sample Name: NASA/JPL, MW-22-2, 10/28/2020 10:05:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 16:41		MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-05	Client Sample Name: NASA/JPL, MW-22-2, 10/28/2020 10:05:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 15:26		KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-05	Client Sample Name: NASA/JPL, MW-22-2, 10/28/2020 10:05:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0018	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 12:08		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 18:19		ARD	PE-EL4	1	B091503	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031670-06) and Client Sample Name (NASA/JPL, MW-22-1, 10/28/2020 11:00:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various organic compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-06	Client Sample Name: NASA/JPL, MW-22-1, 10/28/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.28	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.59	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-06	Client Sample Name: NASA/JPL, MW-22-1, 10/28/2020 11:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 17:05	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-06	Client Sample Name: NASA/JPL, MW-22-1, 10/28/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	17:05	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-06	Client Sample Name: NASA/JPL, MW-22-1, 10/28/2020 11:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	100	ug/L	40	8.1	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/11/20 11:48	SAV	IC6	10	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-06	Client Sample Name: NASA/JPL, MW-22-1, 10/28/2020 11:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00072	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 12:18		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 18:22		ARD	PE-EL4	1	B091503	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031670-07	Client Sample Name:	NASA/JPL, MW-24-4, 10/28/2020 12:38:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1	
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1	
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1	
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1	
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1	
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1	
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1	
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1	
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1	
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-07	Client Sample Name: NASA/JPL, MW-24-4, 10/28/2020 12:38:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	0.12	ug/L	0.50	0.12	EPA-524.2	ND	J	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-07	Client Sample Name: NASA/JPL, MW-24-4, 10/28/2020 12:38:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 17:29	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-07	Client Sample Name: NASA/JPL, MW-24-4, 10/28/2020 12:38:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	17:29	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-07	Client Sample Name: NASA/JPL, MW-24-4, 10/28/2020 12:38:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 16:00		KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-07	Client Sample Name: NASA/JPL, MW-24-4, 10/28/2020 12:38:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00010	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 13:08		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 18:24		ARD	PE-EL4	1	B091503	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-08 Client Sample Name: NASA/JPL, MW-24-5, 10/28/2020 12:55:00PM, Blaine Tech

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031670-08) and Client Sample Name (NASA/JPL, MW-24-5, 10/28/2020 12:55:00PM, Blaine Tech)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-08	Client Sample Name: NASA/JPL, MW-24-5, 10/28/2020 12:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 17:53	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-08	Client Sample Name: NASA/JPL, MW-24-5, 10/28/2020 12:55:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	17:53	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-08	Client Sample Name: NASA/JPL, MW-24-5, 10/28/2020 12:55:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date		Run Date/Time		Analyst	Instrument	Dilution	QC	
		Prep Date	Time	Date/Time	Time				Batch ID	Prep Method
1	EPA-314.0	11/10/20	11:00	11/10/20	16:16	KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-08	Client Sample Name: NASA/JPL, MW-24-5, 10/28/2020 12:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0026	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	1.8	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 13:17		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 18:26		ARD	PE-EL4	1	B091503	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-09 Client Sample Name: NASA/JPL, MW-24-3, 10/28/2020 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.29	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-09 **Client Sample Name:** NASA/JPL, MW-24-3, 10/28/2020 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.23	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-09 **Client Sample Name:** NASA/JPL, MW-24-3, 10/28/2020 1:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 18:17	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-09	Client Sample Name: NASA/JPL, MW-24-3, 10/28/2020 1:45:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 18:17		MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-09	Client Sample Name: NASA/JPL, MW-24-3, 10/28/2020 1:45:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 16:32	KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-09	Client Sample Name: NASA/JPL, MW-24-3, 10/28/2020 1:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000087	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 13:27		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 18:29		ARD	PE-EL4	1	B091503	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031670-10							
Client Sample Name:	NASA/JPL, DUP-3-4Q20, 10/28/2020 1:55:00PM, Blaine Tech							
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.37	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031670-10							Client Sample Name:	NASA/JPL, DUP-3-4Q20, 10/28/2020 1:55:00PM, Blaine Tech				
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #					
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1					
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1					
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1					
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1					
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1					
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1					
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1					
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1					
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1					
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1					
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1					
Tetrachloroethene	0.37	ug/L	0.50	0.23	EPA-524.2	ND	J	1					
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1					
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1					
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1					
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1					
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1					
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1					
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1					
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1					
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1					
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1					
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1					
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1					
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1					
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1					
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1					
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1					
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1					
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1					
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1					

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-10	Client Sample Name: NASA/JPL, DUP-3-4Q20, 10/28/2020 1:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 18:41	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-10	Client Sample Name: NASA/JPL, DUP-3-4Q20, 10/28/2020 1:55:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	18:41	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-10	Client Sample Name: NASA/JPL, DUP-3-4Q20, 10/28/2020 1:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.5	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 16:49	KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-10	Client Sample Name: NASA/JPL, DUP-3-4Q20, 10/28/2020 1:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00010	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 13:36		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 18:31		ARD	PE-EL4	1	B091503	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-11 Client Sample Name: NASA/JPL, MW-24-2, 10/28/2020 3:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	0.24	ug/L	0.50	0.20	EPA-524.2	ND	J	1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.74	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.27	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031670-11) and Client Sample Name (NASA/JPL, MW-24-2, 10/28/2020 3:15:00PM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical constituents and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-11 **Client Sample Name:** NASA/JPL, MW-24-2, 10/28/2020 3:15:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 19:05	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-11	Client Sample Name: NASA/JPL, MW-24-2, 10/28/2020 3:15:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	19:05	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-11	Client Sample Name: NASA/JPL, MW-24-2, 10/28/2020 3:15:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	5.7	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 17:44		KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-11	Client Sample Name: NASA/JPL, MW-24-2, 10/28/2020 3:15:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0024	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	2.0	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 13:46		SAV	IC-4	1	B091578	No Prep
2	EPA-200.8	11/03/20 07:20	11/05/20 18:33		ARD	PE-EL4	1	B091503	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031670-12	Client Sample Name:	NASA/JPL, SB-2-102820, 10/28/2020 3:10:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1	
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1	
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1	
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1	
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1	
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1	
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1	
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1	
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1	
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031670-12) and Client Sample Name (NASA/JPL, SB-2-102820, 10/28/2020 3:10:00PM, Blaine Tech)

Main data table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-12	Client Sample Name: NASA/JPL, SB-2-102820, 10/28/2020 3:10:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 19:29	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-12	Client Sample Name: NASA/JPL, SB-2-102820, 10/28/2020 3:10:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	19:29	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-12	Client Sample Name: NASA/JPL, SB-2-102820, 10/28/2020 3:10:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 14:53	KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-12	Client Sample Name: NASA/JPL, SB-2-102820, 10/28/2020 3:10:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00013	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 15:03		KB1	IC-4	1	B091579	No Prep
2	EPA-200.8	11/04/20 09:00	11/06/20 23:02		ARD	PE-EL2	1	B091691	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031670-13			Client Sample Name:	NASA/JPL, MW-24-1, 10/28/2020 3:50:00PM, Blaine Tech			
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	2.1	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-13 Client Sample Name: NASA/JPL, MW-24-1, 10/28/2020 3:50:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-13	Client Sample Name: NASA/JPL, MW-24-1, 10/28/2020 3:50:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 19:53	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-13	Client Sample Name: NASA/JPL, MW-24-1, 10/28/2020 3:50:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	19:53	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-13	Client Sample Name: NASA/JPL, MW-24-1, 10/28/2020 3:50:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	14	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 18:00		KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-13	Client Sample Name: NASA/JPL, MW-24-1, 10/28/2020 3:50:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00024	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	0.72	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 13:55		SAV	IC-4	1	B091579	No Prep
2	EPA-200.8	11/04/20 09:00	11/06/20 23:03		ARD	PE-EL2	1	B091691	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031670-14) and Client Sample Name (NASA/JPL, EB-3-102820, 10/28/2020 4:10:00PM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various organic compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-14	Client Sample Name: NASA/JPL, EB-3-102820, 10/28/2020 4:10:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	2.6	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031670-14	Client Sample Name: NASA/JPL, EB-3-102820, 10/28/2020 4:10:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20 20:17	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031670-14	Client Sample Name: NASA/JPL, EB-3-102820, 10/28/2020 4:10:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/04/20 09:00	11/04/20	20:17	MGC	MS-V5	1	B091636	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031670-14	Client Sample Name: NASA/JPL, EB-3-102820, 10/28/2020 4:10:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20	15:10	KB1	IC6	1	B092208	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031670-14	Client Sample Name: NASA/JPL, EB-3-102820, 10/28/2020 4:10:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00010	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/02/20 20:00	11/03/20 15:12		KB1	IC-4	1	B091579	No Prep
2	EPA-200.8	11/04/20 09:00	11/06/20 23:05		ARD	PE-EL2	1	B091691	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091636						
Benzene	B091636-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091636-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091636-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091636-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091636-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091636-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091636-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091636-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091636-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091636-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091636-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091636-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091636-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091636-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091636-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091636-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B091636-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091636-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091636-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091636-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091636-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091636-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091636-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091636-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091636-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091636-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091636-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091636-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091636-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091636-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091636-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091636-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091636-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091636-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091636						
trans-1,3-Dichloropropene	B091636-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091636-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091636-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091636-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091636-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091636-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091636-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091636-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091636-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091636-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091636-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B091636-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091636-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091636-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091636-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091636-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B091636-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B091636-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B091636-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B091636-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B091636-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B091636-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B091636-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B091636-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B091636-BLK1	ND	ug/L	0.50	0.18	
Acetone	B091636-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B091636-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B091636-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B091636-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B091636-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B091636-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B091636-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B091636-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B091636-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091636						
Ethyl t-butyl ether	B091636-BLK1	ND	ug/L	0.50	0.32	
Hexachloroethane	B091636-BLK1	ND	ug/L	0.50	0.11	
2-Hexanone	B091636-BLK1	ND	ug/L	10	5.0	
Methacrylonitrile	B091636-BLK1	ND	ug/L	10	2.3	
Methyl ethyl ketone	B091636-BLK1	ND	ug/L	5.0	3.3	
Methyl iodide	B091636-BLK1	ND	ug/L	2.0	1.1	
Methyl isobutyl ketone	B091636-BLK1	ND	ug/L	5.0	2.4	
Methyl methacrylate	B091636-BLK1	ND	ug/L	5.0	1.2	
Pentachloroethane	B091636-BLK1	ND	ug/L	2.0	0.63	
Propionitrile	B091636-BLK1	ND	ug/L	20	6.2	
Tetrahydrofuran	B091636-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	B091636-BLK1	ND	ug/L	0.50	0.34	
o-Xylene	B091636-BLK1	ND	ug/L	0.50	0.13	
1,2-Dichloroethane-d4 (Surrogate)	B091636-BLK1	97.4	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B091636-BLK1	96.5	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B091636-BLK1	104	%	80 - 120 (LCL - UCL)		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B091636										
Benzene	B091636-BS1	LCS	24.530	25.000	ug/L	98.1		70 - 130		
Bromodichloromethane	B091636-BS1	LCS	26.870	25.000	ug/L	107		70 - 130		
Chlorobenzene	B091636-BS1	LCS	23.570	25.000	ug/L	94.3		70 - 130		
Chloroethane	B091636-BS1	LCS	25.460	25.000	ug/L	102		70 - 130		
1,4-Dichlorobenzene	B091636-BS1	LCS	24.230	25.000	ug/L	96.9		70 - 130		
1,1-Dichloroethane	B091636-BS1	LCS	25.090	25.000	ug/L	100		70 - 130		
1,1-Dichloroethene	B091636-BS1	LCS	26.310	25.000	ug/L	105		70 - 130		
Toluene	B091636-BS1	LCS	24.280	25.000	ug/L	97.1		70 - 130		
Trichloroethene	B091636-BS1	LCS	24.570	25.000	ug/L	98.3		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091636-BS1	LCS	9.6700	10.000	ug/L	96.7		75 - 125		
Toluene-d8 (Surrogate)	B091636-BS1	LCS	9.8600	10.000	ug/L	98.6		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091636-BS1	LCS	9.6600	10.000	ug/L	96.6		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B091636		Used client sample: Y - Description: MW-22-3, 10/28/2020 09:05								
Benzene	MS	2031670-04	ND	23.250	25.000	ug/L		93.0		70 - 130
	MSD	2031670-04	ND	25.260	25.000	ug/L	8.3	101	20	70 - 130
Bromodichloromethane	MS	2031670-04	ND	26.200	25.000	ug/L		105		70 - 130
	MSD	2031670-04	ND	28.110	25.000	ug/L	7.0	112	20	70 - 130
Chlorobenzene	MS	2031670-04	ND	23.940	25.000	ug/L		95.8		70 - 130
	MSD	2031670-04	ND	24.780	25.000	ug/L	3.4	99.1	20	70 - 130
Chloroethane	MS	2031670-04	ND	23.180	25.000	ug/L		92.7		70 - 130
	MSD	2031670-04	ND	25.920	25.000	ug/L	11.2	104	20	70 - 130
1,4-Dichlorobenzene	MS	2031670-04	ND	24.630	25.000	ug/L		98.5		70 - 130
	MSD	2031670-04	ND	25.370	25.000	ug/L	3.0	101	20	70 - 130
1,1-Dichloroethane	MS	2031670-04	ND	23.990	25.000	ug/L		96.0		70 - 130
	MSD	2031670-04	ND	26.220	25.000	ug/L	8.9	105	20	70 - 130
1,1-Dichloroethene	MS	2031670-04	ND	24.610	25.000	ug/L		98.4		70 - 130
	MSD	2031670-04	ND	26.500	25.000	ug/L	7.4	106	20	70 - 130
Toluene	MS	2031670-04	ND	23.840	25.000	ug/L		95.4		70 - 130
	MSD	2031670-04	ND	25.730	25.000	ug/L	7.6	103	20	70 - 130
Trichloroethene	MS	2031670-04	ND	24.160	25.000	ug/L		96.6		70 - 130
	MSD	2031670-04	ND	25.760	25.000	ug/L	6.4	103	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2031670-04	ND	9.7600	10.000	ug/L		97.6		75 - 125
	MSD	2031670-04	ND	9.6700	10.000	ug/L	0.9	96.7		75 - 125
Toluene-d8 (Surrogate)	MS	2031670-04	ND	9.8800	10.000	ug/L		98.8		80 - 120
	MSD	2031670-04	ND	9.9700	10.000	ug/L	0.9	99.7		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2031670-04	ND	9.9100	10.000	ug/L		99.1		80 - 120
	MSD	2031670-04	ND	9.9100	10.000	ug/L	0	99.1		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091636						
Chloroacetonitrile	B091636-BLK1	0	ug/L			
1-Chlorobutane	B091636-BLK1	0	ug/L			
1,1-Dichloropropanone	B091636-BLK1	0	ug/L			
Methyl acrylate	B091636-BLK1	0	ug/L			
Nitrobenzene	B091636-BLK1	0	ug/L			
2-Nitropropane	B091636-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092208						
Perchlorate	B092208-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092208										
Perchlorate	B092208-BS1	LCS	8.5985	10.000	ug/L	86.0		85	115	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B092208		Used client sample: Y - Description: MW-22-3, 10/28/2020 09:05								
Perchlorate	DUP	2031670-04	3.6938	3.7158		ug/L	0.6		15	J
	MS	2031670-04	3.6938	14.300	10.101	ug/L		105	80 - 120	
	MSD	2031670-04	3.6938	14.072	10.101	ug/L	1.6	103	15 80 - 120	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091503						
Total Recoverable Chromium	B091503-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B091578						
Hexavalent Chromium	B091578-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B091579						
Hexavalent Chromium	B091579-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B091691						
Total Recoverable Chromium	B091691-BLK1	ND	ug/L	3.0	0.50	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091503										
Total Recoverable Chromium	B091503-BS1	LCS	41.936	40.000	ug/L	105		85 - 115		
QC Batch ID: B091578										
Hexavalent Chromium	B091578-BS1	LCS	0.021593	0.020000	mg/L	108		90 - 110		
QC Batch ID: B091579										
Hexavalent Chromium	B091579-BS1	LCS	0.020091	0.020000	mg/L	100		90 - 110		
QC Batch ID: B091691										
Total Recoverable Chromium	B091691-BS1	LCS	41.840	40.000	ug/L	105		85 - 115		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	Percent Recovery	
QC Batch ID: B091503		Used client sample: Y - Description: MW-22-3, 10/28/2020 09:05								
Total Recoverable Chromium	DUP	2031670-04	1.4480	1.0540		ug/L	31.5		20	J,A02
	MS	2031670-04	1.4480	41.329	40.000	ug/L		99.7	70 - 130	
	MSD	2031670-04	1.4480	40.949	40.000	ug/L	0.9	98.8	20 70 - 130	
QC Batch ID: B091578		Used client sample: Y - Description: MW-22-3, 10/28/2020 09:05								
Hexavalent Chromium	DUP	2031670-04	0.0025150	0.0024960		mg/L	0.8		10	
	MS	2031670-04	0.0025150	0.022955	0.020202	mg/L		101	90 - 110	
	MSD	2031670-04	0.0025150	0.022332	0.020202	mg/L	2.7	98.1	10 90 - 110	
QC Batch ID: B091579		Used client sample: Y - Description: MW-24-1, 10/28/2020 15:50								
Hexavalent Chromium	DUP	2031670-13	0.00024100	0.00023800		mg/L	1.3		10	
	MS	2031670-13	0.00024100	0.020262	0.020202	mg/L		99.1	90 - 110	
	MSD	2031670-13	0.00024100	0.020254	0.020202	mg/L	0.0	99.1	10 90 - 110	
QC Batch ID: B091691		Used client sample: N								
Total Recoverable Chromium	DUP	2031816-06	3.0670	2.7770		ug/L	9.9		20	J
	MS	2031816-06	3.0670	43.466	40.000	ug/L		101	70 - 130	
	MSD	2031816-06	3.0670	42.544	40.000	ug/L	2.1	98.7	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.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 17:37
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- A07 Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 11/16/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive

Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2031816

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 10/29/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda

Client Service Rep

Stuart Buttram

Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	7

Sample Results

2031816-01 - TB-4	
Volatile Organic Analysis (EPA Method 524.2).....	11
Volatile Organic Analysis (EPA Method 524.2) TICs.....	14
2031816-02 - MW-18-5	
Volatile Organic Analysis (EPA Method 524.2).....	15
Volatile Organic Analysis (EPA Method 524.2) TICs.....	18
Water Analysis (General Chemistry).....	19
Metals Analysis.....	20
2031816-03 - MW-18-4	
Volatile Organic Analysis (EPA Method 524.2).....	21
Volatile Organic Analysis (EPA Method 524.2) TICs.....	24
Water Analysis (General Chemistry).....	25
Metals Analysis.....	26
2031816-04 - MW-18-3	
Volatile Organic Analysis (EPA Method 524.2).....	27
Volatile Organic Analysis (EPA Method 524.2) TICs.....	30
Water Analysis (General Chemistry).....	31
Metals Analysis.....	32
2031816-05 - MW-18-2	
Volatile Organic Analysis (EPA Method 524.2).....	33
Volatile Organic Analysis (EPA Method 524.2) TICs.....	36
Water Analysis (General Chemistry).....	37
Metals Analysis.....	38
2031816-06 - MW-17-5	
Volatile Organic Analysis (EPA Method 524.2).....	39
Volatile Organic Analysis (EPA Method 524.2) TICs.....	42
Water Analysis (General Chemistry).....	43
Metals Analysis.....	44
2031816-07 - MW-17-4	
Volatile Organic Analysis (EPA Method 524.2).....	45
Volatile Organic Analysis (EPA Method 524.2) TICs.....	48
Water Analysis (General Chemistry).....	49
Metals Analysis.....	50
2031816-08 - MW-17-3	
Volatile Organic Analysis (EPA Method 524.2).....	51
Volatile Organic Analysis (EPA Method 524.2) TICs.....	54
Water Analysis (General Chemistry).....	55
Metals Analysis.....	56
2031816-09 - MW-17-2	
Volatile Organic Analysis (EPA Method 524.2).....	57
Volatile Organic Analysis (EPA Method 524.2) TICs.....	60
Water Analysis (General Chemistry).....	61
Metals Analysis.....	62
2031816-10 - EB-4	
Volatile Organic Analysis (EPA Method 524.2).....	63
Volatile Organic Analysis (EPA Method 524.2) TICs.....	66
Water Analysis (General Chemistry).....	67
Metals Analysis.....	68

Quality Control Reports

Volatile Organic Analysis (EPA Method 524.2)

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.

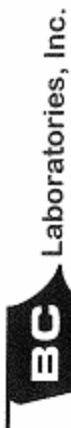


Table of Contents

Method Blank Analysis.....	69
Laboratory Control Sample.....	74
Precision and Accuracy.....	75
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	77
Water Analysis (General Chemistry)	
Method Blank Analysis.....	78
Laboratory Control Sample.....	79
Precision and Accuracy.....	80
Metals Analysis	
Method Blank Analysis.....	81
Laboratory Control Sample.....	82
Precision and Accuracy.....	83
Notes	
Notes and Definitions.....	84



Chain of Custody Form



Page 1 of 1

Project Description: JPL-GW Monitoring

Client: Tidewater, Inc. **Attn.:** David Corner

Street Address: 3761 Attucks Drive **City:** Powell **State:** OH **Zip:** 43065

Phone: 626 | 298 - 5715 **Fax:** 614 | 792 - 2897

Email Address: david.corner@tideh2o.net

Submission #: 20-31816

Sampler(s): Blaine Tech

Project Code: 4Q20

Analysis Requested:

Orthophosphate 365.1	
Cl, NO3, NO2, SO4	
Hexavalent Cr6 2186 (mg/L)	
Perchlorate	
TRM: Cr	
VOCs EPA 524.2	X

Notes:

2186

*Standard Turnaround = 10

DO, CH2, SO4, NH4AS, CO2

Level IV F MS/MSD

Level IV F MS/MSD

CHK BY: DISTRIBUTION

Sub Out

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

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

Lab TAT Approval:

Cost Center:

1. Requisitioned By: [Signature] Date: 10/29/20 Time: 1650

2. Requisitioned By: [Signature] Date: 10/29/20 Time: 1905

3. Requisitioned By: [Signature] Date: 10-29-20 Time: 1905

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)

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

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.



BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 2

Submission #: 2031816

SHIPPING INFORMATION
 Fed Ex UPS Ontrac Hand Delivery
 BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER
 Ice Chest None Box
 Other (Specify) _____

FREE LIQUID
 YES NO
 W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

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

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

COC Received YES NO Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time 10/29/2005
 Temperature: (A) 1.4 °C / (C) 1.2 °C Analyst Init GSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES								E	E	
4oz / 8oz / 16oz PE UNPRES								D	D	
2oz Cr*								F	F	
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A									
40ml VOA VIAL		ABC	ABC	A>F	ABC	A>F	ABC	ABC	ABC	ABC
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 502/503/508										
QT EPA 515/5150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 801SM										
QT EPA 8170										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____
 Sample Numbering Completed By: GSP Date/Time: 10/29 2005
 1 = Actual / C = Corrected

BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 of 2

Submission #: 20-31816

SHIPPING INFORMATION
 Fed Ex UPS Ontrac Hand Delivery
 BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER
 Ice Chest None Box
 Other (Specify) _____

FREE LIQUID
 YES NO
 W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

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

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

COC Received
 YES NO

Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time 10/29/2021
 Temperature: (A) 0.6 °C / (C) 0.4 °C Analyst Init GSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES 4oz / 8oz / 16oz PE UNPRES		E	E	J	E	J	E			E
2oz Cr ⁶		D	D	GH	D	GH	P			D
QT INORGANIC CHEMICAL METALS INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz		F	F	KL	F	KL	F			F
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE 2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PLA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 50601/5080										
QT EPA 515.1/5150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: GSP Date/Time: 10/29/2021

A = Actual / C = Corrected

Rev 21 05/23/2016
 I:\MPD\del\del\Perf\cdLAB\DOC\FORMS\COCTFRM_0316.rvt



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031816-01	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: TB-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 07:30 Sample Depth: --- Lab Matrix: Water Sample Type: Blank Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2031816-02	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-18-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 08:30 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-18-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031816-03	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-18-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 09:00 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-18-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031816-04	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-18-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 10:00 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-18-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031816-05	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-18-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 11:15 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-18-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031816-06	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-17-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 13:20 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-17-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031816-07	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-17-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 14:45 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-17-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031816-08	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-17-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 15:30 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-17-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031816-09	COC Number: --- Project Number: NASA/JPL Sampling Location: --- Sampling Point: MW-17-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/29/2020 19:05 Sampling Date: 10/29/2020 16:00 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-17-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031816-10	COC Number: ---	Receive Date: 10/29/2020 19:05
	Project Number: NASA/JPL	Sampling Date: 10/29/2020 15:40
	Sampling Location: ---	Sample Depth: ---
	Sampling Point: EB-4	Lab Matrix: Water
	Sampled By: Blaine Tech of BTST	Sample Type: Water
		Delivery Work Order:
		Global ID: 0000000000
		Location ID (FieldPoint): EB-4
		Matrix: WG
		Sample QC Type (SACode): CS
	Cooler ID:	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031816-01) and Client Sample Name (NASA/JPL, TB-4, 10/29/2020 7:30:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-01		Client Sample Name: NASA/JPL, TB-4, 10/29/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-01	Client Sample Name: NASA/JPL, TB-4, 10/29/2020 7:30:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	93.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 15:09	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-01	Client Sample Name: NASA/JPL, TB-4, 10/29/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 15:09		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-02 Client Sample Name: NASA/JPL, MW-18-5, 10/29/2020 8:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-02 Client Sample Name: NASA/JPL, MW-18-5, 10/29/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	0.12	ug/L	0.50	0.12	EPA-524.2	ND	J	1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-02 **Client Sample Name:** NASA/JPL, MW-18-5, 10/29/2020 8:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 15:33	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-02	Client Sample Name: NASA/JPL, MW-18-5, 10/29/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 15:33		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-02	Client Sample Name: NASA/JPL, MW-18-5, 10/29/2020 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 20:29	KB1	IC6	1	B092209	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-02	Client Sample Name: NASA/JPL, MW-18-5, 10/29/2020 8:30:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00012	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	0.74	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 08:45		SAV	IC-4	1	B092536	No Prep
2	EPA-200.8	11/04/20 09:00	11/09/20 22:30		ARD	PE-EL2	1	B091692	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-03 Client Sample Name: NASA/JPL, MW-18-4, 10/29/2020 9:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	4.5	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	1.4	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-03 Client Sample Name: NASA/JPL, MW-18-4, 10/29/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	1.7	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	2.3	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-03 **Client Sample Name:** NASA/JPL, MW-18-4, 10/29/2020 9:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 15:57	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-03	Client Sample Name: NASA/JPL, MW-18-4, 10/29/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20	15:57	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-03	Client Sample Name: NASA/JPL, MW-18-4, 10/29/2020 9:00:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 20:46		KB1	IC6	1	B092209	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-03	Client Sample Name: NASA/JPL, MW-18-4, 10/29/2020 9:00:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0029	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	3.0	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 08:54	SAV	IC-4	1	B092536	No Prep
2	EPA-200.8	11/04/20 09:00	11/09/20 22:32	ARD	PE-EL2	1	B091692	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-04 Client Sample Name: NASA/JPL, MW-18-3, 10/29/2020 10:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-04		Client Sample Name: NASA/JPL, MW-18-3, 10/29/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-04	Client Sample Name: NASA/JPL, MW-18-3, 10/29/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 12:44	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-04	Client Sample Name: NASA/JPL, MW-18-3, 10/29/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 12:44		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-04	Client Sample Name: NASA/JPL, MW-18-3, 10/29/2020 10:00:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 19:23		KB1	IC6	1	B092209	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-04	Client Sample Name: NASA/JPL, MW-18-3, 10/29/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0018	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 08:06		SAV	IC-4	1	B092536	No Prep
2	EPA-200.8	11/04/20 09:00	11/09/20 22:11		ARD	PE-EL2	1	B091692	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-05 Client Sample Name: NASA/JPL, MW-18-2, 10/29/2020 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-05 Client Sample Name: NASA/JPL, MW-18-2, 10/29/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-05 **Client Sample Name:** NASA/JPL, MW-18-2, 10/29/2020 11:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 16:21	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-05	Client Sample Name: NASA/JPL, MW-18-2, 10/29/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 16:21		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-05	Client Sample Name: NASA/JPL, MW-18-2, 10/29/2020 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	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20	21:02	KB1	IC6	1	B092209	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-05	Client Sample Name: NASA/JPL, MW-18-2, 10/29/2020 11:15:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000097	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	0.57	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 09:04	SAV	IC-4	1	B092536	No Prep
2	EPA-200.8	11/04/20 09:00	11/09/20 22:34	ARD	PE-EL2	1	B091692	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID:	2031816-06	Client Sample Name:	NASA/JPL, MW-17-5, 10/29/2020 1:20:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #	
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1	
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1	
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1	
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
Chloroform	0.47	ug/L	0.50	0.14	EPA-524.2	ND	J	1	
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1	
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1	
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1	
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1	
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1	
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1	
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1	
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1	
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1	
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1	
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1	
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1	
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1	
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1	
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-06 Client Sample Name: NASA/JPL, MW-17-5, 10/29/2020 1:20:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.28	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.63	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-06	Client Sample Name: NASA/JPL, MW-17-5, 10/29/2020 1:20:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 12:49	11/05/20 19:58	MGC	MS-V5	1	B091776	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-06	Client Sample Name: NASA/JPL, MW-17-5, 10/29/2020 1:20:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 12:49	11/05/20	19:58	MGC	MS-V5	1	B091776	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-06	Client Sample Name: NASA/JPL, MW-17-5, 10/29/2020 1:20:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	5.2	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 22:58	KB1	IC6	1	B092210	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-06	Client Sample Name: NASA/JPL, MW-17-5, 10/29/2020 1:20:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0019	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 10:30		SAV	IC-4	1	B092537	No Prep
2	EPA-200.8	11/04/20 09:00	11/06/20 22:46		ARD	PE-EL2	1	B091691	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-07 Client Sample Name: NASA/JPL, MW-17-4, 10/29/2020 2:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	0.21	ug/L	0.50	0.17	EPA-524.2	ND	J	1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	1.1	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.17	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-07 Client Sample Name: NASA/JPL, MW-17-4, 10/29/2020 2:45:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	1.0	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	1.9	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-07	Client Sample Name: NASA/JPL, MW-17-4, 10/29/2020 2:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 16:45	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-07	Client Sample Name: NASA/JPL, MW-17-4, 10/29/2020 2:45:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20	16:45	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-07	Client Sample Name: NASA/JPL, MW-17-4, 10/29/2020 2:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	5.4	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20	21:19	KB1	IC6	1	B092209	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-07	Client Sample Name: NASA/JPL, MW-17-4, 10/29/2020 2:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0019	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	1.9	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 09:13	SAV	IC-4	1	B092536	No Prep
2	EPA-200.8	11/04/20 09:00	11/09/20 22:36	ARD	PE-EL2	1	B091692	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-08	Client Sample Name: NASA/JPL, MW-17-3, 10/29/2020 3:30:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.53	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.21	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031816-08) and Client Sample Name (NASA/JPL, MW-17-3, 10/29/2020 3:30:00PM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-08	Client Sample Name: NASA/JPL, MW-17-3, 10/29/2020 3:30:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 17:09	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-08	Client Sample Name: NASA/JPL, MW-17-3, 10/29/2020 3:30:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20	17:09	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-08	Client Sample Name: NASA/JPL, MW-17-3, 10/29/2020 3:30:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 22:25	KB1	IC6	1	B092209	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-08	Client Sample Name: NASA/JPL, MW-17-3, 10/29/2020 3:30:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00014	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	1.1	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 10:01	SAV	IC-4	1	B092536	No Prep
2	EPA-200.8	11/04/20 09:00	11/09/20 22:37	ARD	PE-EL2	1	B091692	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-09 Client Sample Name: NASA/JPL, MW-17-2, 10/29/2020 4:00:00PM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-09 Client Sample Name: NASA/JPL, MW-17-2, 10/29/2020 4:00:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-09	Client Sample Name: NASA/JPL, MW-17-2, 10/29/2020 4:00:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 17:33	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-09	Client Sample Name: NASA/JPL, MW-17-2, 10/29/2020 4:00:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20	17:33	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-09	Client Sample Name: NASA/JPL, MW-17-2, 10/29/2020 4:00:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 22:42	KB1	IC6	1	B092209	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-09	Client Sample Name: NASA/JPL, MW-17-2, 10/29/2020 4:00:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000059	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	0.72	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 10:11	SAV	IC-4	1	B092536	No Prep
2	EPA-200.8	11/04/20 09:00	11/09/20 22:39	ARD	PE-EL2	1	B091692	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-10	Client Sample Name: NASA/JPL, EB-4, 10/29/2020 3:40:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-10	Client Sample Name: NASA/JPL, EB-4, 10/29/2020 3:40:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	2.6	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031816-10	Client Sample Name: NASA/JPL, EB-4, 10/29/2020 3:40:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 17:57	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031816-10	Client Sample Name: NASA/JPL, EB-4, 10/29/2020 3:40:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20	17:57	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031816-10	Client Sample Name: NASA/JPL, EB-4, 10/29/2020 3:40:00PM, 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/10/20 11:00	11/10/20 22:08	KB1	IC6	1	B092209	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031816-10	Client Sample Name: NASA/JPL, EB-4, 10/29/2020 3:40:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000079	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 10:21		SAV	IC-4	1	B092536	No Prep
2	EPA-200.8	11/04/20 09:00	11/09/20 22:41		ARD	PE-EL2	1	B091692	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091775						
Benzene	B091775-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091775-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091775-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091775-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091775-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091775-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091775-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091775-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091775-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091775-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091775-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091775-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091775-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B091775-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091775-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091775-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091775-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091775-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091775-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091775-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091775-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091775-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091775-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091775-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091775-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091775-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091775-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091775-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091775						
trans-1,3-Dichloropropene	B091775-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091775-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091775-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091775-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091775-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091775-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091775-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091775-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091775-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091775-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B091775-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091775-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091775-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B091775-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B091775-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B091775-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B091775-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B091775-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B091775-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B091775-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B091775-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B091775-BLK1	ND	ug/L	0.50	0.18	
Acetone	B091775-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B091775-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B091775-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B091775-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B091775-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B091775-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B091775-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B091775-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B091775-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
-------------	--------------	-----------	-------	-----	-----	-----------

QC Batch ID: B091775

Ethyl t-butyl ether	B091775-BLK1	ND	ug/L	0.50	0.32	
Hexachloroethane	B091775-BLK1	ND	ug/L	0.50	0.11	
2-Hexanone	B091775-BLK1	ND	ug/L	10	5.0	
Methacrylonitrile	B091775-BLK1	ND	ug/L	10	2.3	
Methyl ethyl ketone	B091775-BLK1	ND	ug/L	5.0	3.3	
Methyl iodide	B091775-BLK1	ND	ug/L	2.0	1.1	
Methyl isobutyl ketone	B091775-BLK1	ND	ug/L	5.0	2.4	
Methyl methacrylate	B091775-BLK1	ND	ug/L	5.0	1.2	
Pentachloroethane	B091775-BLK1	ND	ug/L	2.0	0.63	
Propionitrile	B091775-BLK1	ND	ug/L	20	6.2	
Tetrahydrofuran	B091775-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	B091775-BLK1	ND	ug/L	0.50	0.34	
o-Xylene	B091775-BLK1	ND	ug/L	0.50	0.13	
1,2-Dichloroethane-d4 (Surrogate)	B091775-BLK1	101	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B091775-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B091775-BLK1	98.6	%	80 - 120 (LCL - UCL)		

QC Batch ID: B091776

Benzene	B091776-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091776-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091776-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091776-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091776-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091776-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091776-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091776-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091776-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091776-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091776-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091776-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091776-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091776-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091776-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091776-BLK1	ND	ug/L	0.50	0.093	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091776						
Dibromochloromethane	B091776-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091776-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091776-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091776-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091776-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091776-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091776-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091776-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091776-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091776-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091776-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091776-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091776-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091776-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091776-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091776-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091776-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091776-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	B091776-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091776-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091776-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091776-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091776-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091776-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091776-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091776-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091776-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091776-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091776-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B091776-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091776-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091776-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091776-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091776-BLK1	ND	ug/L	0.50	0.15	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Table with 7 columns: Constituent, QC Sample ID, MB Result, Units, PQL, MDL, Lab Quals. Includes a QC Batch ID: B091776 and various chemical constituents with their respective results and limits.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B091775										
Benzene	B091775-BS1	LCS	24.500	25.000	ug/L	98.0		70 - 130		
Bromodichloromethane	B091775-BS1	LCS	24.290	25.000	ug/L	97.2		70 - 130		
Chlorobenzene	B091775-BS1	LCS	22.760	25.000	ug/L	91.0		70 - 130		
Chloroethane	B091775-BS1	LCS	26.250	25.000	ug/L	105		70 - 130		
1,4-Dichlorobenzene	B091775-BS1	LCS	22.400	25.000	ug/L	89.6		70 - 130		
1,1-Dichloroethane	B091775-BS1	LCS	24.400	25.000	ug/L	97.6		70 - 130		
1,1-Dichloroethene	B091775-BS1	LCS	25.020	25.000	ug/L	100		70 - 130		
Toluene	B091775-BS1	LCS	23.670	25.000	ug/L	94.7		70 - 130		
Trichloroethene	B091775-BS1	LCS	22.800	25.000	ug/L	91.2		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091775-BS1	LCS	9.6100	10.000	ug/L	96.1		75 - 125		
Toluene-d8 (Surrogate)	B091775-BS1	LCS	9.8100	10.000	ug/L	98.1		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091775-BS1	LCS	9.8400	10.000	ug/L	98.4		80 - 120		

QC Batch ID: B091776										
Benzene	B091776-BS1	LCS	24.390	25.000	ug/L	97.6		70 - 130		
Bromodichloromethane	B091776-BS1	LCS	25.220	25.000	ug/L	101		70 - 130		
Chlorobenzene	B091776-BS1	LCS	23.630	25.000	ug/L	94.5		70 - 130		
Chloroethane	B091776-BS1	LCS	26.260	25.000	ug/L	105		70 - 130		
1,4-Dichlorobenzene	B091776-BS1	LCS	23.440	25.000	ug/L	93.8		70 - 130		
1,1-Dichloroethane	B091776-BS1	LCS	24.630	25.000	ug/L	98.5		70 - 130		
1,1-Dichloroethene	B091776-BS1	LCS	25.440	25.000	ug/L	102		70 - 130		
Toluene	B091776-BS1	LCS	24.990	25.000	ug/L	100		70 - 130		
Trichloroethene	B091776-BS1	LCS	25.720	25.000	ug/L	103		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091776-BS1	LCS	9.5900	10.000	ug/L	95.9		75 - 125		
Toluene-d8 (Surrogate)	B091776-BS1	LCS	10.070	10.000	ug/L	101		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091776-BS1	LCS	10.000	10.000	ug/L	100		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes QC Batch ID: B091775 and Used client sample: Y - Description: MW-18-3, 10/29/2020 10:00.

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes QC Batch ID: B091776 and Used client sample: Y - Description: MW-17-5, 10/29/2020 13:20.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B091776		Used client sample: Y - Description: MW-17-5, 10/29/2020 13:20								
1,1-Dichloroethene	MS	2031816-06	ND	25.650	25.000	ug/L		103		70 - 130
	MSD	2031816-06	ND	25.580	25.000	ug/L	0.3	102	20	70 - 130
Toluene	MS	2031816-06	ND	24.500	25.000	ug/L		98.0		70 - 130
	MSD	2031816-06	ND	24.400	25.000	ug/L	0.4	97.6	20	70 - 130
Trichloroethene	MS	2031816-06	0.63000	24.110	25.000	ug/L		93.9		70 - 130
	MSD	2031816-06	0.63000	23.750	25.000	ug/L	1.5	92.5	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2031816-06	ND	9.9800	10.000	ug/L		99.8		75 - 125
	MSD	2031816-06	ND	9.7900	10.000	ug/L	1.9	97.9		75 - 125
Toluene-d8 (Surrogate)	MS	2031816-06	ND	10.050	10.000	ug/L		100		80 - 120
	MSD	2031816-06	ND	9.8400	10.000	ug/L	2.1	98.4		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2031816-06	ND	9.8400	10.000	ug/L		98.4		80 - 120
	MSD	2031816-06	ND	9.9700	10.000	ug/L	1.3	99.7		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
-------------	--------------	-----------	-------	-----	-----	-----------

QC Batch ID: B091775

Chloroacetonitrile	B091775-BLK1	0	ug/L			
1-Chlorobutane	B091775-BLK1	0	ug/L			
1,1-Dichloropropanone	B091775-BLK1	0	ug/L			
Methyl acrylate	B091775-BLK1	0	ug/L			
Nitrobenzene	B091775-BLK1	0	ug/L			
2-Nitropropane	B091775-BLK1	0	ug/L			

QC Batch ID: B091776

Chloroacetonitrile	B091776-BLK1	0	ug/L			
1-Chlorobutane	B091776-BLK1	0	ug/L			
1,1-Dichloropropanone	B091776-BLK1	0	ug/L			
Methyl acrylate	B091776-BLK1	0	ug/L			
Nitrobenzene	B091776-BLK1	0	ug/L			
2-Nitropropane	B091776-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092209						
Perchlorate	B092209-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: B092210						
Perchlorate	B092210-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092209										
Perchlorate	B092209-BS1	LCS	8.6123	10.000	ug/L	86.1		85	115	
QC Batch ID: B092210										
Perchlorate	B092210-BS1	LCS	9.3344	10.000	ug/L	93.3		85	115	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B092209		Used client sample: Y - Description: MW-18-3, 10/29/2020 10:00								
Perchlorate	DUP	2031816-04	1.2241	1.2522		ug/L	2.3		15	J
	MS	2031816-04	1.2241	11.473	10.101	ug/L		101	80 - 120	
	MSD	2031816-04	1.2241	11.440	10.101	ug/L	0.3	101	15 80 - 120	
QC Batch ID: B092210		Used client sample: Y - Description: MW-17-5, 10/29/2020 13:20								
Perchlorate	DUP	2031816-06	5.2143	5.1508		ug/L	1.2		15	
	MS	2031816-06	5.2143	15.504	10.101	ug/L		102	80 - 120	
	MSD	2031816-06	5.2143	15.435	10.101	ug/L	0.4	101	15 80 - 120	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091691						
Total Recoverable Chromium	B091691-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B091692						
Total Recoverable Chromium	B091692-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B092536						
Hexavalent Chromium	B092536-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B092537						
Hexavalent Chromium	B092537-BLK1	ND	mg/L	0.00020	0.000020	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091691										
Total Recoverable Chromium	B091691-BS1	LCS	41.840	40.000	ug/L	105		85 - 115		
QC Batch ID: B091692										
Total Recoverable Chromium	B091692-BS1	LCS	42.804	40.000	ug/L	107		85 - 115		
QC Batch ID: B092536										
Hexavalent Chromium	B092536-BS1	LCS	0.021507	0.020000	mg/L	108		90 - 110		
QC Batch ID: B092537										
Hexavalent Chromium	B092537-BS1	LCS	0.020905	0.020000	mg/L	105		90 - 110		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	Percent Recovery	
QC Batch ID: B091691		Used client sample: Y - Description: MW-17-5, 10/29/2020 13:20								
Total Recoverable Chromium	DUP	2031816-06	3.0670	2.7770		ug/L	9.9		20	J
	MS	2031816-06	3.0670	43.466	40.000	ug/L		101	70 - 130	
	MSD	2031816-06	3.0670	42.544	40.000	ug/L	2.1	98.7	20 70 - 130	
QC Batch ID: B091692		Used client sample: Y - Description: MW-18-3, 10/29/2020 10:00								
Total Recoverable Chromium	DUP	2031816-04	1.6680	1.6140		ug/L	3.3		20	J
	MS	2031816-04	1.6680	41.665	40.000	ug/L		100	70 - 130	
	MSD	2031816-04	1.6680	41.083	40.000	ug/L	1.4	98.5	20 70 - 130	
QC Batch ID: B092536		Used client sample: Y - Description: MW-18-3, 10/29/2020 10:00								
Hexavalent Chromium	DUP	'031816-04RE'	0.0018280	0.0017710		mg/L	3.2		10	
	MS	'031816-04RE'	0.0018280	0.021268	0.020202	mg/L		96.2	90 - 110	
	MSD	'031816-04RE'	0.0018280	0.021952	0.020202	mg/L	3.2	99.6	10 90 - 110	
QC Batch ID: B092537		Used client sample: Y - Description: MW-17-5, 10/29/2020 13:20								
Hexavalent Chromium	DUP	'031816-06RE'	0.0018660	0.0018030		mg/L	3.4		10	
	MS	'031816-06RE'	0.0018660	0.023354	0.020202	mg/L		106	90 - 110	
	MSD	'031816-06RE'	0.0018660	0.023128	0.020202	mg/L	1.0	105	10 90 - 110	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/16/2020 20:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 11/18/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive

Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2031921

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 10/30/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda

Client Service Rep

Stuart Buttram

Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	7

Sample Results

2031921-01 - TB-5-103020	
Volatile Organic Analysis (EPA Method 524.2).....	11
Volatile Organic Analysis (EPA Method 524.2) TICs.....	14
2031921-02 - MW-23-5	
Volatile Organic Analysis (EPA Method 524.2).....	15
Volatile Organic Analysis (EPA Method 524.2) TICs.....	18
Water Analysis (General Chemistry).....	19
Metals Analysis.....	20
2031921-03 - MW-23-4	
Volatile Organic Analysis (EPA Method 524.2).....	21
Volatile Organic Analysis (EPA Method 524.2) TICs.....	24
Water Analysis (General Chemistry).....	25
Metals Analysis.....	26
2031921-04 - MW-23-3	
Volatile Organic Analysis (EPA Method 524.2).....	27
Volatile Organic Analysis (EPA Method 524.2) TICs.....	30
Water Analysis (General Chemistry).....	31
Metals Analysis.....	32
2031921-05 - MW-23-2	
Volatile Organic Analysis (EPA Method 524.2).....	33
Volatile Organic Analysis (EPA Method 524.2) TICs.....	36
Water Analysis (General Chemistry).....	37
Metals Analysis.....	38
2031921-06 - DUP-4-4Q20	
Volatile Organic Analysis (EPA Method 524.2).....	39
Volatile Organic Analysis (EPA Method 524.2) TICs.....	42
Water Analysis (General Chemistry).....	43
Metals Analysis.....	44
2031921-07 - MW-23-1	
Volatile Organic Analysis (EPA Method 524.2).....	45
Volatile Organic Analysis (EPA Method 524.2) TICs.....	48
Water Analysis (General Chemistry).....	49
Metals Analysis.....	50
2031921-08 - MW-26-2	
Volatile Organic Analysis (EPA Method 524.2).....	51
Volatile Organic Analysis (EPA Method 524.2) TICs.....	54
Water Analysis (General Chemistry).....	55
Metals Analysis.....	56
2031921-09 - EB-5-103020	
Volatile Organic Analysis (EPA Method 524.2).....	57
Volatile Organic Analysis (EPA Method 524.2) TICs.....	60
Water Analysis (General Chemistry).....	61
Metals Analysis.....	62
2031921-10 - MW-26-1	
Volatile Organic Analysis (EPA Method 524.2).....	63
Volatile Organic Analysis (EPA Method 524.2) TICs.....	66
Water Analysis (General Chemistry).....	67
Metals Analysis.....	68

Quality Control Reports

Volatile Organic Analysis (EPA Method 524.2)

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.



Table of Contents

Method Blank Analysis.....	69
Laboratory Control Sample.....	74
Precision and Accuracy.....	75
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	77
Water Analysis (General Chemistry)	
Method Blank Analysis.....	78
Laboratory Control Sample.....	79
Precision and Accuracy.....	80
Metals Analysis	
Method Blank Analysis.....	81
Laboratory Control Sample.....	82
Precision and Accuracy.....	83
Notes	
Notes and Definitions.....	84



Chain of Custody Form

Page 1 of 1

Required Fields

Report To: Tidewater, Inc.
 Client: David Conner
 Attn: David Conner
 Street Address: 3761 Altucks Drive
 City: Powell State: OH Zip: 43065
 Phone: 626 1298 - 5715 Fax: 614 792 - 2897
 Email Address: david.conner@ltdsh2o.net
 Submission #: 20-31921

Project Description: JPL-GW Monitoring
 Project Code: 4020
 Sampler(s): Blaine Tech

Analysis Requested

Orthophosphate 365.1	
CI, NO3, NO2, SO4	
Hexavalent Cr6 -218.6 (mg/L)	
Perchlorate	
TRM: Cr	
VOCs EPA 524.2	X
Matrix*	GW
Date	10/30/20
Time	0700
Sample #	1 TB-5-103020
	2 MW-23-5
	3 MW-23-4
	4 MW-23-3
	5 MW-23-2
	6 DUP-4-4020
	7 MW-23-1
	8 MW-26-2
	9 EB-5-103020
	10 MW-26-1

Billing

Client: Tidewater
 Attn: David Conner
 Address: 3761 Altucks Drive
 City: Powell State: OH Zip: 43065
 Are there any tests with holding times? less than or equal to 48 hours?
 Yes No
 *Standard Turnaround = 10

CHK BY: [Signature] INDETERMINATION
 [Signature] SLURRY
 MS/MSD + Level 4
 MS/MSD + Level 4
 285 SHORT HOLDING TIME
 DO C₂ BOD MBAS
 M = Miscellaneous O = Other

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid
 Turnaround # of working days: 24 Hr Rush 48 Hr Rush 3-5 Day Rush Normal (10 - Days)
 Lab TAT Approval: _____ *Additional Charges May Apply

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

Cost Center:
 1. Requisitioned By: [Signature] Date: 10/30/20 Time: 1710
 2. Requisitioned By: [Signature] Date: 10/30/20 Time: 2005
 3. Requisitioned By: [Signature] Date: 10/30/20 Time: 2005

Global ID:
 1. Received By: [Signature] Date: 10/30/20 Time: 1410
 2. Received By: [Signature] Date: 10/30/20 Time: 2005
 3. Received By: [Signature] Date: 10/30/20 Time: 2005

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

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.



BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 2

Submission #: 20-31921

SHIPPING INFORMATION
 Fed Ex UPS Ontrac Hand Delivery
 BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER
 Ice Chest None Box
 Other (Specify) _____

FREE LIQUID
 YES NO
 W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

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

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

COC Received YES NO
 Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time: 10/30/2005
 Temperature: (A) 5 °C / (C) 3 °C Analyst Init: GSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES									E	E
4oz / 8oz / 16oz PE UNPRES										
2oz Cr*									D	D
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz (16oz)									F	F
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A									
40ml VOA VIAL		ABC	A→F	ABC	ABC	ABC	ABC	A→F	ABC	ABC
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 503/008/009										
QT EPA 515.18150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____
 Sample Numbering Completed By: GSP Date/Time: 10/30/2005
 A = Actual / C = Corrected



BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 of 2

Submission #: 20-31921

SHIPPING INFORMATION: Fed Ex UPS Ontrac Hand Delivery BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER: Ice Chest None Box Other (Specify) _____

FREE LIQUID: YES NO W / S _____

Refrigerant: Ice Blue Ice None Other Comments: _____

Gustody-Seals: Ice Chest Containers None Comments: _____

Intact? Yes No Intact? Yes No

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

COC Received: YES NO

Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time: 10/30/2005

Temperature: (A) 15 °C / (C) 3 °C Analyst Init: GSP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES		E	W	E	E	E	E	W		
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶⁺		D	GH	D	D	D	D	GH		
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz		F	KL	F	F	F	F	KL		
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL										
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 505/018/0080										
QT EPA 515.18150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: GSP Date/Time: 10/30/2005

A = Actual / C = Corrected

Rev 21 05/23/2016
 IS:\WP\Beet\WordPerfect\LAB_DCS\FORMS\GAMSECrev 201



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031921-01	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: TB-5-103020 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Blank Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-5-103020 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031921-02	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-23-5 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 08:05 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-23-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031921-03	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-23-4 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 08:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-23-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031921-04	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-23-3 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 09:30 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-23-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031921-05	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-23-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 10:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-23-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031921-06	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: DUP-4-4Q20 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 10:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-4-4Q20 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031921-07	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-23-1 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 11:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-23-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031921-08	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-26-2 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 12:30 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-26-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2031921-09	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: EB-5-103020 Sampled By: Blaine Tech of BTST	Receive Date: 10/30/2020 20:05 Sampling Date: 10/30/2020 13:50 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-5-103020 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2031921-10	COC Number: ---	Receive Date: 10/30/2020 20:05
	Project Number: JPL/NASA	Sampling Date: 10/30/2020 13:16
	Sampling Location: ---	Sample Depth: ---
	Sampling Point: MW-26-1	Lab Matrix: Water
	Sampled By: Blaine Tech of BTST	Sample Type: Groundwater
		Delivery Work Order:
		Global ID: 0000000000
		Location ID (FieldPoint): MW-26-1
		Matrix: WG
		Sample QC Type (SACode): CS
		Cooler ID:

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-01	Client Sample Name: JPL/NASA, TB-5-103020, 10/30/2020 7:00:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-01	Client Sample Name: JPL/NASA, TB-5-103020, 10/30/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-01	Client Sample Name: JPL/NASA, TB-5-103020, 10/30/2020 7:00:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 14:51	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-01	Client Sample Name: JPL/NASA, TB-5-103020, 10/30/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	14:51	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-02 Client Sample Name: JPL/NASA, MW-23-5, 10/30/2020 8:05:00AM, Blaine Tech

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031921-02) and Client Sample Name (JPL/NASA, MW-23-5, 10/30/2020 8:05:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-02 **Client Sample Name:** JPL/NASA, MW-23-5, 10/30/2020 8:05:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 15:15	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-02	Client Sample Name: JPL/NASA, MW-23-5, 10/30/2020 8:05:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	15:15	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-02	Client Sample Name: JPL/NASA, MW-23-5, 10/30/2020 8:05:00AM, 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	Prep Method
1	EPA-314.0	11/11/20 21:00	11/12/20 00:44	SAV	IC6	1	B092540	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-02	Client Sample Name: JPL/NASA, MW-23-5, 10/30/2020 8:05:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00014	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	2.3	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 11:09		SAV	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20 16:00		EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-03 Client Sample Name: JPL/NASA, MW-23-4, 10/30/2020 8:35:00AM, Blaine Tech

Table with 9 columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-03 Client Sample Name: JPL/NASA, MW-23-4, 10/30/2020 8:35:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-03	Client Sample Name: JPL/NASA, MW-23-4, 10/30/2020 8:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 12:26	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-03	Client Sample Name: JPL/NASA, MW-23-4, 10/30/2020 8:35:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	12:26	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-03	Client Sample Name: JPL/NASA, MW-23-4, 10/30/2020 8:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.3	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/11/20 21:00	11/11/20 23:38	SAV	IC6	1	B092540	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-03	Client Sample Name: JPL/NASA, MW-23-4, 10/30/2020 8:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0036	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20	11:57	SAV	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20	15:44	EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-04 Client Sample Name: JPL/NASA, MW-23-3, 10/30/2020 9:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-04 **Client Sample Name:** JPL/NASA, MW-23-3, 10/30/2020 9:30:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-04	Client Sample Name: JPL/NASA, MW-23-3, 10/30/2020 9:30:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	102	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 15:39	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-04	Client Sample Name: JPL/NASA, MW-23-3, 10/30/2020 9:30:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	15:39	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-04	Client Sample Name: JPL/NASA, MW-23-3, 10/30/2020 9:30:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/11/20 21:00	11/12/20 01:01	SAV	IC6	1	B092540	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-04	Client Sample Name: JPL/NASA, MW-23-3, 10/30/2020 9:30:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0028	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	2.7	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 12:35		SAV	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20 16:02		EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-05	Client Sample Name: JPL/NASA, MW-23-2, 10/30/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.73	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.30	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-05		Client Sample Name: JPL/NASA, MW-23-2, 10/30/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.70	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	2.4	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-05	Client Sample Name: JPL/NASA, MW-23-2, 10/30/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 16:03	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-05	Client Sample Name: JPL/NASA, MW-23-2, 10/30/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	16:03	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-05	Client Sample Name: JPL/NASA, MW-23-2, 10/30/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	4.5	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/11/20 21:00	11/12/20 01:50	SAV	IC6	1	B092540	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-05	Client Sample Name: JPL/NASA, MW-23-2, 10/30/2020 10:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0011	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 12:45		SAV	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20 16:03		EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-06	Client Sample Name: JPL/NASA, DUP-4-4Q20, 10/30/2020 10:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.80	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.31	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-06	Client Sample Name: JPL/NASA, DUP-4-4Q20, 10/30/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.73	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	2.4	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-06	Client Sample Name: JPL/NASA, DUP-4-4Q20, 10/30/2020 10:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 16:27	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-06	Client Sample Name: JPL/NASA, DUP-4-4Q20, 10/30/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	16:27	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-06	Client Sample Name: JPL/NASA, DUP-4-4Q20, 10/30/2020 10:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	4.8	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/11/20 21:00	11/12/20 02:07	SAV	IC6	1	B092540	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-06	Client Sample Name: JPL/NASA, DUP-4-4Q20, 10/30/2020 10:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0013	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 12:54		SAV	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20 16:05		EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-07 Client Sample Name: JPL/NASA, MW-23-1, 10/30/2020 11:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.32	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-07	Client Sample Name: JPL/NASA, MW-23-1, 10/30/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.33	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-07	Client Sample Name: JPL/NASA, MW-23-1, 10/30/2020 11:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	99.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 16:51	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-07	Client Sample Name: JPL/NASA, MW-23-1, 10/30/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	16:51	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-07	Client Sample Name: JPL/NASA, MW-23-1, 10/30/2020 11:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	14	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/11/20 21:00	11/12/20 02:23	SAV	IC6	1	B092540	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-07	Client Sample Name: JPL/NASA, MW-23-1, 10/30/2020 11:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0013	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 13:04		SAV	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20 16:07		EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-08	Client Sample Name: JPL/NASA, MW-26-2, 10/30/2020 12:30:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	2.7	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	0.30	ug/L	0.50	0.27	EPA-524.2	ND	J	1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031921-08) and Client Sample Name (JPL/NASA, MW-26-2, 10/30/2020 12:30:00PM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Qualls, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-08	Client Sample Name: JPL/NASA, MW-26-2, 10/30/2020 12:30:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 12:29	11/06/20 18:28	MGC	MS-V5	1	B091868	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-08	Client Sample Name: JPL/NASA, MW-26-2, 10/30/2020 12:30:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 12:29	11/06/20	18:28	MGC	MS-V5	1	B091868	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-08	Client Sample Name: JPL/NASA, MW-26-2, 10/30/2020 12:30:00PM, 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/11/20 21:00	11/12/20 09:17	SAV	IC6	1	B092541	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-08	Client Sample Name: JPL/NASA, MW-26-2, 10/30/2020 12:30:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00069	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 14:11		SAV	IC-4	1	B092539	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:23		EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031921-09) and Client Sample Name (JPL/NASA, EB-5-103020, 10/30/2020 1:50:00PM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various VOCs like Benzene, Bromobenzene, etc.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-09	Client Sample Name: JPL/NASA, EB-5-103020, 10/30/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	2.5	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-09	Client Sample Name: JPL/NASA, EB-5-103020, 10/30/2020 1:50:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 17:15	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-09	Client Sample Name: JPL/NASA, EB-5-103020, 10/30/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	17:15	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-09	Client Sample Name: JPL/NASA, EB-5-103020, 10/30/2020 1:50:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/11/20 21:00	11/12/20 02:40	SAV	IC6	1	B092540	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-09	Client Sample Name: JPL/NASA, EB-5-103020, 10/30/2020 1:50:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000069	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20	13:52	SAV	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20	16:09	EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2031921-10) and Client Sample Name (JPL/NASA, MW-26-1, 10/30/2020 1:16:00PM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various organic compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-10		Client Sample Name: JPL/NASA, MW-26-1, 10/30/2020 1:16:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.24	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2031921-10	Client Sample Name: JPL/NASA, MW-26-1, 10/30/2020 1:16:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 17:39	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2031921-10	Client Sample Name: JPL/NASA, MW-26-1, 10/30/2020 1:16:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	17:39	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2031921-10	Client Sample Name: JPL/NASA, MW-26-1, 10/30/2020 1:16:00PM, 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/11/20 21:00	11/12/20 02:56	SAV	IC6	1	B092540	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2031921-10	Client Sample Name: JPL/NASA, MW-26-1, 10/30/2020 1:16:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00046	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	0.52	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 14:01		SAV	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20 16:10		EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091867						
Benzene	B091867-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091867-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091867-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091867-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091867-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091867-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091867-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091867-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091867-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091867-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091867-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091867-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091867-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B091867-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091867-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091867-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091867-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091867-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091867-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091867-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091867-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091867-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091867-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091867-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091867-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091867-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091867-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091867-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091867						
trans-1,3-Dichloropropene	B091867-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091867-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091867-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091867-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091867-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091867-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091867-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091867-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091867-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091867-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B091867-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091867-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091867-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B091867-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B091867-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B091867-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B091867-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B091867-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B091867-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B091867-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B091867-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B091867-BLK1	ND	ug/L	0.50	0.18	
Acetone	B091867-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B091867-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B091867-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B091867-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B091867-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B091867-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B091867-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B091867-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B091867-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
-------------	--------------	-----------	-------	-----	-----	-----------

QC Batch ID: B091867

Ethyl t-butyl ether	B091867-BLK1	ND	ug/L	0.50	0.32	
Hexachloroethane	B091867-BLK1	ND	ug/L	0.50	0.11	
2-Hexanone	B091867-BLK1	ND	ug/L	10	5.0	
Methacrylonitrile	B091867-BLK1	ND	ug/L	10	2.3	
Methyl ethyl ketone	B091867-BLK1	ND	ug/L	5.0	3.3	
Methyl iodide	B091867-BLK1	ND	ug/L	2.0	1.1	
Methyl isobutyl ketone	B091867-BLK1	ND	ug/L	5.0	2.4	
Methyl methacrylate	B091867-BLK1	ND	ug/L	5.0	1.2	
Pentachloroethane	B091867-BLK1	ND	ug/L	2.0	0.63	
Propionitrile	B091867-BLK1	ND	ug/L	20	6.2	
Tetrahydrofuran	B091867-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	B091867-BLK1	ND	ug/L	0.50	0.34	
o-Xylene	B091867-BLK1	ND	ug/L	0.50	0.13	
1,2-Dichloroethane-d4 (Surrogate)	B091867-BLK1	96.0	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B091867-BLK1	99.0	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B091867-BLK1	96.3	%	80 - 120 (LCL - UCL)		

QC Batch ID: B091868

Benzene	B091868-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091868-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091868-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091868-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091868-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091868-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091868-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091868-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091868-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091868-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091868-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091868-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091868-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091868-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091868-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091868-BLK1	ND	ug/L	0.50	0.093	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091868						
Dibromochloromethane	B091868-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091868-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091868-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091868-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091868-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091868-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091868-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091868-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091868-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091868-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091868-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091868-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091868-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091868-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091868-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091868-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091868-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091868-BLK1	ND	ug/L	0.50	0.14	
trans-1,3-Dichloropropene	B091868-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091868-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091868-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091868-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091868-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091868-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091868-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091868-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091868-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091868-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091868-BLK1	ND	ug/L	0.50	0.21	
1,1,2,2-Tetrachloroethane	B091868-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091868-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091868-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091868-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091868-BLK1	ND	ug/L	0.50	0.15	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Table with 7 columns: Constituent, QC Sample ID, MB Result, Units, PQL, MDL, Lab Quals. Includes a QC Batch ID: B091868 and a list of 30 chemical constituents with their respective results and limits.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B091867										
Benzene	B091867-BS1	LCS	25.290	25.000	ug/L	101		70 - 130		
Bromodichloromethane	B091867-BS1	LCS	25.940	25.000	ug/L	104		70 - 130		
Chlorobenzene	B091867-BS1	LCS	24.530	25.000	ug/L	98.1		70 - 130		
Chloroethane	B091867-BS1	LCS	26.620	25.000	ug/L	106		70 - 130		
1,4-Dichlorobenzene	B091867-BS1	LCS	24.620	25.000	ug/L	98.5		70 - 130		
1,1-Dichloroethane	B091867-BS1	LCS	25.240	25.000	ug/L	101		70 - 130		
1,1-Dichloroethene	B091867-BS1	LCS	25.740	25.000	ug/L	103		70 - 130		
Toluene	B091867-BS1	LCS	25.380	25.000	ug/L	102		70 - 130		
Trichloroethene	B091867-BS1	LCS	24.940	25.000	ug/L	99.8		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091867-BS1	LCS	9.6200	10.000	ug/L	96.2		75 - 125		
Toluene-d8 (Surrogate)	B091867-BS1	LCS	9.9700	10.000	ug/L	99.7		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091867-BS1	LCS	9.7300	10.000	ug/L	97.3		80 - 120		
QC Batch ID: B091868										
Benzene	B091868-BS1	LCS	23.720	25.000	ug/L	94.9		70 - 130		
Bromodichloromethane	B091868-BS1	LCS	23.820	25.000	ug/L	95.3		70 - 130		
Chlorobenzene	B091868-BS1	LCS	23.660	25.000	ug/L	94.6		70 - 130		
Chloroethane	B091868-BS1	LCS	25.100	25.000	ug/L	100		70 - 130		
1,4-Dichlorobenzene	B091868-BS1	LCS	23.490	25.000	ug/L	94.0		70 - 130		
1,1-Dichloroethane	B091868-BS1	LCS	23.410	25.000	ug/L	93.6		70 - 130		
1,1-Dichloroethene	B091868-BS1	LCS	23.990	25.000	ug/L	96.0		70 - 130		
Toluene	B091868-BS1	LCS	23.910	25.000	ug/L	95.6		70 - 130		
Trichloroethene	B091868-BS1	LCS	24.680	25.000	ug/L	98.7		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091868-BS1	LCS	9.2400	10.000	ug/L	92.4		75 - 125		
Toluene-d8 (Surrogate)	B091868-BS1	LCS	9.8300	10.000	ug/L	98.3		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091868-BS1	LCS	9.8800	10.000	ug/L	98.8		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes QC Batch ID: B091867 and Used client sample: Y - Description: MW-23-4, 10/30/2020 08:35.

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Percent Recovery, Lab Quals. Includes QC Batch ID: B091868 and Used client sample: Y - Description: MW-26-2, 10/30/2020 12:30.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B091868		Used client sample: Y - Description: MW-26-2, 10/30/2020 12:30								
1,1-Dichloroethene	MS	2031921-08	ND	25.350	25.000	ug/L		101		70 - 130
	MSD	2031921-08	ND	25.410	25.000	ug/L	0.2	102	20	70 - 130
Toluene	MS	2031921-08	ND	24.220	25.000	ug/L		96.9		70 - 130
	MSD	2031921-08	ND	24.420	25.000	ug/L	0.8	97.7	20	70 - 130
Trichloroethene	MS	2031921-08	0.43000	23.700	25.000	ug/L		93.1		70 - 130
	MSD	2031921-08	0.43000	23.700	25.000	ug/L	0	93.1	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2031921-08	ND	9.7700	10.000	ug/L		97.7		75 - 125
	MSD	2031921-08	ND	9.5500	10.000	ug/L	2.3	95.5		75 - 125
Toluene-d8 (Surrogate)	MS	2031921-08	ND	9.8700	10.000	ug/L		98.7		80 - 120
	MSD	2031921-08	ND	9.9000	10.000	ug/L	0.3	99.0		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2031921-08	ND	9.8200	10.000	ug/L		98.2		80 - 120
	MSD	2031921-08	ND	9.4800	10.000	ug/L	3.5	94.8		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091867						
Chloroacetonitrile	B091867-BLK1	0	ug/L			
1-Chlorobutane	B091867-BLK1	0	ug/L			
1,1-Dichloropropanone	B091867-BLK1	0	ug/L			
Methyl acrylate	B091867-BLK1	0	ug/L			
Nitrobenzene	B091867-BLK1	0	ug/L			
2-Nitropropane	B091867-BLK1	0	ug/L			
QC Batch ID: B091868						
Chloroacetonitrile	B091868-BLK1	0	ug/L			
1-Chlorobutane	B091868-BLK1	0	ug/L			
1,1-Dichloropropanone	B091868-BLK1	0	ug/L			
Methyl acrylate	B091868-BLK1	0	ug/L			
Nitrobenzene	B091868-BLK1	0	ug/L			
2-Nitropropane	B091868-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092540						
Perchlorate	B092540-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: B092541						
Perchlorate	B092541-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab	Quals
								Percent Recovery	RPD		
QC Batch ID: B092540											
Perchlorate	B092540-BS1	LCS	10.526	10.000	ug/L	105		85	115		
QC Batch ID: B092541											
Perchlorate	B092541-BS1	LCS	9.2163	10.000	ug/L	92.2		85	115		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B092540		Used client sample: Y - Description: MW-23-4, 10/30/2020 08:35								
Perchlorate	DUP	2031921-03	2.2751	2.2888		ug/L	0.6		15	J
	MS	2031921-03	2.2751	12.549	10.101	ug/L		102	80 - 120	
	MSD	2031921-03	2.2751	12.604	10.101	ug/L	0.4	102	15 80 - 120	
QC Batch ID: B092541		Used client sample: Y - Description: MW-26-2, 10/30/2020 12:30								
Perchlorate	DUP	2031921-08	3.1076	3.1580		ug/L	1.6		15	J
	MS	2031921-08	3.1076	13.173	10.101	ug/L		99.7	80 - 120	
	MSD	2031921-08	3.1076	13.111	10.101	ug/L	0.5	99.0	15 80 - 120	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091864						
Total Recoverable Chromium	B091864-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B091865						
Total Recoverable Chromium	B091865-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B092537						
Hexavalent Chromium	B092537-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B092538						
Hexavalent Chromium	B092538-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B092539						
Hexavalent Chromium	B092539-BLK1	ND	mg/L	0.00020	0.000020	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091864										
Total Recoverable Chromium	B091864-BS1	LCS	44.687	40.000	ug/L	112		85 - 115		
QC Batch ID: B091865										
Total Recoverable Chromium	B091865-BS1	LCS	41.675	40.000	ug/L	104		85 - 115		
QC Batch ID: B092537										
Hexavalent Chromium	B092537-BS1	LCS	0.020905	0.020000	mg/L	105		90 - 110		
QC Batch ID: B092538										
Hexavalent Chromium	B092538-BS1	LCS	0.020998	0.020000	mg/L	105		90 - 110		
QC Batch ID: B092539										
Hexavalent Chromium	B092539-BS1	LCS	0.021814	0.020000	mg/L	109		90 - 110		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Precision & Accuracy

Table with columns: Constituent, Source Type, Source Sample ID, Source Result, Result, Spike Added, Units, RPD, Percent Recovery, Control Limits RPD, Control Limits Percent Recovery, Lab Quals. Includes QC Batch IDs B091864, B091865, B092537, B092538, and B092539.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 12:40
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 11/18/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive

Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2032069

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 11/2/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda
Client Service Rep

Stuart Buttram
Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	7

Sample Results

2032069-01 - TB-6-110220	
Volatile Organic Analysis (EPA Method 524.2).....	11
Volatile Organic Analysis (EPA Method 524.2) TICs.....	14
2032069-02 - MW-4-5	
Volatile Organic Analysis (EPA Method 524.2).....	15
Volatile Organic Analysis (EPA Method 524.2) TICs.....	18
Water Analysis (General Chemistry).....	19
Metals Analysis.....	20
2032069-03 - MW-4-4	
Volatile Organic Analysis (EPA Method 524.2).....	21
Volatile Organic Analysis (EPA Method 524.2) TICs.....	24
Water Analysis (General Chemistry).....	25
Metals Analysis.....	26
2032069-04 - MW-4-3	
Volatile Organic Analysis (EPA Method 524.2).....	27
Volatile Organic Analysis (EPA Method 524.2) TICs.....	30
Water Analysis (General Chemistry).....	31
Metals Analysis.....	32
2032069-05 - MW-4-2	
Volatile Organic Analysis (EPA Method 524.2).....	33
Volatile Organic Analysis (EPA Method 524.2) TICs.....	36
Water Analysis (General Chemistry).....	37
Metals Analysis.....	38
2032069-06 - MW-4-1	
Volatile Organic Analysis (EPA Method 524.2).....	39
Volatile Organic Analysis (EPA Method 524.2) TICs.....	42
Water Analysis (General Chemistry).....	43
Metals Analysis.....	44
2032069-07 - MW-12-5	
Volatile Organic Analysis (EPA Method 524.2).....	45
Volatile Organic Analysis (EPA Method 524.2) TICs.....	48
Water Analysis (General Chemistry).....	49
Metals Analysis.....	50
2032069-08 - MW-12-4	
Volatile Organic Analysis (EPA Method 524.2).....	51
Volatile Organic Analysis (EPA Method 524.2) TICs.....	54
Water Analysis (General Chemistry).....	55
Metals Analysis.....	56
2032069-09 - MW-12-3	
Volatile Organic Analysis (EPA Method 524.2).....	57
Volatile Organic Analysis (EPA Method 524.2) TICs.....	60
Water Analysis (General Chemistry).....	61
Metals Analysis.....	62
2032069-10 - MW-12-2	
Volatile Organic Analysis (EPA Method 524.2).....	63
Volatile Organic Analysis (EPA Method 524.2) TICs.....	66
Water Analysis (General Chemistry).....	67
Metals Analysis.....	68
2032069-11 - EB-6-110220	
Volatile Organic Analysis (EPA Method 524.2).....	69

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.



Table of Contents

Volatile Organic Analysis (EPA Method 524.2) TICs.....	72
Water Analysis (General Chemistry).....	73
Metals Analysis.....	74
Quality Control Reports	
Volatile Organic Analysis (EPA Method 524.2)	
Method Blank Analysis.....	75
Laboratory Control Sample.....	78
Precision and Accuracy.....	79
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	80
Water Analysis (General Chemistry)	
Method Blank Analysis.....	81
Laboratory Control Sample.....	82
Precision and Accuracy.....	83
Metals Analysis	
Method Blank Analysis.....	84
Laboratory Control Sample.....	85
Precision and Accuracy.....	86
Notes	
Notes and Definitions.....	87



Chain of Custody Form

Page 1 of 1

Required Fields

Report To: Tidewater, Inc.
 Client: Tidewater
 Attn: David Conner
 Street Address: 3761 Altucks Drive
 City: Powell State: OH Zip: 43065
 Phone: 626 1298 5715 Fax: 614 792-2697
 Email Address: david.conner@tlsh20.net
 Submission #: 2032069

Project Description: JPL-GW Monitoring
 Project Code: 4020
 Sampler(s): Blaine Tech

Analysis Requested

Orthophosphate 365.1	
Cl, NO3, NO2, SO4	
Hexavalent Cr6 -218.6 (mg/L)	
Perchlorate	
TRM: Cr	
VOCs EPA 524.2	X

Matrix*

Sample #	Date	Time	Matrix*
-1	11/02/20	0700	GW
-2	11/05/20	0845	GW
-3	0810	GW	GW
-4	0835	GW	GW
-5	0905	GW	GW
-6	0935	GW	GW
-8	1050	GW	GW
-9	1115	GW	GW
-10	1140	GW	GW
-11	1217	GW	GW
-11	1315	GW	GW

Notes

CHK BY: DISTRIBUTION
 SUB OUT

SHORT HOLDING TIME
 CR# NO. NO. OF GB
 DO CL EOC MBAS OUT

Billing

Client: Tidewater
 Attn: David Conner
 Address: 3761 Altucks Drive
 City: Powell State: OH Zip: 43065
 Are there any tests with holding times? less than or equal to 48 hours?
 Yes No
 *Standard Turnaround = 30

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

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

Lab TAT Approval: _____ * Additional Charges May Apply

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

Cost Center:
 1. Relinquished By: _____ Date: 11/02/20 Time: 1850
 2. Relinquished By: _____ Date: 11/02/20 Time: 1850
 3. Relinquished By: _____ Date: 11/20/20 Time: 1850

Global ID:
 1. Received By: _____ Date: 11/02/20 Time: 1815
 2. Received By: _____ Date: 11/20/20 Time: 1850
 3. Received By: _____ Date: 11/20/20 Time: 1850

MBU Site:
 CVA RCRA
 Geotracker 5 File (CA Default)
 Geotracker 2 File
 other (Specify): _____

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

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.



BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 2

Submission #: 2032069

SHIPPING INFORMATION: Fed Ex UPS Ontrac Hand Delivery BC Lab Field Service Other (Specify)

SHIPPING CONTAINER: Ice Chest None Box Other (Specify)

FREE LIQUID: YES NO W / S

Refrigerant: Ice Blue Ice None Other Comments:

Custody Seals: Ice Chest Containers None Comments:

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

COC Received: YES NO Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time: 11/2/15 5:00

Temperature: (A) -5 °C / (C) -3 °C Analyst Init: [Signature]

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES		E	F	E	E	F	F	E	E	E
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶⁺		D	D	D	D	D	D	D	D	D
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz		F	F	F	F	F	F	F	F	F
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A									
40ml VOA VIAL		ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/003/0080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
10ml EPA 547										
10ml EPA 531.1										
3oz EPA 548										
YT EPA 549										
YT EPA 8015M										
YT EPA 8270										
oz / 16oz / 32oz AMBER										
oz / 16oz / 32oz JAR										
OIL SLEEVE										
CB VIAL										
LASTIC BAG										
EDLAR BAG										
ERROUS IRON										
VCORE										
4ART KIT										
MMA CANISTER										

Comments: _____

Sample Numbering Completed By: [Signature] Date/Time: 11/2/15 5:00

Actual / C = Corrected

Rev 21 05/23/2016



BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 of 2

Submission #: 2032069

SHIPPING INFORMATION: Fed Ex UPS Ontrac Hand Delivery BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER: Ice Chest None Box Other (Specify) _____

FREE LIQUID: YES NO W / S _____

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None Comments: _____

Intact? Yes No Intact? Yes No

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

COC Received: YES NO Emissivity: 0.98 Container: PE Thermometer ID: 208 Date/Time: 11/2/18 5:00

Temperature: (A) -5 °C / (C) -3 °C Analyst Init: GJP

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	E									
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶⁺	D									
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz	F									
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC									
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 504GDE/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 801SM										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: GJP Date/Time: 11/2/18 5:00

1 = Actual / C = Corrected

Rev 21 05/23/2016
 IS:\WPDoc\Ward\Perfec\LAB_DOCS\FORMS\SAVRECrev 201



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032069-01	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: TB-6-110220 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Blank Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-6-110220 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032069-02	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-4-5 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 07:40 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-4-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032069-03	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-4-4 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 08:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-4-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032069-04	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-4-3 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 08:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-4-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032069-05	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-4-2 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 09:05 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-4-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032069-06	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-4-1 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 09:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-4-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032069-07	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-12-5 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 10:50 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032069-08	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-12-4 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 11:15 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032069-09	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-12-3 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 11:40 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032069-10	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-12-2 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 12:17 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-12-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032069-11	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: EB-6-110220 Sampled By: Blaine Tech of BTST	Receive Date: 11/02/2020 18:50 Sampling Date: 11/02/2020 13:15 Sample Depth: --- Lab Matrix: Water Sample Type: Water Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-6-110220 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-01	Client Sample Name: JPL/NASA, TB-6-110220, 11/2/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-01	Client Sample Name: JPL/NASA, TB-6-110220, 11/2/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-01	Client Sample Name: JPL/NASA, TB-6-110220, 11/2/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 18:22	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-01	Client Sample Name: JPL/NASA, TB-6-110220, 11/2/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 18:22		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-02	Client Sample Name: JPL/NASA, MW-4-5, 11/2/2020 7:40:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-02	Client Sample Name: JPL/NASA, MW-4-5, 11/2/2020 7:40:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-02	Client Sample Name: JPL/NASA, MW-4-5, 11/2/2020 7:40:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 18:46	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-02	Client Sample Name: JPL/NASA, MW-4-5, 11/2/2020 7:40:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20	18:46	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-02	Client Sample Name: JPL/NASA, MW-4-5, 11/2/2020 7:40:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/12/20 22:00	11/12/20 23:51	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-02	Client Sample Name: JPL/NASA, MW-4-5, 11/2/2020 7:40:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000044	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 15:08		KB1	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/06/20 16:12		EAR	PE-EL2	1	B091864	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-03	Client Sample Name: JPL/NASA, MW-4-4, 11/2/2020 8:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-03	Client Sample Name: JPL/NASA, MW-4-4, 11/2/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-03	Client Sample Name: JPL/NASA, MW-4-4, 11/2/2020 8:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 19:10	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-03	Client Sample Name: JPL/NASA, MW-4-4, 11/2/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20	19:10	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-03	Client Sample Name: JPL/NASA, MW-4-4, 11/2/2020 8:10:00AM, 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	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 00:58	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-03	Client Sample Name: JPL/NASA, MW-4-4, 11/2/2020 8:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000029	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	0.76	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 15:18	KB1	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:38	EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-04 Client Sample Name: JPL/NASA, MW-4-3, 11/2/2020 8:35:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-04	Client Sample Name: JPL/NASA, MW-4-3, 11/2/2020 8:35:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-04	Client Sample Name: JPL/NASA, MW-4-3, 11/2/2020 8:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20 23:59	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-04	Client Sample Name: JPL/NASA, MW-4-3, 11/2/2020 8:35:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/05/20	23:59	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-04	Client Sample Name: JPL/NASA, MW-4-3, 11/2/2020 8:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.5	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	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 01:14	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-04	Client Sample Name: JPL/NASA, MW-4-3, 11/2/2020 8:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00026	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 15:28		KB1	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:39		EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-05	Client Sample Name: JPL/NASA, MW-4-2, 11/2/2020 9:05:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.40	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-05	Client Sample Name: JPL/NASA, MW-4-2, 11/2/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.19	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-05	Client Sample Name: JPL/NASA, MW-4-2, 11/2/2020 9:05:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	100	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 00:23	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-05	Client Sample Name: JPL/NASA, MW-4-2, 11/2/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 00:23		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-05	Client Sample Name: JPL/NASA, MW-4-2, 11/2/2020 9:05:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	38	ug/L	20	4.0	EPA-314.0	ND	A07	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 11:23	SAV	IC6	5	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-05	Client Sample Name: JPL/NASA, MW-4-2, 11/2/2020 9:05:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00091	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	1.6	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 15:37	KB1	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:41	EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-06	Client Sample Name: JPL/NASA, MW-4-1, 11/2/2020 9:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-06	Client Sample Name: JPL/NASA, MW-4-1, 11/2/2020 9:35:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-06	Client Sample Name: JPL/NASA, MW-4-1, 11/2/2020 9:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 00:47	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-06	Client Sample Name: JPL/NASA, MW-4-1, 11/2/2020 9:35:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 00:47		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-06	Client Sample Name: JPL/NASA, MW-4-1, 11/2/2020 9:35:00AM, 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	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 02:20	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-06	Client Sample Name: JPL/NASA, MW-4-1, 11/2/2020 9:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00010	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 15:47		KB1	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:43		EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-07 Client Sample Name: JPL/NASA, MW-12-5, 11/2/2020 10:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	0.35	ug/L	0.50	0.17	EPA-524.2	ND	J	1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.37	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-07	Client Sample Name: JPL/NASA, MW-12-5, 11/2/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-07	Client Sample Name: JPL/NASA, MW-12-5, 11/2/2020 10:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 01:12	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-07	Client Sample Name: JPL/NASA, MW-12-5, 11/2/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 01:12		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-07	Client Sample Name: JPL/NASA, MW-12-5, 11/2/2020 10:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.5	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 02:37	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-07	Client Sample Name: JPL/NASA, MW-12-5, 11/2/2020 10:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0015	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 15:56		KB1	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:45		EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-08	Client Sample Name: JPL/NASA, MW-12-4, 11/2/2020 11:15:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	0.31	ug/L	0.50	0.17	EPA-524.2	ND	J	1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.45	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-08	Client Sample Name: JPL/NASA, MW-12-4, 11/2/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-08	Client Sample Name: JPL/NASA, MW-12-4, 11/2/2020 11:15:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 01:36	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-08	Client Sample Name: JPL/NASA, MW-12-4, 11/2/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20	01:36	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-08	Client Sample Name: JPL/NASA, MW-12-4, 11/2/2020 11:15:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	2.5	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	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 02:54	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-08	Client Sample Name: JPL/NASA, MW-12-4, 11/2/2020 11:15:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00071	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	0.84	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 16:06		KB1	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:46		EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-09	Client Sample Name: JPL/NASA, MW-12-3, 11/2/2020 11:40:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	0.82	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.68	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-09 **Client Sample Name:** JPL/NASA, MW-12-3, 11/2/2020 11:40:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-09	Client Sample Name: JPL/NASA, MW-12-3, 11/2/2020 11:40:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 01:59	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-09	Client Sample Name: JPL/NASA, MW-12-3, 11/2/2020 11:40:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 01:59		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-09	Client Sample Name: JPL/NASA, MW-12-3, 11/2/2020 11:40:00AM, 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 03:10	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-09	Client Sample Name: JPL/NASA, MW-12-3, 11/2/2020 11:40:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00040	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 16:16		KB1	IC-4	1	B092537	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:48		EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-10	Client Sample Name: JPL/NASA, MW-12-2, 11/2/2020 12:17:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2032069-10) and Client Sample Name (JPL/NASA, MW-12-2, 11/2/2020 12:17:00PM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-10	Client Sample Name: JPL/NASA, MW-12-2, 11/2/2020 12:17:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 02:23	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-10	Client Sample Name: JPL/NASA, MW-12-2, 11/2/2020 12:17:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20	02:23	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-10	Client Sample Name: JPL/NASA, MW-12-2, 11/2/2020 12:17:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.7	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 03:27	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-10	Client Sample Name: JPL/NASA, MW-12-2, 11/2/2020 12:17:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00011	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 16:25		KB1	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:50		EAR	PE-EL2	1	B091865	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-11	Client Sample Name: JPL/NASA, EB-6-110220, 11/2/2020 1:15:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-11	Client Sample Name: JPL/NASA, EB-6-110220, 11/2/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	2.5	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032069-11	Client Sample Name: JPL/NASA, EB-6-110220, 11/2/2020 1:15:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 02:48	MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032069-11	Client Sample Name: JPL/NASA, EB-6-110220, 11/2/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/05/20 09:00	11/06/20 02:48		MGC	MS-V5	1	B091775	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032069-11	Client Sample Name: JPL/NASA, EB-6-110220, 11/2/2020 1:15:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/12/20 22:00	11/13/20 03:44	SAV	IC6	1	B092712	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032069-11	Client Sample Name: JPL/NASA, EB-6-110220, 11/2/2020 1:15:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00018	mg/L	0.00020	0.000020	EPA-218.6	ND	J	1
Total Recoverable Chromium	0.55	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/12/20 07:00	11/12/20 16:35		KB1	IC-4	1	B092538	No Prep
2	EPA-200.8	11/05/20 20:10	11/09/20 14:52		EAR	PE-EL2	1	B091865	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091775						
Benzene	B091775-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091775-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091775-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091775-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091775-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091775-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091775-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091775-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091775-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091775-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091775-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091775-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091775-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B091775-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091775-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091775-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091775-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091775-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091775-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091775-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091775-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091775-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091775-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091775-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091775-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091775-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091775-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091775-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091775						
trans-1,3-Dichloropropene	B091775-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091775-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091775-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091775-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091775-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091775-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091775-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091775-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091775-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091775-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B091775-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091775-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091775-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091775-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B091775-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B091775-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B091775-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B091775-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B091775-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B091775-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B091775-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B091775-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B091775-BLK1	ND	ug/L	0.50	0.18	
Acetone	B091775-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B091775-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B091775-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B091775-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B091775-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B091775-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B091775-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B091775-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B091775-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091775						
Ethyl t-butyl ether	B091775-BLK1	ND	ug/L	0.50	0.32	
Hexachloroethane	B091775-BLK1	ND	ug/L	0.50	0.11	
2-Hexanone	B091775-BLK1	ND	ug/L	10	5.0	
Methacrylonitrile	B091775-BLK1	ND	ug/L	10	2.3	
Methyl ethyl ketone	B091775-BLK1	ND	ug/L	5.0	3.3	
Methyl iodide	B091775-BLK1	ND	ug/L	2.0	1.1	
Methyl isobutyl ketone	B091775-BLK1	ND	ug/L	5.0	2.4	
Methyl methacrylate	B091775-BLK1	ND	ug/L	5.0	1.2	
Pentachloroethane	B091775-BLK1	ND	ug/L	2.0	0.63	
Propionitrile	B091775-BLK1	ND	ug/L	20	6.2	
Tetrahydrofuran	B091775-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	B091775-BLK1	ND	ug/L	0.50	0.34	
o-Xylene	B091775-BLK1	ND	ug/L	0.50	0.13	
1,2-Dichloroethane-d4 (Surrogate)	B091775-BLK1	101	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B091775-BLK1	100	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B091775-BLK1	98.6	%	80 - 120 (LCL - UCL)		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B091775										
Benzene	B091775-BS1	LCS	24.500	25.000	ug/L	98.0		70 - 130		
Bromodichloromethane	B091775-BS1	LCS	24.290	25.000	ug/L	97.2		70 - 130		
Chlorobenzene	B091775-BS1	LCS	22.760	25.000	ug/L	91.0		70 - 130		
Chloroethane	B091775-BS1	LCS	26.250	25.000	ug/L	105		70 - 130		
1,4-Dichlorobenzene	B091775-BS1	LCS	22.400	25.000	ug/L	89.6		70 - 130		
1,1-Dichloroethane	B091775-BS1	LCS	24.400	25.000	ug/L	97.6		70 - 130		
1,1-Dichloroethene	B091775-BS1	LCS	25.020	25.000	ug/L	100		70 - 130		
Toluene	B091775-BS1	LCS	23.670	25.000	ug/L	94.7		70 - 130		
Trichloroethene	B091775-BS1	LCS	22.800	25.000	ug/L	91.2		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091775-BS1	LCS	9.6100	10.000	ug/L	96.1		75 - 125		
Toluene-d8 (Surrogate)	B091775-BS1	LCS	9.8100	10.000	ug/L	98.1		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091775-BS1	LCS	9.8400	10.000	ug/L	98.4		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B091775		Used client sample: N								
Benzene	MS	2031816-04	ND	25.890	25.000	ug/L		104		70 - 130
	MSD	2031816-04	ND	26.420	25.000	ug/L	2.0	106	20	70 - 130
Bromodichloromethane	MS	2031816-04	ND	26.250	25.000	ug/L		105		70 - 130
	MSD	2031816-04	ND	26.390	25.000	ug/L	0.5	106	20	70 - 130
Chlorobenzene	MS	2031816-04	ND	24.480	25.000	ug/L		97.9		70 - 130
	MSD	2031816-04	ND	25.020	25.000	ug/L	2.2	100	20	70 - 130
Chloroethane	MS	2031816-04	ND	27.760	25.000	ug/L		111		70 - 130
	MSD	2031816-04	ND	27.490	25.000	ug/L	1.0	110	20	70 - 130
1,4-Dichlorobenzene	MS	2031816-04	ND	24.550	25.000	ug/L		98.2		70 - 130
	MSD	2031816-04	ND	24.910	25.000	ug/L	1.5	99.6	20	70 - 130
1,1-Dichloroethane	MS	2031816-04	ND	26.140	25.000	ug/L		105		70 - 130
	MSD	2031816-04	ND	26.090	25.000	ug/L	0.2	104	20	70 - 130
1,1-Dichloroethene	MS	2031816-04	ND	27.040	25.000	ug/L		108		70 - 130
	MSD	2031816-04	ND	26.730	25.000	ug/L	1.2	107	20	70 - 130
Toluene	MS	2031816-04	ND	26.090	25.000	ug/L		104		70 - 130
	MSD	2031816-04	ND	25.930	25.000	ug/L	0.6	104	20	70 - 130
Trichloroethene	MS	2031816-04	ND	25.070	25.000	ug/L		100		70 - 130
	MSD	2031816-04	ND	24.730	25.000	ug/L	1.4	98.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2031816-04	ND	9.9500	10.000	ug/L		99.5		75 - 125
	MSD	2031816-04	ND	9.4700	10.000	ug/L	4.9	94.7		75 - 125
Toluene-d8 (Surrogate)	MS	2031816-04	ND	10.160	10.000	ug/L		102		80 - 120
	MSD	2031816-04	ND	9.8600	10.000	ug/L	3.0	98.6		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2031816-04	ND	9.7300	10.000	ug/L		97.3		80 - 120
	MSD	2031816-04	ND	9.4900	10.000	ug/L	2.5	94.9		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091775						
Chloroacetonitrile	B091775-BLK1	0	ug/L			
1-Chlorobutane	B091775-BLK1	0	ug/L			
1,1-Dichloropropanone	B091775-BLK1	0	ug/L			
Methyl acrylate	B091775-BLK1	0	ug/L			
Nitrobenzene	B091775-BLK1	0	ug/L			
2-Nitropropane	B091775-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092712						
Perchlorate	B092712-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092712										
Perchlorate	B092712-BS1	LCS	9.3214	10.000	ug/L	93.2		85	115	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B092712		Used client sample: Y - Description: MW-4-5, 11/02/2020 07:40								
Perchlorate	DUP	2032069-02	ND	ND		ug/L			15	
	MS	2032069-02	ND	10.707	10.101	ug/L		106		80 - 120
	MSD	2032069-02	ND	10.707	10.101	ug/L	0	106	15	80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091864						
Total Recoverable Chromium	B091864-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B091865						
Total Recoverable Chromium	B091865-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B092537						
Hexavalent Chromium	B092537-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B092538						
Hexavalent Chromium	B092538-BLK1	ND	mg/L	0.00020	0.000020	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091864										
Total Recoverable Chromium	B091864-BS1	LCS	44.687	40.000	ug/L	112		85 - 115		
QC Batch ID: B091865										
Total Recoverable Chromium	B091865-BS1	LCS	41.675	40.000	ug/L	104		85 - 115		
QC Batch ID: B092537										
Hexavalent Chromium	B092537-BS1	LCS	0.020905	0.020000	mg/L	105		90 - 110		
QC Batch ID: B092538										
Hexavalent Chromium	B092538-BS1	LCS	0.020998	0.020000	mg/L	105		90 - 110		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	Percent Recovery	
QC Batch ID: B091864		Used client sample: N								
Total Recoverable Chromium	DUP	2031921-03	3.1270	3.6290		ug/L	14.9		20	
	MS	2031921-03	3.1270	43.287	40.000	ug/L		100		70 - 130
	MSD	2031921-03	3.1270	43.305	40.000	ug/L	0.0	100	20	70 - 130
QC Batch ID: B091865		Used client sample: N								
Total Recoverable Chromium	DUP	2031921-08	2.3560	1.2760		ug/L	59.5		20	J,A02
	MS	2031921-08	2.3560	41.297	40.000	ug/L		97.4		70 - 130
	MSD	2031921-08	2.3560	41.144	40.000	ug/L	0.4	97.0	20	70 - 130
QC Batch ID: B092537		Used client sample: N								
Hexavalent Chromium	DUP	'031816-06RE'	0.0018660	0.0018030		mg/L	3.4		10	
	MS	'031816-06RE'	0.0018660	0.023354	0.020202	mg/L		106		90 - 110
	MSD	'031816-06RE'	0.0018660	0.023128	0.020202	mg/L	1.0	105	10	90 - 110
QC Batch ID: B092538		Used client sample: N								
Hexavalent Chromium	DUP	'031921-03RE'	0.0035580	0.0033430		mg/L	6.2		10	
	MS	'031921-03RE'	0.0035580	0.022811	0.020202	mg/L		95.3		90 - 110
	MSD	'031921-03RE'	0.0035580	0.023942	0.020202	mg/L	4.8	101	10	90 - 110

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/18/2020 16:41
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- A02 The difference between duplicate readings is less than the quantitation limit.
- A07 Detection and quantitation limits were raised due to sample dilution caused by high analyte concentration or matrix interference.
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 11/19/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive

Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2032280

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 11/3/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda

Client Service Rep

Stuart Buttram

Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	9

Sample Results

2032280-01 - TB-7-110320	
Volatile Organic Analysis (EPA Method 524.2).....	13
Volatile Organic Analysis (EPA Method 524.2) TICs.....	16
2032280-02 - MW-11-4	
Volatile Organic Analysis (EPA Method 524.2).....	17
Volatile Organic Analysis (EPA Method 524.2) TICs.....	20
Water Analysis (General Chemistry).....	21
Metals Analysis.....	22
2032280-03 - MW-11-5	
Volatile Organic Analysis (EPA Method 524.2).....	23
Volatile Organic Analysis (EPA Method 524.2) TICs.....	26
Water Analysis (General Chemistry).....	27
Metals Analysis.....	28
2032280-04 - MW-11-3	
Volatile Organic Analysis (EPA Method 524.2).....	29
Volatile Organic Analysis (EPA Method 524.2) TICs.....	32
Water Analysis (General Chemistry).....	33
Metals Analysis.....	34
2032280-05 - MW-11-2	
Volatile Organic Analysis (EPA Method 524.2).....	35
Volatile Organic Analysis (EPA Method 524.2) TICs.....	38
Water Analysis (General Chemistry).....	39
Metals Analysis.....	40
2032280-06 - MW-11-1	
Volatile Organic Analysis (EPA Method 524.2).....	41
Volatile Organic Analysis (EPA Method 524.2) TICs.....	44
Water Analysis (General Chemistry).....	45
Metals Analysis.....	46
2032280-07 - MW-21-4	
Volatile Organic Analysis (EPA Method 524.2).....	47
Volatile Organic Analysis (EPA Method 524.2) TICs.....	50
Water Analysis (General Chemistry).....	51
Metals Analysis.....	52
2032280-08 - MW-21-5	
Volatile Organic Analysis (EPA Method 524.2).....	53
Volatile Organic Analysis (EPA Method 524.2) TICs.....	56
Water Analysis (General Chemistry).....	57
Metals Analysis.....	58
2032280-09 - MW-21-3	
Volatile Organic Analysis (EPA Method 524.2).....	59
Volatile Organic Analysis (EPA Method 524.2) TICs.....	62
Water Analysis (General Chemistry).....	63
Metals Analysis.....	64
2032280-10 - MW-21-2	
Volatile Organic Analysis (EPA Method 524.2).....	65
Volatile Organic Analysis (EPA Method 524.2) TICs.....	68
Water Analysis (General Chemistry).....	69
Metals Analysis.....	70
2032280-11 - DUP-5-4Q20	
Volatile Organic Analysis (EPA Method 524.2).....	71

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.



Table of Contents

Volatile Organic Analysis (EPA Method 524.2) TICs.....	74
Water Analysis (General Chemistry).....	75
Metals Analysis.....	76
2032280-12 - EB-7-110320	
Volatile Organic Analysis (EPA Method 524.2).....	77
Volatile Organic Analysis (EPA Method 524.2) TICs.....	80
Water Analysis (General Chemistry).....	81
Metals Analysis.....	82
Quality Control Reports	
Volatile Organic Analysis (EPA Method 524.2)	
Method Blank Analysis.....	83
Laboratory Control Sample.....	86
Precision and Accuracy.....	87
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	88
Water Analysis (General Chemistry)	
Method Blank Analysis.....	89
Laboratory Control Sample.....	90
Precision and Accuracy.....	91
Metals Analysis	
Method Blank Analysis.....	92
Laboratory Control Sample.....	93
Precision and Accuracy.....	94
Notes	
Notes and Definitions.....	95



Chain of Custody Form

Page 1 of 2

Client: Tidewater, Inc.
Attn: David Conner
Street Address: 3761 Alticks Drive
City: Powell **State:** OH **Zip:** 43065
Phone: 626 | 298 - 5715 **Fax:** 614 | 792 - 2897
Email Address: david.conner@tidwh2b.net
Submission #: 20-32280

Project Description: JPL-GW Monitoring
Project Code: 4020
Sampler (s): Blaine Tech

Analysis Requested:
 Orthophosphate 365.1
 Cl, NO3, NO2, SO4
 Hexavalent Cr 6 -218.6 (mg/L)
 Perchlorate
 TRM: Cr
 VOCs EPA 524.2

Billing:
Client: Tidewater
Attn: David Conner
Address: 3761 Alticks Drive
City: Powell **State:** OH **Zip:** 43065
 Are there any tests with holding times? less than or equal to 48 hours?
 Yes NO
 *Standard Turnaround = 10

Sample #	Sample Description	Date	Time	Matrix*
-1	TB-7-110320	11/03/20	0700	GW
-2	MW-11-4	0725	6W	
-3	MW-11-5	0800	6W	
-4	MW-11-3	0845	6W	
-5	MW-11-2	0945	6W	
-6	MW-11-1	1105	6W	
-8	MW-21-5	1155	6W	
-9	MW-21-3	1330	6W	
-10	MW-21-2	1345	6W	
-4	DOP-5-4020	1355	6W	

Notes:
 CHOCY DISTRIBUTION
 SUB OUT
 DO Cl2 BOD MBAS COT
 SHORT HOLDING TIME
 NO2 NO3 OP SS

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

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

Lab TAT Approval: _____

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:
 1. Relinquished By: _____ Date: 11/03/20 Time: 1435
 2. Relinquished By: _____ Date: 11/30/20 Time: 1715
 3. Relinquished By: _____ Date: 11/30/20 Time: 1715

Global ID: _____

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

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.



BC Laboratories, Inc.

Environmental Testing Laboratory Since 1949

COOLER RECEIPT FORM

Page 1 of 3

Submission #: 20-32280

SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____	SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____	FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/> W / S
---	---	---

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers: None Comments: _____

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

COC Received YES NO

Emissivity: .98 Container: PE Thermometer ID: 203 Date/Time 1/3 1715

Temperature: (A) 1.8 °C / (C) 1.6 °C Analyst Init PPE

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES										
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁴										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	<u>094</u>	<u>A</u>								
40ml VOA VIAL	<u>096</u>	<u>A</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>ABC</u>	<u>A-F</u>	<u>ABC</u>	<u>ABC</u>
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL - 504										
QT EPA 503/508/509										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.I										
3oz EPA 543										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: PPE Date/Time: 1/3/2020 2020

A = Actual / C = Corrected

Rev 21 05/23/2016
C:\NP\Doc\Work\Perfor\LAB_DOC\FORMS\SANREC\rev 201



BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 Of 3

Submission #: 20-32280
SHIPPING INFORMATION: Fed Ex, UPS, Ontrac, Hand Delivery, BC Lab Field Service
SHIPPING CONTAINER: Ice Chest, None, Box, Other
FREE LIQUID: YES, NO, W/S

Refrigerant: Ice, Blue Ice, None, Other
Custody Seals: Ice Chest, Containers, None

All samples received? Yes, No
All samples containers intact? Yes, No
Description(s) match COC? Yes, No
COC Received: YES, NO
Emissivity: .99, Container: PE, Thermometer ID: 208
Temperature: (A) 1.8 °C, (C) 1.6 °C
Date/Time: 4/3 1715
Analyst Init: PRE

Table with columns: SAMPLE CONTAINERS, SAMPLE NUMBERS (1-10). Rows include: QT PE UNPRES, 4oz / 8oz / 16oz PE UNPRES, 2oz Cr+, QT INORGANIC CHEMICAL METALS, INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz, PT CYANIDE, PT NITROGEN FORMS, PT TOTAL SULFIDE, 2oz. NITRATE / NITRITE, PT TOTAL ORGANIC CARBON, PT CHEMICAL OXYGEN DEMAND, PA PHENOLICS, 40ml VOA VIAL TRAVEL BLANK, 40ml VOA VIAL, QT EPA 1664, PT ODOR, RADIOLOGICAL, BACTERIOLOGICAL, 40 ml VOA VIAL- 504, QT EPA 508/508/808, QT EPA 515/1515, QT EPA 525, QT EPA 525 TRAVEL BLANK, 40ml EPA 547, 40ml EPA 531.1, 8oz EPA 548, QT EPA 549, QT EPA 8015M, QT EPA 8270, 8oz / 16oz / 32oz AMBER, 8oz / 16oz / 32oz JAR, SOIL SLEEVE, PCB VIAL, PLASTIC BAG, TEDIAR BAG, FERROUS IRON, ENCORE, SMART KIT, SUMMA CANISTER

Comments:
Sample Numbering Completed By: PRE
Date/Time: 4/3/2020 2020
Rev 21 05/23/2016
IS:\WP\Doc\WordPerfect\LAB_DOCS\FORMS\SAMREC rev 201



BC LABORATORIES INC. COOLER RECEIPT FORM Page 3 of 3

Submission #: 20-32280

SHIPPING INFORMATION: Fed Ex, UPS, Ontrac, Hand Delivery, BC Lab Field Service, Other. SHIPPING CONTAINER: Ice Chest, None, Box, Other. FREE LIQUID: YES, NO, W/S

Refrigerant: Ice, Blue Ice, None, Other. Comments:

Custody Seals: Ice Chest, Containers, None. Intact? Yes/No

All samples received? Yes/No. All samples containers intact? Yes/No. Description(s) match COC? Yes/No

COC Received: YES/NO. Emissivity: .98. Container: PC. Thermometer ID: 203. Date/Time: 4/3/1715. Analyst Init: PRE. Temperature: (A) 1 °C / (C) .8 °C

Table with columns for SAMPLE CONTAINERS and SAMPLE NUMBERS (1-10). Rows include various sample types like QT PE UNPRES, QT INORGANIC CHEMICAL METALS, etc. with handwritten entries like 'E', 'D', 'F', 'IJ', 'E', 'E', 'C'.

Comments: Sample Numbering Completed By: PRE Date/Time: 4/3/2020 2020 Rev 21 05/23/2016



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032280-01	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: TB-7-110320 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-7-110320 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032280-02	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-11-4 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 07:25 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-11-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032280-03	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-11-5 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 08:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-11-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032280-04	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-11-3 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 08:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-11-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032280-05	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-11-2 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 09:15 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-11-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032280-06	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-11-1 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 09:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-11-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032280-07	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-21-4 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 11:05 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032280-08	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-21-5 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 11:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032280-09	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-21-3 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 12:20 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032280-10	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-21-2 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 12:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-21-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032280-11	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: DUP-5-4Q20 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 12:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-5-4Q20 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032280-12	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: EB-7-110320 Sampled By: Blaine Tech of BTST	Receive Date: 11/03/2020 17:15 Sampling Date: 11/03/2020 13:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-7-110320 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-01	Client Sample Name: JPL/NASA, TB-7-110320, 11/3/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2032280-01) and Client Sample Name (JPL/NASA, TB-7-110320, 11/3/2020 7:00:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-01	Client Sample Name: JPL/NASA, TB-7-110320, 11/3/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 12:38	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-01	Client Sample Name: JPL/NASA, TB-7-110320, 11/3/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20	12:38	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-02 **Client Sample Name:** JPL/NASA, MW-11-4, 11/3/2020 7:25:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with columns: BCL Sample ID, Client Sample Name, Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-02	Client Sample Name: JPL/NASA, MW-11-4, 11/3/2020 7:25:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 13:02	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-02	Client Sample Name: JPL/NASA, MW-11-4, 11/3/2020 7:25:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20	13:02	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-02	Client Sample Name: JPL/NASA, MW-11-4, 11/3/2020 7:25:00AM, 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	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 00:45	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-02	Client Sample Name: JPL/NASA, MW-11-4, 11/3/2020 7:25:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00013	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20	16:50	KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20	16:23	EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-03 **Client Sample Name:** JPL/NASA, MW-11-5, 11/3/2020 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-03 Client Sample Name: JPL/NASA, MW-11-5, 11/3/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND	V11	1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-03	Client Sample Name: JPL/NASA, MW-11-5, 11/3/2020 8:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.7	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 13:26	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-03	Client Sample Name: JPL/NASA, MW-11-5, 11/3/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20	13:26	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-03	Client Sample Name: JPL/NASA, MW-11-5, 11/3/2020 8:00:00AM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 01:02	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-03	Client Sample Name: JPL/NASA, MW-11-5, 11/3/2020 8:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00035	mg/L	0.00020	0.000020	EPA-218.6	ND		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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 16:59		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:25		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2032280-04) and Client Sample Name (JPL/NASA, MW-11-3, 11/3/2020 8:45:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various organic compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-04 Client Sample Name: JPL/NASA, MW-11-3, 11/3/2020 8:45:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	0.28	ug/L	0.50	0.15	EPA-524.2	ND	J	1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	0.31	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	0.61	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	0.25	ug/L	0.50	0.17	EPA-524.2	ND	J	1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND	V11	1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-04	Client Sample Name: JPL/NASA, MW-11-3, 11/3/2020 8:45:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 13:50	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-04	Client Sample Name: JPL/NASA, MW-11-3, 11/3/2020 8:45:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20	13:50	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-04	Client Sample Name: JPL/NASA, MW-11-3, 11/3/2020 8:45:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	0.87	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	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 01:51	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-04	Client Sample Name: JPL/NASA, MW-11-3, 11/3/2020 8:45:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000052	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 17:09		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:27		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-05 Client Sample Name: JPL/NASA, MW-11-2, 11/3/2020 9:15:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-05	Client Sample Name: JPL/NASA, MW-11-2, 11/3/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND	V11	1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-05	Client Sample Name: JPL/NASA, MW-11-2, 11/3/2020 9:15:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 14:14	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-05	Client Sample Name: JPL/NASA, MW-11-2, 11/3/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20	14:14	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-05	Client Sample Name: JPL/NASA, MW-11-2, 11/3/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 02:08		SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-05	Client Sample Name: JPL/NASA, MW-11-2, 11/3/2020 9:15:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000056	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 17:18		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:28		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-06 **Client Sample Name:** JPL/NASA, MW-11-1, 11/3/2020 9:45:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-06 **Client Sample Name:** JPL/NASA, MW-11-1, 11/3/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND	V11	1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-06	Client Sample Name: JPL/NASA, MW-11-1, 11/3/2020 9:45:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 14:37	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-06	Client Sample Name: JPL/NASA, MW-11-1, 11/3/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20	14:37	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-06	Client Sample Name: JPL/NASA, MW-11-1, 11/3/2020 9:45:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Chloride	26	mg/L	0.50	0.13	EPA-300.0	ND		1
Nitrate as N	1.2	mg/L	0.10	0.024	EPA-300.0	ND		1
Sulfate	53	mg/L	1.0	0.14	EPA-300.0	ND		1
Nitrite as N	0.022	mg/L	0.050	0.010	EPA-353.2	0.022	J	2
Perchlorate	ND	ug/L	4.0	0.81	EPA-314.0	ND		3
ortho-Phosphate as P	ND	mg/L	0.050	0.017	EPA-365.1	ND		4

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-300.0	11/03/20 22:00	11/04/20	13:16	SAV	IC1	1	B091642	No Prep
2	EPA-353.2	11/04/20 08:56	11/04/20	09:00	MC1	KONE-1	1	B092403	No Prep
3	EPA-314.0	11/16/20 21:00	11/17/20	02:25	SAV	IC6	1	B092897	No Prep
4	EPA-365.1	11/04/20 08:23	11/04/20	08:32	MC1	SC-1	1	B092402	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-06	Client Sample Name: JPL/NASA, MW-11-1, 11/3/2020 9:45:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00021	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 17:57		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:30		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-07	Client Sample Name: JPL/NASA, MW-21-4, 11/3/2020 11:05:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	3.5	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2032280-07) and Client Sample Name (JPL/NASA, MW-21-4, 11/3/2020 11:05:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical constituents and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-07	Client Sample Name: JPL/NASA, MW-21-4, 11/3/2020 11:05:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	102	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 08:13	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-07	Client Sample Name: JPL/NASA, MW-21-4, 11/3/2020 11:05:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Instrument	Dilution	QC	
			Date/Time	Analyst			Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 08:13	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-07	Client Sample Name: JPL/NASA, MW-21-4, 11/3/2020 11:05:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/16/20 23:39	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-07	Client Sample Name: JPL/NASA, MW-21-4, 11/3/2020 11:05:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0016	mg/L	0.00020	0.000020	EPA-218.6	ND		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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 16:11		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:09		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-08	Client Sample Name: JPL/NASA, MW-21-5, 11/3/2020 11:55:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	4.1	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2032280-08) and Client Sample Name (JPL/NASA, MW-21-5, 11/3/2020 11:55:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quals, Run #. Lists various chemical compounds and their detection results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-08	Client Sample Name: JPL/NASA, MW-21-5, 11/3/2020 11:55:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.1	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	100	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 15:01	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-08	Client Sample Name: JPL/NASA, MW-21-5, 11/3/2020 11:55:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 15:01		MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-08	Client Sample Name: JPL/NASA, MW-21-5, 11/3/2020 11:55:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 12:25	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-08	Client Sample Name: JPL/NASA, MW-21-5, 11/3/2020 11:55:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.0014	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 18:06		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:32		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-09	Client Sample Name: JPL/NASA, MW-21-3, 11/3/2020 12:20:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.65	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	0.19	ug/L	0.50	0.15	EPA-524.2	ND	J	1
1,2-Dichloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,1-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-09	Client Sample Name: JPL/NASA, MW-21-3, 11/3/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	2.1	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	2.0	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND	V11	1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-09	Client Sample Name: JPL/NASA, MW-21-3, 11/3/2020 12:20:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	92.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 15:25	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-09	Client Sample Name: JPL/NASA, MW-21-3, 11/3/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20	15:25	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-09	Client Sample Name: JPL/NASA, MW-21-3, 11/3/2020 12:20:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 02:58	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-09	Client Sample Name: JPL/NASA, MW-21-3, 11/3/2020 12:20:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00057	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 18:16		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:34		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-10	Client Sample Name: JPL/NASA, MW-21-2, 11/3/2020 12:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.30	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-10		Client Sample Name: JPL/NASA, MW-21-2, 11/3/2020 12:45:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	1.0	ug/L	0.50	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	0.20	ug/L	0.50	0.19	EPA-524.2	ND	J	1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND	V11	1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-10	Client Sample Name: JPL/NASA, MW-21-2, 11/3/2020 12:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.0	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 15:49	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-10	Client Sample Name: JPL/NASA, MW-21-2, 11/3/2020 12:45:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20	15:49	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-10	Client Sample Name: JPL/NASA, MW-21-2, 11/3/2020 12:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.7	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 12:58	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-10	Client Sample Name: JPL/NASA, MW-21-2, 11/3/2020 12:45:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00024	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	0.53	ug/L	3.0	0.50	EPA-200.8	ND	J	2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 18:25		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:35		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-11	Client Sample Name: JPL/NASA, DUP-5-4Q20, 11/3/2020 12:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	0.18	ug/L	0.50	0.14	EPA-524.2	ND	J	1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-11	Client Sample Name: JPL/NASA, DUP-5-4Q20, 11/3/2020 12:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2,2-Tetrachloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Tetrachloroethene	0.49	ug/L	0.50	0.23	EPA-524.2	ND	J	1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND	V11	1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-11	Client Sample Name: JPL/NASA, DUP-5-4Q20, 11/3/2020 12:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 16:13	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-11	Client Sample Name: JPL/NASA, DUP-5-4Q20, 11/3/2020 12:55:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 16:13		MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-11	Client Sample Name: JPL/NASA, DUP-5-4Q20, 11/3/2020 12:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	1.6	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 13:15	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-11	Client Sample Name: JPL/NASA, DUP-5-4Q20, 11/3/2020 12:55:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00024	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 18:35		KB1	IC-4	1	B091822	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:37		EAR	PE-EL2	1	B092315	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-12	Client Sample Name: JPL/NASA, EB-7-110320, 11/3/2020 1:45:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-12	Client Sample Name: JPL/NASA, EB-7-110320, 11/3/2020 1:45:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	2.2	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND	V11	1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032280-12	Client Sample Name: JPL/NASA, EB-7-110320, 11/3/2020 1:45:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND		1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	101	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 16:37	MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032280-12	Client Sample Name: JPL/NASA, EB-7-110320, 11/3/2020 1:45:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/09/20 06:00	11/09/20 16:37		MGC	MS-V5	1	B092002	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032280-12	Client Sample Name: JPL/NASA, EB-7-110320, 11/3/2020 1:45:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 03:47	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032280-12	Client Sample Name: JPL/NASA, EB-7-110320, 11/3/2020 1:45:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00015	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/04/20 11:00	11/05/20 17:47		KB1	IC-4	1	B091821	No Prep
2	EPA-200.8	11/10/20 20:15	11/11/20 16:51		ARD	PE-EL2	1	B092316	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092002						
Benzene	B092002-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B092002-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B092002-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B092002-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B092002-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B092002-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B092002-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B092002-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B092002-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B092002-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B092002-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B092002-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B092002-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B092002-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B092002-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B092002-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B092002-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B092002-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B092002-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B092002-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B092002-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B092002-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B092002-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B092002-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B092002-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B092002-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B092002-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B092002-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B092002-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B092002-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B092002-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B092002-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B092002-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B092002-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092002						
trans-1,3-Dichloropropene	B092002-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B092002-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B092002-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B092002-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B092002-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B092002-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B092002-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B092002-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B092002-BLK1	ND	ug/L	0.50	0.12	
Styrene	B092002-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B092002-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B092002-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B092002-BLK1	ND	ug/L	0.50	0.23	
Toluene	B092002-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B092002-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B092002-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B092002-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B092002-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B092002-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B092002-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B092002-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B092002-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B092002-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B092002-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B092002-BLK1	ND	ug/L	0.50	0.18	
Acetone	B092002-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B092002-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B092002-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B092002-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B092002-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B092002-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B092002-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B092002-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B092002-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092002						
Ethyl t-butyl ether	B092002-BLK1	ND	ug/L	0.50	0.32	
Hexachloroethane	B092002-BLK1	ND	ug/L	0.50	0.11	
2-Hexanone	B092002-BLK1	ND	ug/L	10	5.0	
Methacrylonitrile	B092002-BLK1	ND	ug/L	10	2.3	
Methyl ethyl ketone	B092002-BLK1	ND	ug/L	5.0	3.3	
Methyl iodide	B092002-BLK1	ND	ug/L	2.0	1.1	
Methyl isobutyl ketone	B092002-BLK1	ND	ug/L	5.0	2.4	
Methyl methacrylate	B092002-BLK1	ND	ug/L	5.0	1.2	
Pentachloroethane	B092002-BLK1	ND	ug/L	2.0	0.63	
Propionitrile	B092002-BLK1	ND	ug/L	20	6.2	
Tetrahydrofuran	B092002-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	B092002-BLK1	ND	ug/L	0.50	0.34	
o-Xylene	B092002-BLK1	ND	ug/L	0.50	0.13	
1,2-Dichloroethane-d4 (Surrogate)	B092002-BLK1	93.7	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B092002-BLK1	96.3	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B092002-BLK1	98.6	%	80 - 120 (LCL - UCL)		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B092002										
Benzene	B092002-BS1	LCS	23.350	25.000	ug/L	93.4		70 - 130		
Bromodichloromethane	B092002-BS1	LCS	23.790	25.000	ug/L	95.2		70 - 130		
Chlorobenzene	B092002-BS1	LCS	23.210	25.000	ug/L	92.8		70 - 130		
Chloroethane	B092002-BS1	LCS	24.850	25.000	ug/L	99.4		70 - 130		
1,4-Dichlorobenzene	B092002-BS1	LCS	22.920	25.000	ug/L	91.7		70 - 130		
1,1-Dichloroethane	B092002-BS1	LCS	23.330	25.000	ug/L	93.3		70 - 130		
1,1-Dichloroethene	B092002-BS1	LCS	24.730	25.000	ug/L	98.9		70 - 130		
Toluene	B092002-BS1	LCS	23.030	25.000	ug/L	92.1		70 - 130		
Trichloroethene	B092002-BS1	LCS	22.530	25.000	ug/L	90.1		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B092002-BS1	LCS	9.5600	10.000	ug/L	95.6		75 - 125		
Toluene-d8 (Surrogate)	B092002-BS1	LCS	9.6300	10.000	ug/L	96.3		80 - 120		
4-Bromofluorobenzene (Surrogate)	B092002-BS1	LCS	9.9500	10.000	ug/L	99.5		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B092002		Used client sample: Y - Description: MW-21-4, 11/03/2020 11:05								
Benzene	MS	2032280-07	ND	23.430	25.000	ug/L		93.7		70 - 130
	MSD	2032280-07	ND	23.280	25.000	ug/L	0.6	93.1	20	70 - 130
Bromodichloromethane	MS	2032280-07	ND	24.000	25.000	ug/L		96.0		70 - 130
	MSD	2032280-07	ND	24.620	25.000	ug/L	2.6	98.5	20	70 - 130
Chlorobenzene	MS	2032280-07	ND	23.380	25.000	ug/L		93.5		70 - 130
	MSD	2032280-07	ND	23.410	25.000	ug/L	0.1	93.6	20	70 - 130
Chloroethane	MS	2032280-07	ND	23.980	25.000	ug/L		95.9		70 - 130
	MSD	2032280-07	ND	24.250	25.000	ug/L	1.1	97.0	20	70 - 130
1,4-Dichlorobenzene	MS	2032280-07	ND	23.650	25.000	ug/L		94.6		70 - 130
	MSD	2032280-07	ND	23.580	25.000	ug/L	0.3	94.3	20	70 - 130
1,1-Dichloroethane	MS	2032280-07	ND	23.000	25.000	ug/L		92.0		70 - 130
	MSD	2032280-07	ND	22.940	25.000	ug/L	0.3	91.8	20	70 - 130
1,1-Dichloroethene	MS	2032280-07	ND	23.970	25.000	ug/L		95.9		70 - 130
	MSD	2032280-07	ND	23.890	25.000	ug/L	0.3	95.6	20	70 - 130
Toluene	MS	2032280-07	ND	24.010	25.000	ug/L		96.0		70 - 130
	MSD	2032280-07	ND	24.220	25.000	ug/L	0.9	96.9	20	70 - 130
Trichloroethene	MS	2032280-07	0.60000	22.940	25.000	ug/L		89.4		70 - 130
	MSD	2032280-07	0.60000	23.600	25.000	ug/L	2.8	92.0	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2032280-07	ND	9.6300	10.000	ug/L		96.3		75 - 125
	MSD	2032280-07	ND	9.6300	10.000	ug/L	0	96.3		75 - 125
Toluene-d8 (Surrogate)	MS	2032280-07	ND	9.7700	10.000	ug/L		97.7		80 - 120
	MSD	2032280-07	ND	9.8900	10.000	ug/L	1.2	98.9		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2032280-07	ND	9.9100	10.000	ug/L		99.1		80 - 120
	MSD	2032280-07	ND	9.7300	10.000	ug/L	1.8	97.3		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092002						
Chloroacetonitrile	B092002-BLK1	0	ug/L			
1-Chlorobutane	B092002-BLK1	0	ug/L			
1,1-Dichloropropanone	B092002-BLK1	0	ug/L			
Methyl acrylate	B092002-BLK1	0	ug/L			
Nitrobenzene	B092002-BLK1	0	ug/L			
2-Nitropropane	B092002-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091642						
Chloride	B091642-BLK1	ND	mg/L	0.50	0.13	
Nitrate as N	B091642-BLK1	ND	mg/L	0.10	0.024	
Sulfate	B091642-BLK1	ND	mg/L	1.0	0.14	
QC Batch ID: B092402						
ortho-Phosphate as P	B092402-BLK1	ND	mg/L	0.050	0.017	
QC Batch ID: B092403						
Nitrite as N	B092403-BLK1	0.021850	mg/L	0.050	0.010	J
QC Batch ID: B092897						
Perchlorate	B092897-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091642										
Chloride	B091642-BS1	LCS	50.196	50.000	mg/L	100		90 - 110		
Nitrate as N	B091642-BS1	LCS	5.1250	5.0000	mg/L	102		90 - 110		
Sulfate	B091642-BS1	LCS	99.673	100.00	mg/L	99.7		90 - 110		
QC Batch ID: B092402										
ortho-Phosphate as P	B092402-BS1	LCS	0.52920	0.50000	mg/L	106		90 - 110		
QC Batch ID: B092403										
Nitrite as N	B092403-BS1	LCS	0.51443	0.50000	mg/L	103		90 - 110		
QC Batch ID: B092897										
Perchlorate	B092897-BS1	LCS	8.5657	10.000	ug/L	85.7		85 - 115		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab
								Percent Recovery	Percent Recovery	
QC Batch ID: B091642		Used client sample: N								
Chloride	DUP	2032287-01	29.114	28.871		mg/L	0.8		10	
	MS	2032287-01	29.114	83.502	50.505	mg/L		108		80 - 120
	MSD	2032287-01	29.114	83.266	50.505	mg/L	0.3	107	10	80 - 120
Nitrate as N	DUP	2032287-01	6.6030	6.5860		mg/L	0.3		10	
	MS	2032287-01	6.6030	11.639	5.0505	mg/L		99.7		80 - 120
	MSD	2032287-01	6.6030	11.684	5.0505	mg/L	0.4	101	10	80 - 120
Sulfate	DUP	2032287-01	19.464	19.395		mg/L	0.4		10	
	MS	2032287-01	19.464	124.95	101.01	mg/L		104		80 - 120
	MSD	2032287-01	19.464	124.53	101.01	mg/L	0.3	104	10	80 - 120
QC Batch ID: B092402		Used client sample: Y - Description: MW-11-1, 11/03/2020 09:45								
ortho-Phosphate as P	DUP	2032280-06	ND	ND		mg/L			10	
	MS	2032280-06	ND	0.57453	0.52632	mg/L		109		90 - 110
	MSD	2032280-06	ND	0.58011	0.52632	mg/L	1.0	110	10	90 - 110
QC Batch ID: B092403		Used client sample: N								
Nitrite as N	DUP	2032234-01	0.020591	0.020476		mg/L	0.6		10	J
	MS	2032234-01	0.020591	0.54684	0.52632	mg/L		100		90 - 110
	MSD	2032234-01	0.020591	0.54761	0.52632	mg/L	0.1	100	10	90 - 110
QC Batch ID: B092897		Used client sample: Y - Description: MW-21-4, 11/03/2020 11:05								
Perchlorate	DUP	2032280-07	2.7938	2.7074		ug/L	3.1		15	J
	MS	2032280-07	2.7938	12.021	10.101	ug/L		91.4		80 - 120
	MSD	2032280-07	2.7938	11.832	10.101	ug/L	1.6	89.5	15	80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091821						
Hexavalent Chromium	B091821-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B091822						
Hexavalent Chromium	B091822-BLK1	ND	mg/L	0.00020	0.000020	
QC Batch ID: B092315						
Total Recoverable Chromium	B092315-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B092316						
Total Recoverable Chromium	B092316-BLK1	ND	ug/L	3.0	0.50	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B091821										
Hexavalent Chromium	B091821-BS1	LCS	0.018574	0.020000	mg/L	92.9		90 - 110		
QC Batch ID: B091822										
Hexavalent Chromium	B091822-BS1	LCS	0.018522	0.020000	mg/L	92.6		90 - 110		
QC Batch ID: B092315										
Total Recoverable Chromium	B092315-BS1	LCS	42.576	40.000	ug/L	106		85 - 115		
QC Batch ID: B092316										
Total Recoverable Chromium	B092316-BS1	LCS	42.040	40.000	ug/L	105		85 - 115		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	Percent Recovery	
QC Batch ID: B091821		Used client sample: Y - Description: MW-21-4, 11/03/2020 11:05								
Hexavalent Chromium	DUP	2032280-07	0.0015560	0.0015540		mg/L	0.1		10	
	MS	2032280-07	0.0015560	0.021933	0.020202	mg/L		101		90 - 110
	MSD	2032280-07	0.0015560	0.021621	0.020202	mg/L	1.4	99.3	10	90 - 110
QC Batch ID: B091822		Used client sample: Y - Description: DUP-5-4Q20, 11/03/2020 12:55								
Hexavalent Chromium	DUP	2032280-11	0.00024500	0.00023500		mg/L	4.2		10	
	MS	2032280-11	0.00024500	0.020523	0.020202	mg/L		100		90 - 110
	MSD	2032280-11	0.00024500	0.020264	0.020202	mg/L	1.3	99.1	10	90 - 110
QC Batch ID: B092315		Used client sample: Y - Description: MW-21-4, 11/03/2020 11:05								
Total Recoverable Chromium	DUP	2032280-07	1.4460	1.3060		ug/L	10.2		20	J
	MS	2032280-07	1.4460	39.445	40.000	ug/L		95.0		70 - 130
	MSD	2032280-07	1.4460	40.204	40.000	ug/L	1.9	96.9	20	70 - 130
QC Batch ID: B092316		Used client sample: Y - Description: EB-7-110320, 11/03/2020 13:45								
Total Recoverable Chromium	DUP	2032280-12	ND	ND		ug/L			20	
	MS	2032280-12	ND	42.656	40.000	ug/L		107		70 - 130
	MSD	2032280-12	ND	43.418	40.000	ug/L	1.8	109	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.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:19
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 11/20/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive

Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2032462

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 11/4/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda

Client Service Rep

Stuart Buttram

Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	4
Laboratory / Client Sample Cross Reference.....	7

Sample Results

2032462-01 - TB-8-110420	
Volatile Organic Analysis (EPA Method 524.2).....	11
Volatile Organic Analysis (EPA Method 524.2) TICs.....	14
2032462-02 - MW-3-5	
Volatile Organic Analysis (EPA Method 524.2).....	15
Volatile Organic Analysis (EPA Method 524.2) TICs.....	18
Water Analysis (General Chemistry).....	19
Metals Analysis.....	20
2032462-03 - MW-3-4	
Volatile Organic Analysis (EPA Method 524.2).....	21
Volatile Organic Analysis (EPA Method 524.2) TICs.....	24
Water Analysis (General Chemistry).....	25
Metals Analysis.....	26
2032462-04 - MW-3-3	
Volatile Organic Analysis (EPA Method 524.2).....	27
Volatile Organic Analysis (EPA Method 524.2) TICs.....	30
Water Analysis (General Chemistry).....	31
Metals Analysis.....	32
2032462-05 - MW-3-2	
Volatile Organic Analysis (EPA Method 524.2).....	33
Volatile Organic Analysis (EPA Method 524.2) TICs.....	36
Water Analysis (General Chemistry).....	37
Metals Analysis.....	38
2032462-06 - EB-8-110420	
Volatile Organic Analysis (EPA Method 524.2).....	39
Volatile Organic Analysis (EPA Method 524.2) TICs.....	42
Water Analysis (General Chemistry).....	43
Metals Analysis.....	44
2032462-07 - MW-3-1	
Volatile Organic Analysis (EPA Method 524.2).....	45
Volatile Organic Analysis (EPA Method 524.2) TICs.....	48
Water Analysis (General Chemistry).....	49
Metals Analysis.....	50
2032462-08 - MW-1	
Volatile Organic Analysis (EPA Method 524.2).....	51
Volatile Organic Analysis (EPA Method 524.2) TICs.....	54
Water Analysis (General Chemistry).....	55
Metals Analysis.....	56
2032462-09 - DUP-6-4Q20	
Volatile Organic Analysis (EPA Method 524.2).....	57
Volatile Organic Analysis (EPA Method 524.2) TICs.....	60
Water Analysis (General Chemistry).....	61
Metals Analysis.....	62
2032462-10 - MW-9	
Volatile Organic Analysis (EPA Method 524.2).....	63
Volatile Organic Analysis (EPA Method 524.2) TICs.....	66
Water Analysis (General Chemistry).....	67
Metals Analysis.....	68
2032462-11 - DUP-7-4Q20	
Volatile Organic Analysis (EPA Method 524.2).....	69

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.



Table of Contents

Volatile Organic Analysis (EPA Method 524.2) TICs.....	72
Water Analysis (General Chemistry).....	73
Metals Analysis.....	74
Quality Control Reports	
Volatile Organic Analysis (EPA Method 524.2)	
Method Blank Analysis.....	75
Laboratory Control Sample.....	78
Precision and Accuracy.....	79
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	80
Water Analysis (General Chemistry)	
Method Blank Analysis.....	81
Laboratory Control Sample.....	82
Precision and Accuracy.....	83
Metals Analysis	
Method Blank Analysis.....	84
Laboratory Control Sample.....	85
Precision and Accuracy.....	86
Notes	
Notes and Definitions.....	87



Chain of Custody Form



Report To: Tidelwater, Inc.
 Client: David Conner
 Attn: David Conner
 Street Address: 3761 Allucks Drive
 City: Powell State: OH Zip: 43085
 Phone: 626 298 5715 Fax: 614 792 2897
 Email Address: david.conner@tlden2o.net
 Submission #: 20-32462

Project Description: JPL-GW Monitoring
 Project Code: 4Q20
 Sampler(s): Blaine Tech

Analysis Requested:
 Orthophosphate 365.1
 Cl, NO3, NO2, SO4
 Hexavalent Cr6 - 218.6 (mg/L)
 Perchlorate
 TRM: Cr
 VOCs EPA 524.2

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other
 Turnaround # of working days: 24 Hr Rush 48 Hr Rush 3-5 Day Rush Normal (10 - Days)
 Lab TAT Approval: *Additional Charges May Apply

Sample #	Sample Description	Date	Time	Matrix*
-1	TB-8-110420	11/14/20	0700	GW
-2	MW-3-5		0745	GW
-3	MW-3-4		0750	GW
-4	MW-3-3		0818	GW
-5	MW-3-2		0850	GW
-6	ER-8-110420		0930	GW
-7	MW-3-1		0920	GW
-8	MW-1		1235	GW
-9	DIP-6-4Q20		1245	GW
-10	MW-9		1355	GW
-11	DIP-7-4Q20		1405	GW

Notes:
 CHK BY DISTRIBUTION
 SUB OUT
 SHORT HOLDING TIME
 NO2 NO3 OP SS
 DO CL BOD MPAS GOT

Global ID:
 1. Received By: [Signature] Date: 11/04/20 Time: 1450
 2. Relinquished By: [Signature] Date: 11/04/20 Time: 1850
 3. Relinquished By: [Signature] Date: 11/12/20 Time: 1850

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)

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

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.



Laboratories, Inc.

Environmental Testing Laboratory Since 1949

COOLER RECEIPT FORM Page 1 Of 2
Submission #: 20-32462

SHIPPING INFORMATION Fed Ex <input type="checkbox"/> UPS <input type="checkbox"/> Ontrac <input type="checkbox"/> Hand Delivery <input type="checkbox"/> BC Lab Field Service <input checked="" type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		SHIPPING CONTAINER Ice Chest <input checked="" type="checkbox"/> None <input type="checkbox"/> Box <input type="checkbox"/> Other <input type="checkbox"/> (Specify) _____		FREE LIQUID YES <input type="checkbox"/> NO <input type="checkbox"/> W / S
---	--	---	--	---

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals	Ice Chest <input checked="" 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 No All samples containers intact? Yes No Description(s) match COC? Yes No

<input checked="" type="checkbox"/> COC Received <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	Emissivity: <u>.99</u> Container: <u>PE</u> Thermometer ID: <u>208</u>	Date/Time <u>11/4 1850</u>
	Temperature: (A) <u>-3</u> °C / (C) <u>.1</u> °C	Analyst Init <u>PRE</u>

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES <u>X48</u>		E	E	E	E	E	E	E	E	E
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶										
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz <u>1024</u>		F	F	F	F	F	F	F	F	F
PT CYANIDE <u>108</u>		D	D	D	D	D	D	D	D	D
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK <u>094</u> A										
40ml VOA VIAL <u>096</u>		ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC	ABC
QT EPA 1664										
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										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 543										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz IAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____
 Sample Numbering Completed By: PRE Date/Time: 11/4 2050
 A = Actual / C = Corrected

Rev 21 05/23/2016
S:\WPDoc\Work\Perfect\LAB_50CS\FORMS\SAMREC201

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.



BC LABORATORIES INC. COOLER RECEIPT FORM Page 2 of 2

Submission #: 20-32462

SHIPPING INFORMATION
 Fed Ex UPS Ontrac Hand Delivery
 BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER
 Ice Chest None Box
 Other (Specify) _____

FREE LIQUID
 YES NO
 W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

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

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

COC Received YES NO Emissivity: .99 Container: PC Thermometer ID: 208 Date/Time: 11/4 1850
 Temperature: (A) .3 °C / (C) .1 °C Analyst Init: PRE

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES	E									
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶	F									
QT INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz										
PT CYANIDE	D									
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PLA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	ABC									
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/008/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____
 Sample Numbering Completed By: PRC Date/Time: 11/4 2050
 A = Actual / C = Corrected



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032462-01	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: TB-8-110420 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-8-110420 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032462-02	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-3-5 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 07:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-3-5 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032462-03	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-3-4 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 07:50 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-3-4 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032462-04	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-3-3 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 08:18 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-3-3 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032462-05	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-3-2 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 08:50 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-3-2 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032462-06	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: EB-8-110420 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 09:50 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): EB-8-110420 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032462-07	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-3-1 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 09:20 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-3-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032462-08	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-1 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 12:35 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-1 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032462-09	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: DUP-6-4Q20 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 12:45 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-6-4Q20 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032462-10	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-9 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 13:55 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-9 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

2032462-11	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: DUP-7-4Q20 Sampled By: Blaine Tech of BTST	Receive Date: 11/04/2020 18:50 Sampling Date: 11/04/2020 14:05 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-7-4Q20 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-01	Client Sample Name: JPL/NASA, TB-8-110420, 11/4/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-01	Client Sample Name: JPL/NASA, TB-8-110420, 11/4/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-01	Client Sample Name: JPL/NASA, TB-8-110420, 11/4/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.4	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 18:52	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-01	Client Sample Name: JPL/NASA, TB-8-110420, 11/4/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	18:52	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-02	Client Sample Name: JPL/NASA, MW-3-5, 11/4/2020 7:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-02 **Client Sample Name:** JPL/NASA, MW-3-5, 11/4/2020 7:35:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-02	Client Sample Name: JPL/NASA, MW-3-5, 11/4/2020 7:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 19:16	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-02	Client Sample Name: JPL/NASA, MW-3-5, 11/4/2020 7:35:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	19:16	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-02	Client Sample Name: JPL/NASA, MW-3-5, 11/4/2020 7:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	5.0	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 04:04	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-02	Client Sample Name: JPL/NASA, MW-3-5, 11/4/2020 7:35:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00073	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	20	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 23:31		SAV	IC-4	1	B093017	No Prep
2	EPA-200.8	11/11/20 10:00	11/11/20 22:17		ARD	PE-EL2	1	B092367	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-03	Client Sample Name: JPL/NASA, MW-3-4, 11/4/2020 7:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND	V11	1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-03	Client Sample Name: JPL/NASA, MW-3-4, 11/4/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-03	Client Sample Name: JPL/NASA, MW-3-4, 11/4/2020 7:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 19:40	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-03	Client Sample Name: JPL/NASA, MW-3-4, 11/4/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	19:40	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-03	Client Sample Name: JPL/NASA, MW-3-4, 11/4/2020 7:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	5.1	ug/L	4.0	0.81	EPA-314.0	ND		1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 04:20	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-03	Client Sample Name: JPL/NASA, MW-3-4, 11/4/2020 7:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00085	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	21	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 21:55		KB1	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 17:33		ARD	PE-EL2	1	B092499	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-04	Client Sample Name: JPL/NASA, MW-3-3, 11/4/2020 8:18:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-04	Client Sample Name: JPL/NASA, MW-3-3, 11/4/2020 8:18:00AM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-04	Client Sample Name: JPL/NASA, MW-3-3, 11/4/2020 8:18:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	97.9	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20 23:40	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-04	Client Sample Name: JPL/NASA, MW-3-3, 11/4/2020 8:18:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/06/20	23:40	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-04	Client Sample Name: JPL/NASA, MW-3-3, 11/4/2020 8:18:00AM, 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 05:10	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-04	Client Sample Name: JPL/NASA, MW-3-3, 11/4/2020 8:18:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00073	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 22:05		KB1	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 16:25		ARD	PE-EL2	1	B092499	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-05	Client Sample Name: JPL/NASA, MW-3-2, 11/4/2020 8:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-05	Client Sample Name: JPL/NASA, MW-3-2, 11/4/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-05	Client Sample Name: JPL/NASA, MW-3-2, 11/4/2020 8:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	97.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20 00:04	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-05	Client Sample Name: JPL/NASA, MW-3-2, 11/4/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20	00:04	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-05	Client Sample Name: JPL/NASA, MW-3-2, 11/4/2020 8:50:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 05:26	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-05	Client Sample Name: JPL/NASA, MW-3-2, 11/4/2020 8:50:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00062	mg/L	0.00020	0.000020	EPA-218.6	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 22:14		KB1	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 16:27		ARD	PE-EL2	1	B092499	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-06 **Client Sample Name:** JPL/NASA, EB-8-110420, 11/4/2020 9:50:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-06	Client Sample Name: JPL/NASA, EB-8-110420, 11/4/2020 9:50:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	2.0	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-06	Client Sample Name: JPL/NASA, EB-8-110420, 11/4/2020 9:50:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.2	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20 00:28	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-06	Client Sample Name: JPL/NASA, EB-8-110420, 11/4/2020 9:50:00AM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20	00:28	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-06	Client Sample Name: JPL/NASA, EB-8-110420, 11/4/2020 9:50:00AM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 05:43	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-06	Client Sample Name: JPL/NASA, EB-8-110420, 11/4/2020 9:50:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000054	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 22:53		SAV	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 16:28		ARD	PE-EL2	1	B092499	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-07	Client Sample Name: JPL/NASA, MW-3-1, 11/4/2020 9:20:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-07	Client Sample Name: JPL/NASA, MW-3-1, 11/4/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-07	Client Sample Name: JPL/NASA, MW-3-1, 11/4/2020 9:20:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20 00:53	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-07	Client Sample Name: JPL/NASA, MW-3-1, 11/4/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20	00:53	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-07	Client Sample Name: JPL/NASA, MW-3-1, 11/4/2020 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 05:59	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-07	Client Sample Name: JPL/NASA, MW-3-1, 11/4/2020 9:20:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00010	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 21:17		KB1	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 16:30		ARD	PE-EL2	1	B092499	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-08	Client Sample Name: JPL/NASA, MW-1, 11/4/2020 12:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-08	Client Sample Name: JPL/NASA, MW-1, 11/4/2020 12:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-08	Client Sample Name: JPL/NASA, MW-1, 11/4/2020 12:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	94.5	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	92.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20 01:17	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-08	Client Sample Name: JPL/NASA, MW-1, 11/4/2020 12:35:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20	01:17	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-08	Client Sample Name: JPL/NASA, MW-1, 11/4/2020 12:35:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 06:16	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-08	Client Sample Name: JPL/NASA, MW-1, 11/4/2020 12:35:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000029	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 22:24		KB1	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 16:32		ARD	PE-EL2	1	B092499	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-09	Client Sample Name: JPL/NASA, DUP-6-4Q20, 11/4/2020 12:45:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-09	Client Sample Name: JPL/NASA, DUP-6-4Q20, 11/4/2020 12:45:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-09	Client Sample Name: JPL/NASA, DUP-6-4Q20, 11/4/2020 12:45:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	95.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	94.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20 01:41	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-09	Client Sample Name: JPL/NASA, DUP-6-4Q20, 11/4/2020 12:45:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20	01:41	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-09	Client Sample Name: JPL/NASA, DUP-6-4Q20, 11/4/2020 12:45:00PM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 07:27	SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-09	Client Sample Name: JPL/NASA, DUP-6-4Q20, 11/4/2020 12:45:00PM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.000059	mg/L	0.00020	0.000020	EPA-218.6	ND	J	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	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 23:02		SAV	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 16:34		ARD	PE-EL2	1	B092499	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-10	Client Sample Name: JPL/NASA, MW-9, 11/4/2020 1:55:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-10		Client Sample Name: JPL/NASA, MW-9, 11/4/2020 1:55:00PM, Blaine Tech						
Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-10	Client Sample Name: JPL/NASA, MW-9, 11/4/2020 1:55:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	98.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20 02:05	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-10	Client Sample Name: JPL/NASA, MW-9, 11/4/2020 1:55:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20	02:05	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-10	Client Sample Name: JPL/NASA, MW-9, 11/4/2020 1:55:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 07:44		SAV	IC6	1	B092897	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-10	Client Sample Name: JPL/NASA, MW-9, 11/4/2020 1:55:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00048	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	240	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 23:12		SAV	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 16:35		ARD	PE-EL2	1	B092499	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-11	Client Sample Name: JPL/NASA, DUP-7-4Q20, 11/4/2020 2:05:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-11	Client Sample Name: JPL/NASA, DUP-7-4Q20, 11/4/2020 2:05:00PM, 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032462-11	Client Sample Name: JPL/NASA, DUP-7-4Q20, 11/4/2020 2:05:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND	V11	1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.0	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.6	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20 02:29	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032462-11	Client Sample Name: JPL/NASA, DUP-7-4Q20, 11/4/2020 2:05:00PM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/06/20 10:00	11/07/20	02:29	MGC	MS-V5	1	B091867	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032462-11	Client Sample Name: JPL/NASA, DUP-7-4Q20, 11/4/2020 2:05:00PM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 09:06	SAV	IC6	1	B092898	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032462-11	Client Sample Name: JPL/NASA, DUP-7-4Q20, 11/4/2020 2:05:00PM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00048	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	230	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/16/20 22:00	11/17/20 23:21		SAV	IC-4	1	B093017	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 16:37		ARD	PE-EL2	1	B092499	EPA 200.2

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091867						
Benzene	B091867-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B091867-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B091867-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B091867-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B091867-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B091867-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B091867-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B091867-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B091867-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B091867-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B091867-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B091867-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B091867-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B091867-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B091867-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B091867-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B091867-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B091867-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B091867-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B091867-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B091867-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B091867-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B091867-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B091867-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B091867-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B091867-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B091867-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B091867-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091867						
trans-1,3-Dichloropropene	B091867-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B091867-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B091867-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B091867-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B091867-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B091867-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B091867-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B091867-BLK1	ND	ug/L	0.50	0.12	
Styrene	B091867-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B091867-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B091867-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B091867-BLK1	ND	ug/L	0.50	0.23	
Toluene	B091867-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B091867-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B091867-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B091867-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B091867-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B091867-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B091867-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B091867-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B091867-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B091867-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B091867-BLK1	ND	ug/L	0.50	0.18	
Acetone	B091867-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B091867-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B091867-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B091867-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B091867-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B091867-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B091867-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B091867-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B091867-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091867						
Ethyl t-butyl ether	B091867-BLK1	ND	ug/L	0.50	0.32	
Hexachloroethane	B091867-BLK1	ND	ug/L	0.50	0.11	
2-Hexanone	B091867-BLK1	ND	ug/L	10	5.0	
Methacrylonitrile	B091867-BLK1	ND	ug/L	10	2.3	
Methyl ethyl ketone	B091867-BLK1	ND	ug/L	5.0	3.3	
Methyl iodide	B091867-BLK1	ND	ug/L	2.0	1.1	
Methyl isobutyl ketone	B091867-BLK1	ND	ug/L	5.0	2.4	
Methyl methacrylate	B091867-BLK1	ND	ug/L	5.0	1.2	
Pentachloroethane	B091867-BLK1	ND	ug/L	2.0	0.63	
Propionitrile	B091867-BLK1	ND	ug/L	20	6.2	
Tetrahydrofuran	B091867-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	B091867-BLK1	ND	ug/L	0.50	0.34	
o-Xylene	B091867-BLK1	ND	ug/L	0.50	0.13	
1,2-Dichloroethane-d4 (Surrogate)	B091867-BLK1	96.0	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B091867-BLK1	99.0	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B091867-BLK1	96.3	%	80 - 120 (LCL - UCL)		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B091867										
Benzene	B091867-BS1	LCS	25.290	25.000	ug/L	101		70 - 130		
Bromodichloromethane	B091867-BS1	LCS	25.940	25.000	ug/L	104		70 - 130		
Chlorobenzene	B091867-BS1	LCS	24.530	25.000	ug/L	98.1		70 - 130		
Chloroethane	B091867-BS1	LCS	26.620	25.000	ug/L	106		70 - 130		
1,4-Dichlorobenzene	B091867-BS1	LCS	24.620	25.000	ug/L	98.5		70 - 130		
1,1-Dichloroethane	B091867-BS1	LCS	25.240	25.000	ug/L	101		70 - 130		
1,1-Dichloroethene	B091867-BS1	LCS	25.740	25.000	ug/L	103		70 - 130		
Toluene	B091867-BS1	LCS	25.380	25.000	ug/L	102		70 - 130		
Trichloroethene	B091867-BS1	LCS	24.940	25.000	ug/L	99.8		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B091867-BS1	LCS	9.6200	10.000	ug/L	96.2		75 - 125		
Toluene-d8 (Surrogate)	B091867-BS1	LCS	9.9700	10.000	ug/L	99.7		80 - 120		
4-Bromofluorobenzene (Surrogate)	B091867-BS1	LCS	9.7300	10.000	ug/L	97.3		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B091867		Used client sample: N								
Benzene	MS	2031921-03	ND	24.170	25.000	ug/L		96.7		70 - 130
	MSD	2031921-03	ND	24.470	25.000	ug/L	1.2	97.9	20	70 - 130
Bromodichloromethane	MS	2031921-03	ND	24.860	25.000	ug/L		99.4		70 - 130
	MSD	2031921-03	ND	25.260	25.000	ug/L	1.6	101	20	70 - 130
Chlorobenzene	MS	2031921-03	ND	23.440	25.000	ug/L		93.8		70 - 130
	MSD	2031921-03	ND	24.370	25.000	ug/L	3.9	97.5	20	70 - 130
Chloroethane	MS	2031921-03	ND	25.110	25.000	ug/L		100		70 - 130
	MSD	2031921-03	ND	25.500	25.000	ug/L	1.5	102	20	70 - 130
1,4-Dichlorobenzene	MS	2031921-03	ND	23.420	25.000	ug/L		93.7		70 - 130
	MSD	2031921-03	ND	24.250	25.000	ug/L	3.5	97.0	20	70 - 130
1,1-Dichloroethane	MS	2031921-03	ND	24.300	25.000	ug/L		97.2		70 - 130
	MSD	2031921-03	ND	24.660	25.000	ug/L	1.5	98.6	20	70 - 130
1,1-Dichloroethene	MS	2031921-03	ND	25.130	25.000	ug/L		101		70 - 130
	MSD	2031921-03	ND	25.080	25.000	ug/L	0.2	100	20	70 - 130
Toluene	MS	2031921-03	ND	24.540	25.000	ug/L		98.2		70 - 130
	MSD	2031921-03	ND	24.750	25.000	ug/L	0.9	99.0	20	70 - 130
Trichloroethene	MS	2031921-03	ND	23.500	25.000	ug/L		94.0		70 - 130
	MSD	2031921-03	ND	23.740	25.000	ug/L	1.0	95.0	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2031921-03	ND	9.6100	10.000	ug/L		96.1		75 - 125
	MSD	2031921-03	ND	9.4600	10.000	ug/L	1.6	94.6		75 - 125
Toluene-d8 (Surrogate)	MS	2031921-03	ND	9.9500	10.000	ug/L		99.5		80 - 120
	MSD	2031921-03	ND	10.000	10.000	ug/L	0.5	100		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2031921-03	ND	9.8500	10.000	ug/L		98.5		80 - 120
	MSD	2031921-03	ND	9.7300	10.000	ug/L	1.2	97.3		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B091867						
Chloroacetonitrile	B091867-BLK1	0	ug/L			
1-Chlorobutane	B091867-BLK1	0	ug/L			
1,1-Dichloropropanone	B091867-BLK1	0	ug/L			
Methyl acrylate	B091867-BLK1	0	ug/L			
Nitrobenzene	B091867-BLK1	0	ug/L			
2-Nitropropane	B091867-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092897						
Perchlorate	B092897-BLK1	ND	ug/L	4.0	0.81	
QC Batch ID: B092898						
Perchlorate	B092898-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092897										
Perchlorate	B092897-BS1	LCS	8.5657	10.000	ug/L	85.7		85	115	
QC Batch ID: B092898										
Perchlorate	B092898-BS1	LCS	9.0847	10.000	ug/L	90.8		85	115	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092897		Used client sample: N								
Perchlorate	DUP	2032280-07	2.7938	2.7074		ug/L	3.1		15	J
	MS	2032280-07	2.7938	12.021	10.101	ug/L		91.4	80 - 120	
	MSD	2032280-07	2.7938	11.832	10.101	ug/L	1.6	89.5	15 80 - 120	
QC Batch ID: B092898		Used client sample: Y - Description: DUP-7-4Q20, 11/04/2020 14:05								
Perchlorate	DUP	2032462-11	ND	ND		ug/L			15	
	MS	2032462-11	ND	9.1367	10.101	ug/L		90.5	80 - 120	
	MSD	2032462-11	ND	9.1702	10.101	ug/L	0.4	90.8	15 80 - 120	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092367						
Total Recoverable Chromium	B092367-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B092499						
Total Recoverable Chromium	B092499-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B093017						
Hexavalent Chromium	B093017-BLK1	ND	mg/L	0.00020	0.000020	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092367										
Total Recoverable Chromium	B092367-BS1	LCS	41.495	40.000	ug/L	104		85 - 115		
QC Batch ID: B092499										
Total Recoverable Chromium	B092499-BS1	LCS	39.501	40.000	ug/L	98.8		85 - 115		
QC Batch ID: B093017										
Hexavalent Chromium	B093017-BS1	LCS	0.019925	0.020000	mg/L	99.6		90 - 110		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B092367		Used client sample: N								
Total Recoverable Chromium	DUP	2032138-03	ND	ND		ug/L			20	
	MS	2032138-03	ND	38.776	40.000	ug/L		96.9		70 - 130
	MSD	2032138-03	ND	39.686	40.000	ug/L	2.3	99.2	20	70 - 130
QC Batch ID: B092499		Used client sample: Y - Description: MW-3-4, 11/04/2020 07:50								
Total Recoverable Chromium	DUP	2032462-03	21.321	21.578		ug/L	1.2		20	
	MS	2032462-03	21.321	58.812	40.000	ug/L		93.7		70 - 130
	MSD	2032462-03	21.321	58.826	40.000	ug/L	0.0	93.8	20	70 - 130
QC Batch ID: B093017		Used client sample: Y - Description: MW-3-1, 11/04/2020 09:20								
Hexavalent Chromium	DUP	2032462-07	0.00010200	0.000094000		mg/L	8.2		10	J
	MS	2032462-07	0.00010200	0.019779	0.020202	mg/L		97.4		90 - 110
	MSD	2032462-07	0.00010200	0.019215	0.020202	mg/L	2.9	94.6	10	90 - 110

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/20/2020 14:04
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.



Date of Report: 11/19/2020

David Conner

Tidewater Inc. - Powell

3761 Attucks Drive

Powell, OH 43065

Client Project: 4Q20

BCL Project: JPL- GW Monitoring Wells-CLP

BCL Work Order: 2032647

Invoice ID:

Enclosed are the results of analyses for samples received by the laboratory on 11/5/2020. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Natalie Serda

Client Service Rep

Stuart Buttram

Technical Director

Certifications: CA ELAP #1186; NV #CA00014; OR ELAP #4032-001; AK UST101

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.



Table of Contents

Sample Information

Chain of Custody and Cooler Receipt form.....	3
Laboratory / Client Sample Cross Reference.....	5

Sample Results

2032647-01 - TB-9-110520	
Volatile Organic Analysis (EPA Method 524.2).....	7
Volatile Organic Analysis (EPA Method 524.2) TICs.....	10
2032647-02 - MW-15	
Volatile Organic Analysis (EPA Method 524.2).....	11
Volatile Organic Analysis (EPA Method 524.2) TICs.....	14
Water Analysis (General Chemistry).....	15
Metals Analysis.....	16
2032647-03 - DUP-8-4Q20	
Volatile Organic Analysis (EPA Method 524.2).....	17
Volatile Organic Analysis (EPA Method 524.2) TICs.....	20
Water Analysis (General Chemistry).....	21
Metals Analysis.....	22
2032647-04 - MW-10	
Volatile Organic Analysis (EPA Method 524.2).....	23
Volatile Organic Analysis (EPA Method 524.2) TICs.....	26
Water Analysis (General Chemistry).....	27
2032647-05 - MW-8	
Volatile Organic Analysis (EPA Method 524.2).....	28
Volatile Organic Analysis (EPA Method 524.2) TICs.....	31
Water Analysis (General Chemistry).....	32

Quality Control Reports

Volatile Organic Analysis (EPA Method 524.2)	
Method Blank Analysis.....	33
Laboratory Control Sample.....	36
Precision and Accuracy.....	37
Volatile Organic Analysis (EPA Method 524.2) TICs	
Method Blank Analysis.....	38
Water Analysis (General Chemistry)	
Method Blank Analysis.....	39
Laboratory Control Sample.....	40
Precision and Accuracy.....	41
Metals Analysis	
Method Blank Analysis.....	42
Laboratory Control Sample.....	43
Precision and Accuracy.....	44

Notes

Notes and Definitions.....	45
----------------------------	----



Chain of Custody Form

*Required Fields

Report To: Client: *Tidewater, Inc. Attn: *David Conner
 Street Address: *3761 Attucks Drive City: *Powell State: *OH Zip: *43065
 Phone: *626 | 298 - 5715 Fax: *614 | 792 - 2897
 Email Address: david.conner@ltdh2o.net
 Submission #: 20-32647

Project Description: *JPL-GW Monitoring
 Project Code: *4020
 Sampler (s): *Blaine Tech

Analysis Requested:
 VOCs EPA 524.2 TRM-C Perchlorate Hexavalent Cr6-218.6 (mg/L) Cl, NO3, NO2, SO4 Orthophosphate 365.1

Sample #	Sample Description	Date	Time	Matrix*
-1	TB-9-110520	11/05/20	1320	GW
-2	MW-15	09/00	0900	GW
-3	DUP-8-48320	08/10	0810	GW
-4	MW-10	08/25	0825	GW
-5	MW-8	10/15	1015	GW

Matrix Types: S = Soil SL = Sludge DW = Drinking Water WW = Wastewater GW = Groundwater L = Liquid M = Miscellaneous O = Other
 Turnaround # of working days: * 24 Hr Rush 48 Hr Rush 3-5 Day Rush Normal (10 - Days)
 Lab TAT Approval: _____ *Additional Charges May Apply

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

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

Cost Center:
 1. Relinquished By: _____ Date: _____ Time: _____
 2. Relinquished By: _____ Date: 11/05/20 Time: 1320
 3. Relinquished By: _____ Date: 11-5-20 Time: 3:15

Global ID: _____
 1. Received By: _____ Date: 11-5-20 Time: 1320
 2. Received By: _____ Date: 11-5-20 Time: 1510
 3. Specified By: _____ Date: 11-5-20 Time: 1850

Billing:
 Client: *Tidewater Attn: *David Conner
 Address: *3761 Attucks Drive City: *Powell State: *OH Zip: *43065
 Are there any tests with holding times? less than or equal to 48 hours? Yes No
 *Standard Turnaround = 30

Notes:
 CHK BY: _____ DISTRIBUTION: _____
 SUB-OUT:
 SHORT HOLDING TIME: _____
 G+15 NO2 NO3 OP SS
 DO Cl2 BOD MBAS COT

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

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.



BC LABORATORIES INC. COOLER RECEIPT FORM Page 1 of 1

Submission #: 20-32647

SHIPPING INFORMATION: Fed Ex UPS Ontrac Hand Delivery BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER: Ice Chest None Box Other (Specify) _____

FREE LIQUID: YES NO W / S

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None Comments: _____

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

COC Received: YES NO

Emissivity: 0.98 Container: PC Thermometer ID: 208 Date/Time: 11/5 1840

Temperature: (A) 2.7 °C / (C) 2.5 °C Analyst Init: PRE

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT PE UNPRES x48		E	E	D	D					
4oz / 8oz / 16oz PE UNPRES										
2oz Cr ⁶⁺ 100		D	D							
QT INORGANIC CHEMICAL METALS 100										
INORGANIC CHEMICAL METALS 4oz / 8oz / 16oz 100		F	F							
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
PT TOTAL ORGANIC CARBON										
PT CHEMICAL OXYGEN DEMAND										
PIA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK	A									
40ml VOA VIAL		ABC	ABC	ABC	ABC					
QT EPA 1664										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/08/0250										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
40ml EPA 547										
40ml EPA 531.1										
8oz EPA 548										
QT EPA 549										
QT EPA 8015M										
QT EPA 8270										
8oz / 16oz / 32oz AMBER										
8oz / 16oz / 32oz JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
TEDLAR BAG										
FERROUS IRON										
ENCORE										
SMART KIT										
SUMMA CANISTER										

Comments: _____

Sample Numbering Completed By: PRE Date/Time: 11/5 2020 Rev 21 05/23/2016

A = Actual / C = Corrected

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032647-01	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: TB-9-110520 Sampled By: Blaine Tech of BTST	Receive Date: 11/05/2020 18:50 Sampling Date: 11/05/2020 07:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): TB-9-110520 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032647-02	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-15 Sampled By: Blaine Tech of BTST	Receive Date: 11/05/2020 18:50 Sampling Date: 11/05/2020 08:00 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-15 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032647-03	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: DUP-8-4Q20 Sampled By: Blaine Tech of BTST	Receive Date: 11/05/2020 18:50 Sampling Date: 11/05/2020 08:10 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): DUP-8-4Q20 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
------------	---------------------------

2032647-04	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-10 Sampled By: Blaine Tech of BTST	Receive Date: 11/05/2020 18:50 Sampling Date: 11/05/2020 08:25 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-10 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	--	---

2032647-05	COC Number: --- Project Number: JPL/NASA Sampling Location: --- Sampling Point: MW-8 Sampled By: Blaine Tech of BTST	Receive Date: 11/05/2020 18:50 Sampling Date: 11/05/2020 10:15 Sample Depth: --- Lab Matrix: Water Sample Type: Groundwater Delivery Work Order: Global ID: 0000000000 Location ID (FieldPoint): MW-8 Matrix: WG Sample QC Type (SACode): CS Cooler ID:
-------------------	---	--

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-01	Client Sample Name: JPL/NASA, TB-9-110520, 11/5/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-01	Client Sample Name: JPL/NASA, TB-9-110520, 11/5/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-01	Client Sample Name: JPL/NASA, TB-9-110520, 11/5/2020 7:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	89.3	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.8	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20 13:52	MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032647-01	Client Sample Name: JPL/NASA, TB-9-110520, 11/5/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20	13:52	MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-02 Client Sample Name: JPL/NASA, MW-15, 11/5/2020 8:00:00AM, Blaine Tech

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-02	Client Sample Name: JPL/NASA, MW-15, 11/5/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-02	Client Sample Name: JPL/NASA, MW-15, 11/5/2020 8:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	96.6	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	101	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	99.5	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20 09:05	MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032647-02	Client Sample Name: JPL/NASA, MW-15, 11/5/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20 09:05		MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032647-02	Client Sample Name: JPL/NASA, MW-15, 11/5/2020 8:00:00AM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 10:46	SAV	IC6	1	B092898	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032647-02	Client Sample Name: JPL/NASA, MW-15, 11/5/2020 8:00:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00030	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	7.2	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/13/20 07:00	11/13/20	11:53	SAV	IC-4	1	B092711	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20	19:40	ARD	PE-EL2	1	B092502	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-03	Client Sample Name: JPL/NASA, DUP-8-4Q20, 11/5/2020 8:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-03	Client Sample Name: JPL/NASA, DUP-8-4Q20, 11/5/2020 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	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-03	Client Sample Name: JPL/NASA, DUP-8-4Q20, 11/5/2020 8:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	93.9	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	99.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	95.4	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20 14:40	MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032647-03	Client Sample Name: JPL/NASA, DUP-8-4Q20, 11/5/2020 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20	14:40	MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032647-03	Client Sample Name: JPL/NASA, DUP-8-4Q20, 11/5/2020 8:10:00AM, Blaine Tech
----------------------------------	---

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

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 11:02	SAV	IC6	1	B092898	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

BCL Sample ID: 2032647-03	Client Sample Name: JPL/NASA, DUP-8-4Q20, 11/5/2020 8:10:00AM, Blaine Tech
----------------------------------	---

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Hexavalent Chromium	0.00033	mg/L	0.00020	0.000020	EPA-218.6	ND		1
Total Recoverable Chromium	21	ug/L	3.0	0.50	EPA-200.8	ND		2

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-218.6	11/13/20 07:00	11/13/20 12:31		SAV	IC-4	1	B092711	No Prep
2	EPA-200.8	11/12/20 07:30	11/12/20 19:58		ARD	PE-EL2	1	B092502	EPA 200.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-04	Client Sample Name: JPL/NASA, MW-10, 11/5/2020 8:25:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Table with 2 columns: BCL Sample ID (2032647-04) and Client Sample Name (JPL/NASA, MW-10, 11/5/2020 8:25:00AM, Blaine Tech)

Main data table with columns: Constituent, Result, Units, PQL, MDL, Method, MB Bias, Lab Quads, Run #. Lists various chemical compounds and their analysis results.

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-04	Client Sample Name: JPL/NASA, MW-10, 11/5/2020 8:25:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	91.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	96.7	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	97.2	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20 15:04	MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032647-04	Client Sample Name: JPL/NASA, MW-10, 11/5/2020 8:25:00AM, 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		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20	15:04	MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032647-04	Client Sample Name: JPL/NASA, MW-10, 11/5/2020 8:25:00AM, 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 Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 11:52	SAV	IC6	1	B092898	No Prep

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-05	Client Sample Name: JPL/NASA, MW-8, 11/5/2020 10:15:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Benzene	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
Bromobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Bromochloromethane	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
Bromodichloromethane	2.8	ug/L	0.50	0.20	EPA-524.2	ND		1
Bromoform	ND	ug/L	0.50	0.46	EPA-524.2	ND		1
Bromomethane	ND	ug/L	0.50	0.20	EPA-524.2	ND		1
n-Butylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
sec-Butylbenzene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
tert-Butylbenzene	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Carbon tetrachloride	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chlorobenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloroethane	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
Chloroform	2.0	ug/L	0.50	0.14	EPA-524.2	ND		1
Chloromethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Chlorotoluene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
4-Chlorotoluene	ND	ug/L	0.50	0.093	EPA-524.2	ND		1
Dibromochloromethane	1.3	ug/L	0.50	0.22	EPA-524.2	ND		1
1,2-Dibromo-3-chloropropane	ND	ug/L	1.0	0.89	EPA-524.2	ND		1
1,2-Dibromoethane	ND	ug/L	0.50	0.22	EPA-524.2	ND		1
Dibromomethane	ND	ug/L	0.50	0.23	EPA-524.2	ND		1
1,2-Dichlorobenzene	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,3-Dichlorobenzene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
1,4-Dichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Dichlorodifluoromethane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1-Dichloroethane	ND	ug/L	0.50	0.15	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	0.27	EPA-524.2	ND		1
cis-1,2-Dichloroethene	ND	ug/L	0.50	0.27	EPA-524.2	ND		1
trans-1,2-Dichloroethene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2-Dichloropropane	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,3-Dichloropropane	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
2,2-Dichloropropane	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
1,1-Dichloropropene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-05	Client Sample Name: JPL/NASA, MW-8, 11/5/2020 10:15:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
cis-1,3-Dichloropropene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
trans-1,3-Dichloropropene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
Ethylbenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
Hexachlorobutadiene	ND	ug/L	0.50	0.20	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	0.14	EPA-524.2	ND		1
Methylene chloride	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Methyl t-butyl ether	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Naphthalene	ND	ug/L	0.50	0.16	EPA-524.2	ND		1
n-Propylbenzene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
Styrene	ND	ug/L	0.50	0.12	EPA-524.2	ND		1
1,1,1,2-Tetrachloroethane	ND	ug/L	0.50	0.21	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	0.23	EPA-524.2	ND		1
Toluene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,2,3-Trichlorobenzene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trichlorobenzene	ND	ug/L	0.50	0.15	EPA-524.2	ND		1
1,1,1-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
1,1,2-Trichloroethane	ND	ug/L	0.50	0.21	EPA-524.2	ND		1
Trichloroethene	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
Trichlorofluoromethane	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
1,2,3-Trichloropropane	ND	ug/L	1.0	0.78	EPA-524.2	ND		1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
1,2,4-Trimethylbenzene	ND	ug/L	0.50	0.17	EPA-524.2	ND		1
1,3,5-Trimethylbenzene	ND	ug/L	0.50	0.14	EPA-524.2	ND		1
Vinyl chloride	ND	ug/L	0.50	0.18	EPA-524.2	ND		1
Acetone	ND	ug/L	10	6.6	EPA-524.2	ND		1
Acrylonitrile	ND	ug/L	5.0	1.5	EPA-524.2	ND		1
Allyl chloride	ND	ug/L	5.0	0.47	EPA-524.2	ND		1
t-Amyl Methyl ether	ND	ug/L	0.50	0.19	EPA-524.2	ND		1
t-Butyl alcohol	ND	ug/L	2.0	2.0	EPA-524.2	ND		1
Carbon disulfide	ND	ug/L	0.50	0.48	EPA-524.2	ND		1
trans-1,4-Dichloro-2-butene	ND	ug/L	5.0	1.8	EPA-524.2	ND		1

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

BCL Sample ID: 2032647-05	Client Sample Name: JPL/NASA, MW-8, 11/5/2020 10:15:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Diethyl ether	ND	ug/L	2.0	0.33	EPA-524.2	ND		1
Ethyl methacrylate	ND	ug/L	4.0	1.3	EPA-524.2	ND		1
Ethyl t-butyl ether	ND	ug/L	0.50	0.32	EPA-524.2	ND		1
Hexachloroethane	ND	ug/L	0.50	0.11	EPA-524.2	ND		1
2-Hexanone	ND	ug/L	10	5.0	EPA-524.2	ND		1
Methacrylonitrile	ND	ug/L	10	2.3	EPA-524.2	ND		1
Methyl ethyl ketone	ND	ug/L	5.0	3.3	EPA-524.2	ND		1
Methyl iodide	ND	ug/L	2.0	1.1	EPA-524.2	ND	V11	1
Methyl isobutyl ketone	ND	ug/L	5.0	2.4	EPA-524.2	ND		1
Methyl methacrylate	ND	ug/L	5.0	1.2	EPA-524.2	ND		1
Pentachloroethane	ND	ug/L	2.0	0.63	EPA-524.2	ND		1
Propionitrile	ND	ug/L	20	6.2	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	0.34	EPA-524.2	ND		1
o-Xylene	ND	ug/L	0.50	0.13	EPA-524.2	ND		1
1,2-Dichloroethane-d4 (Surrogate)	90.8	%	75 - 125 (LCL - UCL)		EPA-524.2			1
Toluene-d8 (Surrogate)	98.3	%	80 - 120 (LCL - UCL)		EPA-524.2			1
4-Bromofluorobenzene (Surrogate)	98.1	%	80 - 120 (LCL - UCL)		EPA-524.2			1

Run #	Method	Prep Date	Run Date/Time	Analyst	Instrument	Dilution	QC Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20 15:28	MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

BCL Sample ID: 2032647-05	Client Sample Name: JPL/NASA, MW-8, 11/5/2020 10:15:00AM, Blaine Tech
----------------------------------	--

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

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-524.2	11/10/20 07:00	11/10/20 15:28		MGC	MS-V5	1	B092186	EPA 524.2

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

BCL Sample ID: 2032647-05	Client Sample Name: JPL/NASA, MW-8, 11/5/2020 10:15:00AM, Blaine Tech
----------------------------------	--

Constituent	Result	Units	PQL	MDL	Method	MB Bias	Lab Quals	Run #
Perchlorate	0.97	ug/L	4.0	0.81	EPA-314.0	ND	J	1

Run #	Method	Prep Date	Run		Analyst	Instrument	Dilution	QC	
			Date/Time					Batch ID	Prep Method
1	EPA-314.0	11/16/20 21:00	11/17/20 12:08		SAV	IC6	1	B092898	No Prep

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.

Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092186						
Benzene	B092186-BLK1	ND	ug/L	0.50	0.11	
Bromobenzene	B092186-BLK1	ND	ug/L	0.50	0.15	
Bromochloromethane	B092186-BLK1	ND	ug/L	0.50	0.27	
Bromodichloromethane	B092186-BLK1	ND	ug/L	0.50	0.20	
Bromoform	B092186-BLK1	ND	ug/L	0.50	0.46	
Bromomethane	B092186-BLK1	ND	ug/L	0.50	0.20	
n-Butylbenzene	B092186-BLK1	ND	ug/L	0.50	0.15	
sec-Butylbenzene	B092186-BLK1	ND	ug/L	0.50	0.13	
tert-Butylbenzene	B092186-BLK1	ND	ug/L	0.50	0.18	
Carbon tetrachloride	B092186-BLK1	ND	ug/L	0.50	0.17	
Chlorobenzene	B092186-BLK1	ND	ug/L	0.50	0.14	
Chloroethane	B092186-BLK1	ND	ug/L	0.50	0.17	
Chloroform	B092186-BLK1	ND	ug/L	0.50	0.14	
Chloromethane	B092186-BLK1	ND	ug/L	0.50	0.11	
2-Chlorotoluene	B092186-BLK1	ND	ug/L	0.50	0.14	
4-Chlorotoluene	B092186-BLK1	ND	ug/L	0.50	0.093	
Dibromochloromethane	B092186-BLK1	ND	ug/L	0.50	0.22	
1,2-Dibromo-3-chloropropane	B092186-BLK1	ND	ug/L	1.0	0.89	
1,2-Dibromoethane	B092186-BLK1	ND	ug/L	0.50	0.22	
Dibromomethane	B092186-BLK1	ND	ug/L	0.50	0.23	
1,2-Dichlorobenzene	B092186-BLK1	ND	ug/L	0.50	0.21	
1,3-Dichlorobenzene	B092186-BLK1	ND	ug/L	0.50	0.16	
1,4-Dichlorobenzene	B092186-BLK1	ND	ug/L	0.50	0.15	
Dichlorodifluoromethane	B092186-BLK1	ND	ug/L	0.50	0.15	
1,1-Dichloroethane	B092186-BLK1	ND	ug/L	0.50	0.15	
1,2-Dichloroethane	B092186-BLK1	ND	ug/L	0.50	0.17	
1,1-Dichloroethene	B092186-BLK1	ND	ug/L	0.50	0.27	
cis-1,2-Dichloroethene	B092186-BLK1	ND	ug/L	0.50	0.27	
trans-1,2-Dichloroethene	B092186-BLK1	ND	ug/L	0.50	0.17	
1,2-Dichloropropane	B092186-BLK1	ND	ug/L	0.50	0.15	
1,3-Dichloropropane	B092186-BLK1	ND	ug/L	0.50	0.13	
2,2-Dichloropropane	B092186-BLK1	ND	ug/L	0.50	0.18	
1,1-Dichloropropene	B092186-BLK1	ND	ug/L	0.50	0.19	
cis-1,3-Dichloropropene	B092186-BLK1	ND	ug/L	0.50	0.14	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092186						
trans-1,3-Dichloropropene	B092186-BLK1	ND	ug/L	0.50	0.13	
Ethylbenzene	B092186-BLK1	ND	ug/L	0.50	0.15	
Hexachlorobutadiene	B092186-BLK1	ND	ug/L	0.50	0.20	
Isopropylbenzene	B092186-BLK1	ND	ug/L	0.50	0.14	
p-Isopropyltoluene	B092186-BLK1	ND	ug/L	0.50	0.14	
Methylene chloride	B092186-BLK1	ND	ug/L	0.50	0.21	
Methyl t-butyl ether	B092186-BLK1	ND	ug/L	0.50	0.14	
Naphthalene	B092186-BLK1	ND	ug/L	0.50	0.16	
n-Propylbenzene	B092186-BLK1	ND	ug/L	0.50	0.12	
Styrene	B092186-BLK1	ND	ug/L	0.50	0.12	
1,1,1,2-Tetrachloroethane	B092186-BLK1	ND	ug/L	0.50	0.21	
1,1,1,2,2-Tetrachloroethane	B092186-BLK1	ND	ug/L	0.50	0.17	
Tetrachloroethene	B092186-BLK1	ND	ug/L	0.50	0.23	
Toluene	B092186-BLK1	ND	ug/L	0.50	0.17	
1,2,3-Trichlorobenzene	B092186-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trichlorobenzene	B092186-BLK1	ND	ug/L	0.50	0.15	
1,1,1-Trichloroethane	B092186-BLK1	ND	ug/L	0.50	0.21	
1,1,2-Trichloroethane	B092186-BLK1	ND	ug/L	0.50	0.21	
Trichloroethene	B092186-BLK1	ND	ug/L	0.50	0.19	
Trichlorofluoromethane	B092186-BLK1	ND	ug/L	0.50	0.14	
1,2,3-Trichloropropane	B092186-BLK1	ND	ug/L	1.0	0.78	
1,1,2-Trichloro-1,2,2-trifluoroethane	B092186-BLK1	ND	ug/L	0.50	0.19	
1,2,4-Trimethylbenzene	B092186-BLK1	ND	ug/L	0.50	0.17	
1,3,5-Trimethylbenzene	B092186-BLK1	ND	ug/L	0.50	0.14	
Vinyl chloride	B092186-BLK1	ND	ug/L	0.50	0.18	
Acetone	B092186-BLK1	ND	ug/L	10	6.6	
Acrylonitrile	B092186-BLK1	ND	ug/L	5.0	1.5	
Allyl chloride	B092186-BLK1	ND	ug/L	5.0	0.47	
t-Amyl Methyl ether	B092186-BLK1	ND	ug/L	0.50	0.19	
t-Butyl alcohol	B092186-BLK1	ND	ug/L	2.0	2.0	
Carbon disulfide	B092186-BLK1	ND	ug/L	0.50	0.48	
trans-1,4-Dichloro-2-butene	B092186-BLK1	ND	ug/L	5.0	1.8	
Diethyl ether	B092186-BLK1	ND	ug/L	2.0	0.33	
Ethyl methacrylate	B092186-BLK1	ND	ug/L	4.0	1.3	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092186						
Ethyl t-butyl ether	B092186-BLK1	ND	ug/L	0.50	0.32	
Hexachloroethane	B092186-BLK1	ND	ug/L	0.50	0.11	
2-Hexanone	B092186-BLK1	ND	ug/L	10	5.0	
Methacrylonitrile	B092186-BLK1	ND	ug/L	10	2.3	
Methyl ethyl ketone	B092186-BLK1	ND	ug/L	5.0	3.3	
Methyl iodide	B092186-BLK1	ND	ug/L	2.0	1.1	
Methyl isobutyl ketone	B092186-BLK1	ND	ug/L	5.0	2.4	
Methyl methacrylate	B092186-BLK1	ND	ug/L	5.0	1.2	
Pentachloroethane	B092186-BLK1	ND	ug/L	2.0	0.63	
Propionitrile	B092186-BLK1	ND	ug/L	20	6.2	
Tetrahydrofuran	B092186-BLK1	ND	ug/L	20	5.2	
p- & m-Xylenes	B092186-BLK1	ND	ug/L	0.50	0.34	
o-Xylene	B092186-BLK1	ND	ug/L	0.50	0.13	
1,2-Dichloroethane-d4 (Surrogate)	B092186-BLK1	98.0	%	75 - 125 (LCL - UCL)		
Toluene-d8 (Surrogate)	B092186-BLK1	97.3	%	80 - 120 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	B092186-BLK1	99.4	%	80 - 120 (LCL - UCL)		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092186										
Benzene	B092186-BS1	LCS	23.500	25.000	ug/L	94.0		70 - 130		
Bromodichloromethane	B092186-BS1	LCS	24.350	25.000	ug/L	97.4		70 - 130		
Chlorobenzene	B092186-BS1	LCS	23.380	25.000	ug/L	93.5		70 - 130		
Chloroethane	B092186-BS1	LCS	25.160	25.000	ug/L	101		70 - 130		
1,4-Dichlorobenzene	B092186-BS1	LCS	23.650	25.000	ug/L	94.6		70 - 130		
1,1-Dichloroethane	B092186-BS1	LCS	22.670	25.000	ug/L	90.7		70 - 130		
1,1-Dichloroethene	B092186-BS1	LCS	24.230	25.000	ug/L	96.9		70 - 130		
Toluene	B092186-BS1	LCS	25.610	25.000	ug/L	102		70 - 130		
Trichloroethene	B092186-BS1	LCS	23.240	25.000	ug/L	93.0		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	B092186-BS1	LCS	9.2700	10.000	ug/L	92.7		75 - 125		
Toluene-d8 (Surrogate)	B092186-BS1	LCS	10.070	10.000	ug/L	101		80 - 120		
4-Bromofluorobenzene (Surrogate)	B092186-BS1	LCS	9.9100	10.000	ug/L	99.1		80 - 120		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab
								Percent Recovery	RPD	
QC Batch ID: B092186		Used client sample: Y - Description: MW-15, 11/05/2020 08:00								
Benzene	MS	2032647-02	ND	23.800	25.000	ug/L		95.2		70 - 130
	MSD	2032647-02	ND	23.480	25.000	ug/L	1.4	93.9	20	70 - 130
Bromodichloromethane	MS	2032647-02	ND	24.050	25.000	ug/L		96.2		70 - 130
	MSD	2032647-02	ND	24.290	25.000	ug/L	1.0	97.2	20	70 - 130
Chlorobenzene	MS	2032647-02	ND	23.830	25.000	ug/L		95.3		70 - 130
	MSD	2032647-02	ND	23.260	25.000	ug/L	2.4	93.0	20	70 - 130
Chloroethane	MS	2032647-02	ND	25.300	25.000	ug/L		101		70 - 130
	MSD	2032647-02	ND	23.950	25.000	ug/L	5.5	95.8	20	70 - 130
1,4-Dichlorobenzene	MS	2032647-02	ND	24.380	25.000	ug/L		97.5		70 - 130
	MSD	2032647-02	ND	23.150	25.000	ug/L	5.2	92.6	20	70 - 130
1,1-Dichloroethane	MS	2032647-02	ND	22.670	25.000	ug/L		90.7		70 - 130
	MSD	2032647-02	ND	22.330	25.000	ug/L	1.5	89.3	20	70 - 130
1,1-Dichloroethene	MS	2032647-02	ND	24.360	25.000	ug/L		97.4		70 - 130
	MSD	2032647-02	ND	23.990	25.000	ug/L	1.5	96.0	20	70 - 130
Toluene	MS	2032647-02	ND	23.920	25.000	ug/L		95.7		70 - 130
	MSD	2032647-02	ND	24.220	25.000	ug/L	1.2	96.9	20	70 - 130
Trichloroethene	MS	2032647-02	ND	22.480	25.000	ug/L		89.9		70 - 130
	MSD	2032647-02	ND	23.090	25.000	ug/L	2.7	92.4	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	MS	2032647-02	ND	9.3900	10.000	ug/L		93.9		75 - 125
	MSD	2032647-02	ND	9.1900	10.000	ug/L	2.2	91.9		75 - 125
Toluene-d8 (Surrogate)	MS	2032647-02	ND	9.8400	10.000	ug/L		98.4		80 - 120
	MSD	2032647-02	ND	9.8100	10.000	ug/L	0.3	98.1		80 - 120
4-Bromofluorobenzene (Surrogate)	MS	2032647-02	ND	10.020	10.000	ug/L		100		80 - 120
	MSD	2032647-02	ND	9.6900	10.000	ug/L	3.3	96.9		80 - 120

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Volatile Organic Analysis (EPA Method 524.2) TICs

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092186						
Chloroacetonitrile	B092186-BLK1	0	ug/L			
1-Chlorobutane	B092186-BLK1	0	ug/L			
1,1-Dichloropropanone	B092186-BLK1	0	ug/L			
Methyl acrylate	B092186-BLK1	0	ug/L			
Nitrobenzene	B092186-BLK1	0	ug/L			
2-Nitropropane	B092186-BLK1	0	ug/L			

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092898						
Perchlorate	B092898-BLK1	ND	ug/L	4.0	0.81	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Water Analysis (General Chemistry)

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092898										
Perchlorate	B092898-BS1	LCS	9.0847	10.000	ug/L	90.8		85 - 115		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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	Control Limits		Lab Quals
								Percent Recovery	Percent Recovery	
QC Batch ID: B092898		Used client sample: N								
Perchlorate	DUP	2032462-11	ND	ND		ug/L			15	
	MS	2032462-11	ND	9.1367	10.101	ug/L		90.5	80 - 120	
	MSD	2032462-11	ND	9.1702	10.101	ug/L	0.4	90.8	15 80 - 120	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Method Blank Analysis

Constituent	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
QC Batch ID: B092502						
Total Recoverable Chromium	B092502-BLK1	ND	ug/L	3.0	0.50	
QC Batch ID: B092711						
Hexavalent Chromium	B092711-BLK1	ND	mg/L	0.00020	0.000020	

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Metals Analysis

Quality Control Report - Laboratory Control Sample

Constituent	QC Sample ID	Type	Result	Spike Level	Units	Percent Recovery	RPD	Control Limits		Lab
								Percent Recovery	RPD	
QC Batch ID: B092502										
Total Recoverable Chromium	B092502-BS1	LCS	38.003	40.000	ug/L	95.0		85 - 115		
QC Batch ID: B092711										
Hexavalent Chromium	B092711-BS1	LCS	0.021637	0.020000	mg/L	108		90 - 110		

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
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		Lab Quals
								Percent Recovery	RPD	
QC Batch ID: B092502		Used client sample: Y - Description: MW-15, 11/05/2020 08:00								
Total Recoverable Chromium	DUP	2032647-02	7.2070	7.1110		ug/L	1.3		20	
	MS	2032647-02	7.2070	44.211	40.000	ug/L		92.5		70 - 130
	MSD	2032647-02	7.2070	46.139	40.000	ug/L	4.3	97.3	20	70 - 130
QC Batch ID: B092711		Used client sample: Y - Description: MW-15, 11/05/2020 08:00								
Hexavalent Chromium	DUP	2032647-02	0.00030000	0.00029200		mg/L	2.7		10	
	MS	2032647-02	0.00030000	0.022108	0.020202	mg/L		108		90 - 110
	MSD	2032647-02	0.00030000	0.022225	0.020202	mg/L	0.5	109	10	90 - 110

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.



Tidewater Inc. - Powell
3761 Attucks Drive
Powell, OH 43065

Reported: 11/19/2020 14:20
Project: JPL- GW Monitoring Wells-CLP
Project Number: 4Q20
Project Manager: David Conner

Notes And Definitions

- J Estimated Value (CLP Flag)
- MDL Method Detection Limit
- ND Analyte Not Detected
- PQL Practical Quantitation Limit
- V11 The Continuing Calibration Verification (CCV) recovery was not within established control limits.

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.