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Name of Document: **December 2017 Semi-Annual Progress Report No. 10**

Date of Document: 12-31-2017

Site Name: **Former Professional Cleaners and Linen Service-QuikTrip Store No. 703R**

Site ID Number: VRP 1314972618

Document Submittal Checklist. Please certify that the submittal includes the following by checking each box as appropriate. Items 1 – 3 should be checked / included / certified for each submittal:

- 1. One paper copy of the document (double-sided is preferred)
- 2. Two compact discs (CDs), each containing an electronic copy of the document as a single, searchable, Portable Document Format (PDF) file. Only one CD is needed for Release Notifications. CDs should be labeled at a minimum with the following: 1) Name of Document, 2) Date of Document, 3) Site Name, and 4) Site Number. Any scanned images should have a resolution of at least 300 dpi and should be in color if applicable.
- 3. The electronic copies are complete, virus free, and identical to the paper copy except as described in Item 4 below.
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 - laboratory data sheets
 - manifests
 - other: NA

I certify that the information I am submitting is, to the best of my knowledge and belief, true, accurate, and complete.

Signature: 

Name (printed): Mitchell T. Guthrie

Date: 1/4/2018

Organization: Genesis Project, Inc.

Phone: 770-713-0666

Email: mguthrie@genproject.com

Receipt Date
(for EPD use only)



Genesis Project, Inc.
ENVIRONMENTAL SERVICES

January 4, 2018

Ms. Susan Kibler
Project Manager
Response and Remediation Program
Land Protection Branch
State of Georgia EPD
Martin Luther King Dr.
Suite 1054 East
Atlanta, GA 30334

SUBJECT: Voluntary Remediation Program
June 2017 Semi-Annual Progress Report No. 10
Former Professional Cleaners-Proposed QuikTrip Site No. 703R
2040 Beaver Ruin Road, Norcross-Gwinnett County, Georgia

Dear Ms. Kibler:

Genesis Project, the consultant for QuikTrip Corporation, has prepared the enclosed Semi-Annual Progress Report No. 10 in fulfillment of the criteria set forth by the Voluntary Investigation and Remediation Program (VIRP) application approved in March 2012. This progress report presents the activities performed since the submittal of the previous Semi-Annual Progress Report No. 9 for June 2017 prepared by Genesis Project, Inc. and submitted to EPD in June 2017.

If you have any questions regarding this progress report, please do not hesitate to contact our office at (770) 319-7217.

Sincerely,
Genesis Project, Inc.

Mitchell T. Guthrie, PG
Senior Geologist

Cc: Kyla Rudd, QuikTrip Corporation

December 2017 Semi-Annual Progress Report No. 10
Former Professional Cleaners and Linen Service-Proposed QuikTrip Store No. 703R
2040 Beaver Ruin Road
The Crossings Shopping Center
Norcross, Gwinnett County, Georgia
Tax Parcel ID 6212 036

Submitted to:

Georgia Environmental Protection Division
Hazardous Sites Response Program
2 Martin Luther King Jr. Drive
Floyd Towers East, Suite 1054
Atlanta, Georgia 30334

Prepared for:

QuikTrip Corporation
4705 South 129th East Avenue
Tulsa, OK 74134

December 31, 2017

Prepared by

Genesis Project, Inc.
1258 Concord Road
Smyrna, Georgia 30080
(770) 319-7217

Genesis Project, Inc.

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SIGNED AND SEALED PE/PG CERTIFICATION:

“I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional geologist who is registered with the Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

Mitchell T. Guthrie PG# 1016
Printed Name and GA PE/PG Number

12-31-17
Date

Mitchell T. Guthrie

Signature and Stamp



1.0 INTRODUCTION

QuikTrip Corporation acquired this Property in October 2016 and retained Genesis Project, Inc. to provide environmental services for this project. Genesis Project, Inc. has prepared this Semi-Annual Progress Report in fulfillment of the criteria set forth by the Voluntary Remediation Program (VRP) application approved on March 6, 2012. This progress report presents the activities performed since the previous progress report was submitted to the Georgia Environmental Protection Division (GAEPD) by Genesis Project, Inc. in December 2016.

1.1 Background

The Professional Cleaners and Linen Services facility operated in Suite 15 of The Crossings Shopping Center - 2040 Beaver Ruin Road, Norcross-Gwinnett County, Georgia from approximately 1984 until September 2016 (Figure 1). A release of tetrachloroethene (PCE) was detected in soil and groundwater at this site during a Limited Phase II Environmental Site Assessment (ESA) performed by GLE Associates, Inc. in March 2011. Based on review of the Phase II study, the soils above notification concentrations were reportedly removed from the site and a release notification to groundwater was submitted to GAEPD in April 2011. A Voluntary Investigation and Remediation Plan (VIRP) was prepared by EMA and submitted to GAEPD in September 2011. GAEPD approved the VIRP and accepted the site into the VRP in March 2012.

EMA has conducted multiple injection events (from April 2012 to December 2015) of in-situ chemical oxidation (ISCO) reagents (PeroxyChem Klozur®-activated sodium persulfate) in an effort to reduce PCE concentrations in groundwater at the site. In addition, EMA has submitted a total of seven (7) Semi Annual Progress Reports to GAEPD detailing groundwater sampling and remediation efforts from May 2013 to July 2016.

GCLRP, LLC foreclosed on the Property in May 2016. A Prospective Purchaser Corrective Action Plan (PPCAP) and Brownfield Application was prepared by Logic Environmental and submitted to GAEPD for GCLRP, LLC in May 2016. GAEPD approved the PPCAP in June 2016. In January 2017, Genesis Project Inc. submitted to GAEPD a PPCAP Addendum, which indicates that QuikTrip Corporation is now the Property owner and eligible for a limitation of liability for this Property under the Georgia Brownfield Act.

This Semi-Annual Progress Report No. 10 was prepared in accordance with the VRP and covers activities conducted since the Semi-Annual Progress Report No. 9 submittal in June 2017. The activities include installation of new monitor wells, as well as the collection and analysis of soil and groundwater samples from the new monitor well locations.

2.0 WORK PERFORMED DURING THIS MONITORING PERIOD

Activities completed during this period included:

- 1) Re-installation of seven (7) on-site monitor wells on June 20 and 21, 2017;
- 2) Installation of two (2) off-site monitor wells on October 19 and 20, 2017;
- 3) Analysis of soil samples obtained from new monitor well installation; and
- 4) Analysis of groundwater samples obtained from new monitor wells. Two (2) events, June 2017 and December 2017.

2.2 Monitor Well Installation and Soil Sampling

On June 20 and 21, 2017, new on-site monitor wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-8, and MW-9) were installed. On October 19 and 20, 2017, new off-site monitor wells (MW-6 and MW7) were installed. The monitor wells were installed by GeoLab, Inc. under the supervision of Genesis Project, Inc. personnel. The new monitor well locations are depicted on Figure 3 in Appendix I. The monitor wells were installed with a GeoProbe T-66 track drill rig utilizing hollow stem auger and rotary drilling techniques. Soil samples were collected utilizing continuous direct push GeoProbe sampler at 5 foot intervals to a depth of 15 feet in each monitor well location. Each monitoring well consists of 2-inch diameter PVC with machine threaded connectors and 15-feet of 0.10 slotted screen. Each monitor well has a graded sand pack that was tremmied in-place to approximately 2-feet above the top of the well screen. An approximate 2-foot bentonite seal was placed above the sand pack and the well was grouted to within approximately 1-foot of the ground surface. A 12-inch steel manhole cover was concreted in-place to provide the surface completion for each monitor well. The soil boring logs and monitor well as-built diagrams are presented in Appendix III.

Soil samples were collected from each monitor well location from depths of approximately 10 to 12-feet below the existing ground surface. The soil samples were scanned by Genesis Project field personnel utilizing an Ion Science Photocheck + photo-ionization detector (PID). No significant PID readings were recorded for any of the samples collected. A total of nine (9) of the soil samples (one from each monitor well location) were submitted to AES Laboratories for total VOC analysis.

2.3 Groundwater Sampling

Groundwater samples were collected from the new on-site monitor wells (MW-1, MW-2, MW-3, MW-4, MW-5, MW-8 and MW-9) and also existing off-site well (MW-10) on June 28 and 29, 2017. A second groundwater sampling event was conducted on December 18 and 19, 2017, which included all of the wells sampled in the June 2017 sampling event as well as new off-site wells (MW-6 and MW-7). For each sampling event, depth-to-water measurements were recorded from monitor wells. The groundwater flow direction is generally to the south and is depicted on Figures 4 and 4A in Appendix I. Following these activities, groundwater samples were collected from

designated wells utilizing low-flow sampling techniques. Low-flow sampling techniques are utilized in order to minimize the loss of volatile components during the groundwater sample collection. In accordance with the USEPA, Region IV, Science and Ecosystem Support Division standard operating procedure dated November 1, 2007, water quality parameters such as pH, conductivity, temperature, dissolved oxygen and groundwater drawdown rate are evaluated during purging to ensure groundwater samples are representative of formational groundwater. Stabilization criterion is based on dissolved oxygen (DO) concentrations as well as three successive readings ranging within +/- 0.10 for pH, +/- 0.30 (S/cm) conductivity, and < 10 ntu for turbidity. Once the parameters have stabilized, the groundwater sample is collected within the laboratory provided containers and placed in an ice-filled cooler and submitted to ESC Lab Sciences for VOCs analysis via EPA method 8260B. The groundwater sampling logs for these sampling events are presented in Appendix III.

3.0 REPORTING PERIOD RESULTS

3.1 Soil Sampling Results

Soil analytical results indicated that trace level concentrations of PCE were detected in the soil samples collected from MW-1 (10-12') and MW-2 (10-12'). The PCE soil concentrations in these well locations are below the GA EPD HSRA notification level of 0.18 mg/kg. In addition, trace level concentrations of Trimethylbenzene compounds were detected in the soil sample obtained from MW-8 (10-12'). The Trimethylbenzene compounds are petroleum hydrocarbons and are not listed in the GA EPD HSRA notification level constituent list. It should be noted that MW-8 is located in the area of the former aboveground detention pond associated with the previous shopping center development. It is believed that the trace level petroleum compounds detected in the soil are likely associated with parking lot storm water run-off impacts. A summary of soil analytical results is provided in Table 1. The laboratory analytical reports are presented Appendix IV.

3.2 Groundwater Sampling Results

The groundwater sampling event for June 2017 was the initial sampling event for the new on-site monitor wells. The December 2017 groundwater sampling event represents the initial sampling event for off-site wells (MW-6 and MW-7) and the second event for the new on-site wells. Historical groundwater sampling results for the former on-site monitor wells (which were abandoned in December 2016) are presented in Table 3, Appendix III.

PCE concentrations in groundwater decreased in monitor wells MW-1, MW-2 and MW-4 from the June 2017 to December 2017 sampling events. Monitor wells MW-5 and MW-9 showed an increase in PCE groundwater concentrations from the June 2017 to December 2017 sampling events. PCE groundwater concentrations in monitor wells MW-3 and MW-8 were relatively the same from the June 2017 to December 2017 sampling events. Low-level petroleum related compounds were detected in the initial (June 2017) groundwater sampling event in monitor well MW-8. As previously mentioned in Section 3.1, this well is located in the area of the former aboveground detention pond for the previous shopping center development. It is believed that low-level petroleum soil impacts resulting from parking lot storm water run-off are present in this area and that these petroleum impacts were vertically displaced during drilling operations for the well installation. No petroleum or other VOCs were detected in MW-8 in the December 2017 groundwater sampling event.

PCE, TCE and 1,2 cis DCE were detected in MW-6 and no VOCs were detected in MW-7 (the new off-site wells) in the December 2017 sampling event. PCE concentrations were relatively the same in existing off-site well MW-10 in the June and December 2017 sampling events.

Current groundwater analytical results are presented in Table 4 in Appendix II and also depicted on Figures 5 and 6 in Appendix I.

4.0 FUTURE SITE ACTIVITIES

The following activities are proposed to be completed at the site, prior to the next Semi Annual Progress Report which is due to EPD in June 2018.

4.1 Hydro-Geological Testing and Groundwater Modeling

Genesis Project will conduct aquifer testing to determine the hydraulic conductivity in the shallow water table aquifer. This analysis is deemed necessary since the June 18, 2003 VRP-CSR did not include an adequate number of data points nor any back-up data for the previous analysis. In addition, the reported hydraulic conductivity values were several orders of magnitude higher than anticipated for the soil classifications presented in the boring logs. This analysis will be utilized in conjunction with the development of a three-dimensional conceptual site model (CSM) and conduct a groundwater fate and transport model to recalculate the alternate concentration limit for the site. The results of the hydraulic conductivity analysis will be presented in the subsequent Semi-Annual Progress Report.

4.2 Proposed Uniform Environmental Covenant

It is anticipated that a Uniform Environmental Covenant (UEC) will be developed for the site to restrict the use or extraction of groundwater beneath the property for drinking water or for any other non-remedial purposes. The UEC will be submitted with the subsequent Semi-Annual Progress Report.

4.3 Semi-Annual Progress Report

It is anticipated that the next monitor well sampling event will occur in June 2018. As a result, we anticipate that the next Semi-Annual Progress Report will be submitted to EPD no later than June 30, 2018.

5.0 MILESTONE SCHEDULE

A milestone schedule is included in Appendix V.

6.0 SERVICE HOURS FOR THIS PERIOD

139.0 professional service hours have been completed by Genesis Project, Inc. from June 1, 2017 to December 31, 2017. A detailed break-out of the professional services hours is presented in Appendix V.

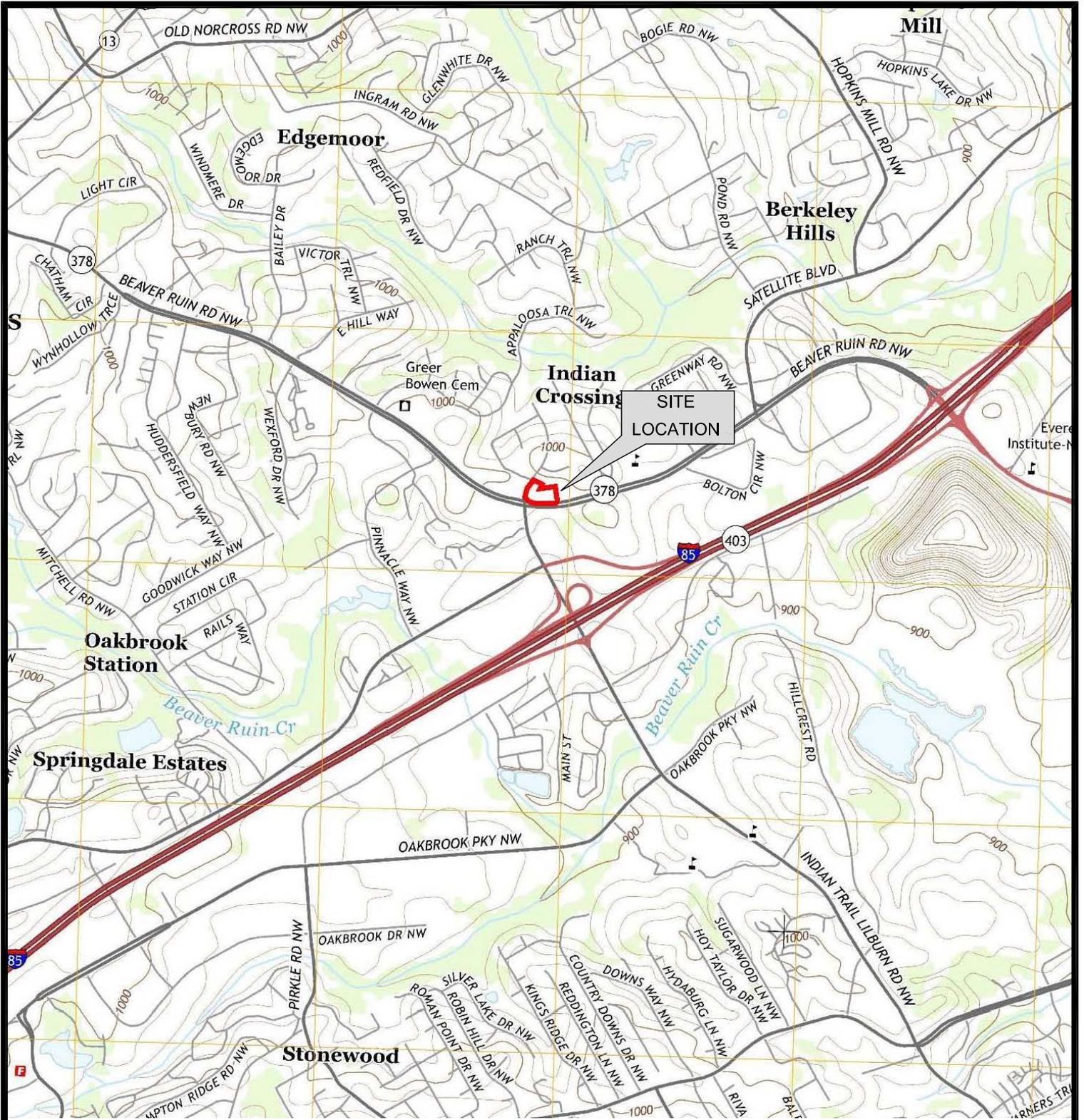
7.0 LIFE-CYCLE COST ESTIMATE

The life cycle cost estimate is based on the anticipated activities necessary to finalize corrective action at this site and submit a final VRP-CSR. These activities will include:

1. Hydro-geologic testing of soil and aquifer.
2. Groundwater Modeling.
3. Development of Unified Environmental Covenant (UEC); and
4. Preparation and submittal of a Final VRP-CSR.

Based on these activities the remaining estimated life cycle cost for this site is **\$19,123**.

APPENDIX I
Figures



USGS 7.5 Minute Topo Map— Norcross, GA 2014



APPOX. SCALE



Former Professional Cleaners & Linen Service
 Proposed QuikTrip Store No. 703R
 2040 Beaver Ruin Road
 Norcross-Gwinnett County, Georgia

Figure 1-Site Location Plan



TRACT 2

TRACT 1

STORE NO. 0000
3,900 S.F.
BLDG. HT. = 22'-0"

MW-3

TANK EXCAVATION AREA



Planter

N37°53'05"E
209.67'

S57°36'59"E
132.62'

S21°11'50"W
49.85'

MW-5

MW-1

MW-7

MW-11

MW-2

MW-2D

MW-9

MW-8

MW-6

MW-4

BEAVER RUIN ROAD

MW-10

LEGEND

- QT PROPERTY BOUNDARY
- MW-1 FORMER MONITOR WELL LOCATION NOW ABANDONED
- MW-10 EXISTING OFF-SITE MONITOR WELL LOCATION

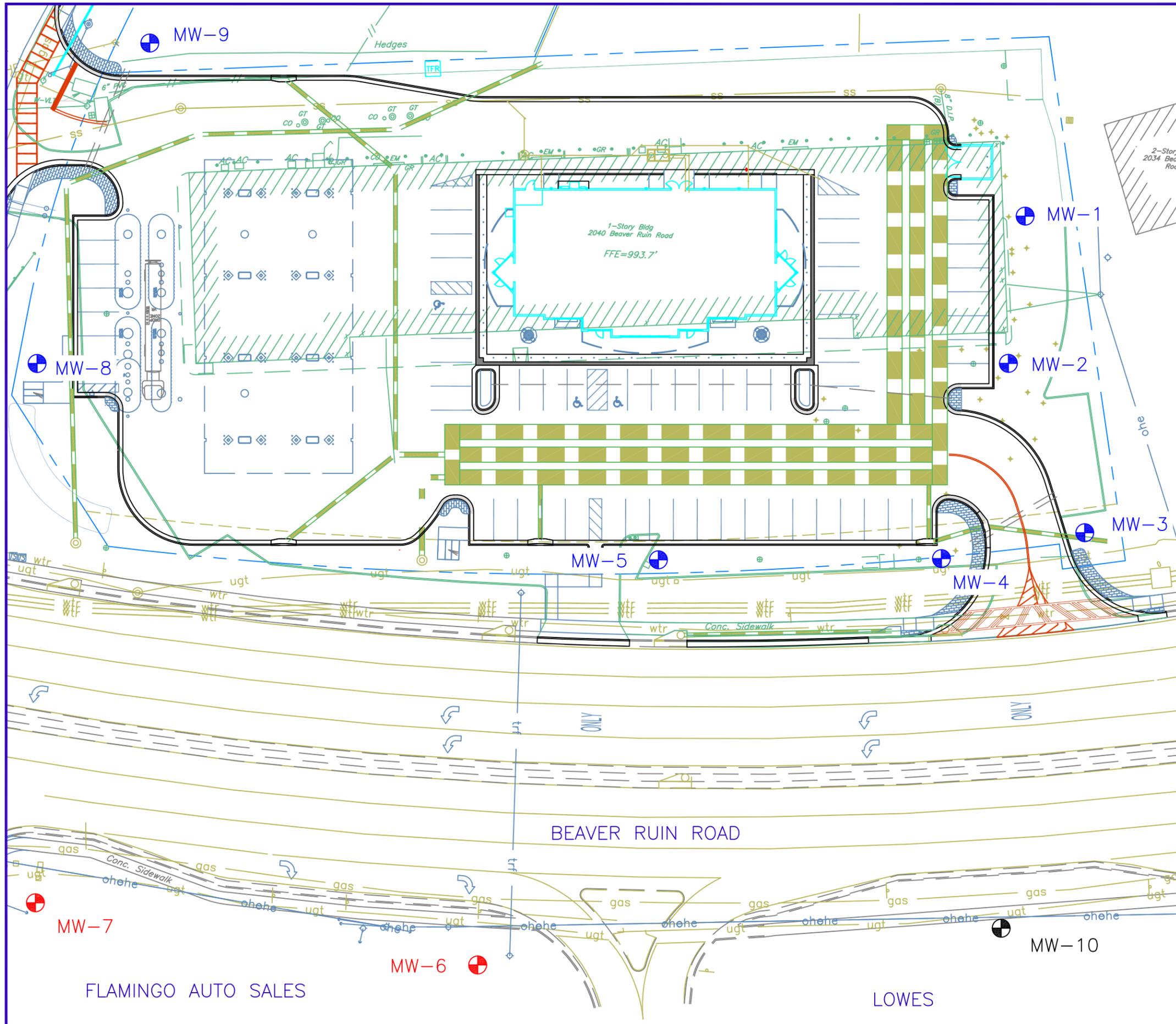
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REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
MDM	--	--	--	MTG	MDM	MDM



Former Monitor Well Location Plan
Former Professional Cleaners & Linen Service
Proposed QuikTrip Store No. 703R
2040 Beaver Ruin Road
Norcross-Gwinnett County, Georgia



PROJECT No.	QT 703R	FILE No.	--
DESIGN	MTG 1/23/17	SCALE	AS SHOWN
CADD	MTG 1/23/17	REV.	--
CHECK	MDM 1/23/17	Figure 2	
REVIEW	MDM 1/23/17		



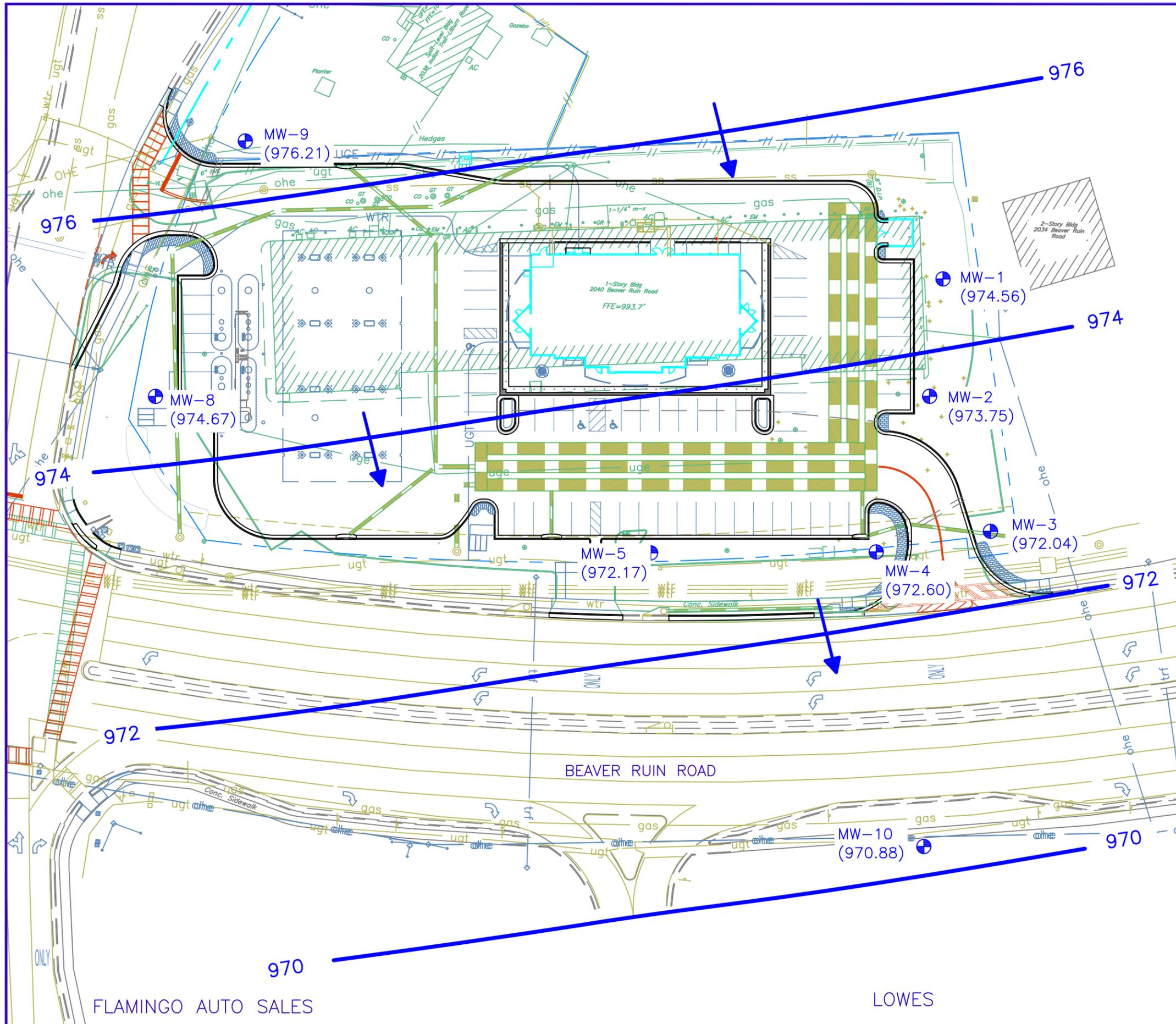
- MW-1 NEW ON-SITE MONITOR WELL LOCATION
- MW-10 EXISTING OFF-SITE MONITOR WELL LOCATION
- MW-6 NEW OFF-SITE MONITOR WELL LOCATION
- FORMER SHOPPING CENTER BUILDING LOCATION

3/9/17	WFM	---	WFM	MDM	MDM
REV	DATE	DES	REVISION DESCRIPTION		CADD



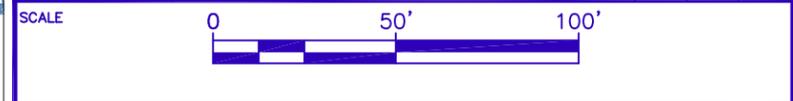
New Monitor Well Location Plan
Former Professional Cleaners & Linen Service
Proposed QuikTrip Store No. 703R
2040 Beaver Ruin Road
Norcross-Gwinnett County, Georgia

 Atlanta, Ga	PROJECT No.	FILE No.	---
	DESIGN WFM 3/9/17	SCALE AS SHOWN	REV. 0
	CADD WFM 3/9/17	Figure 3	
	CHECK MDM 3/9/17		
REVIEW MDM 3/9/17			



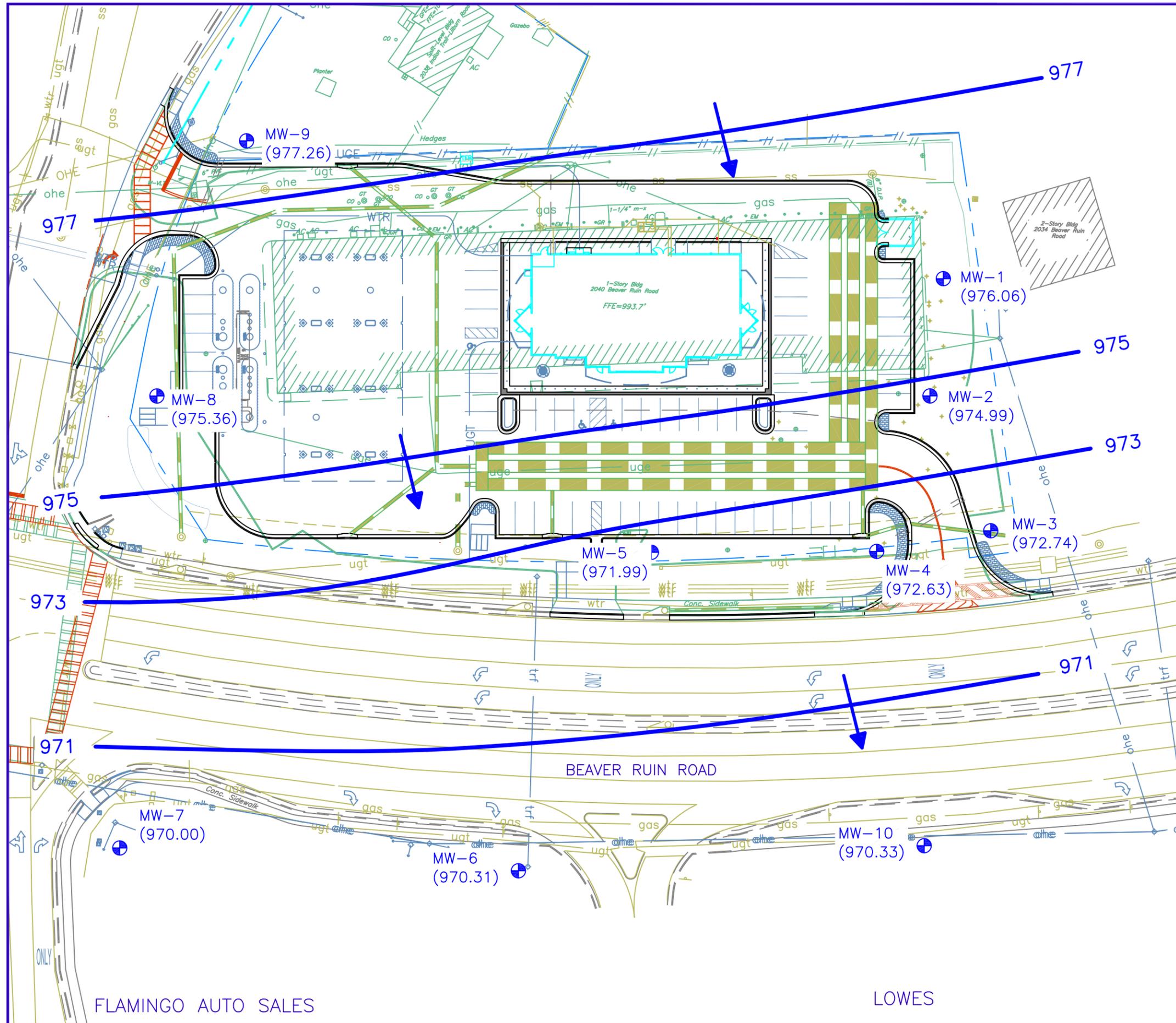
- MW-1 MONITOR WELL LOCATION
- (970.21) GW ELEVATION FEET, MSL
- 976 GW CONTOUR
- GW FLOW DIRECTION

REV	DATE	DES	WFM	MDM	MDM
3/9/17					
REVISION DESCRIPTION			CADD	CHK	RVW



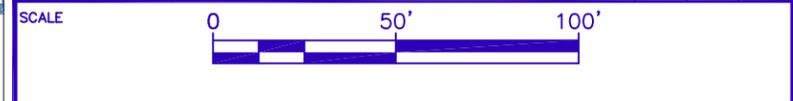
Groundwater Contour Plan—June 2017
 Former Professional Cleaners & Linen Service
 QuikTrip Store No. 703R
 2040 Beaver Ruin Road
 Norcross—Gwinnett County, Georgia

 Atlanta, Ga	PROJECT No.			FILE No.		
	DESIGN	WFM	3/9/17	SCALE	AS SHOWN	REV. 0
	CADD	WFM	3/9/17	Figure 4		
	CHECK	MDM	3/9/17			
REVIEW	MDM	3/9/17				



- MW-1 MONITOR WELL LOCATION
- (970.21) GW ELEVATION FEET, MSL
- 976 GW CONTOUR
- GW FLOW DIRECTION

REV	DATE	DES	WFM	MDM	MDM
3/9/17					
REVISION DESCRIPTION			CADD	CHK	RVW

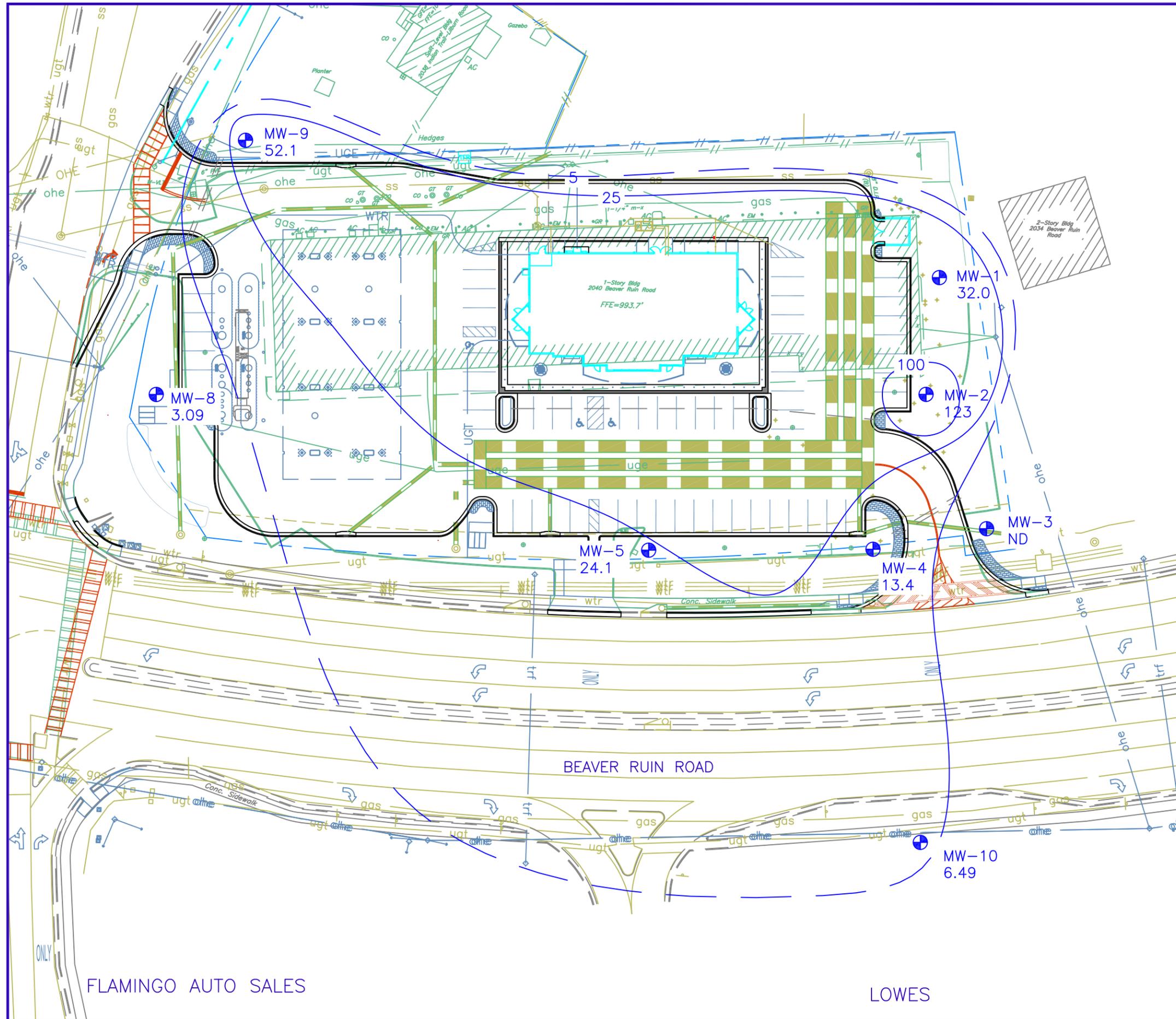


Groundwater Contour Plan—December 2017
 Former Professional Cleaners & Linen Service
 QuikTrip Store No. 703R
 2040 Beaver Ruin Road
 Norcross—Gwinnett County, Georgia

Genesis Project, Inc. ENVIRONMENTAL SERVICES Atlanta, Ga	PROJECT No.	FILE No.	--
	DESIGN WFM 3/9/17	SCALE AS SHOWN	REV. 0
	CADD WFM 3/9/17	Figure 4A	
	CHECK MDM 3/9/17		
REVIEW MDM 3/9/17			

FLAMINGO AUTO SALES

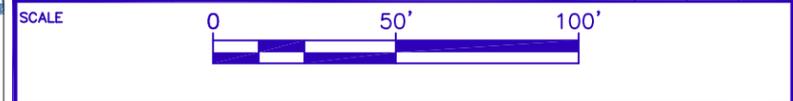
LOWES



MW-1 32.0
 MW-2 123
 MW-3 ND
 MW-4 13.4
 MW-5 24.1
 MW-8 3.09
 MW-9 52.1
 MW-10 6.49

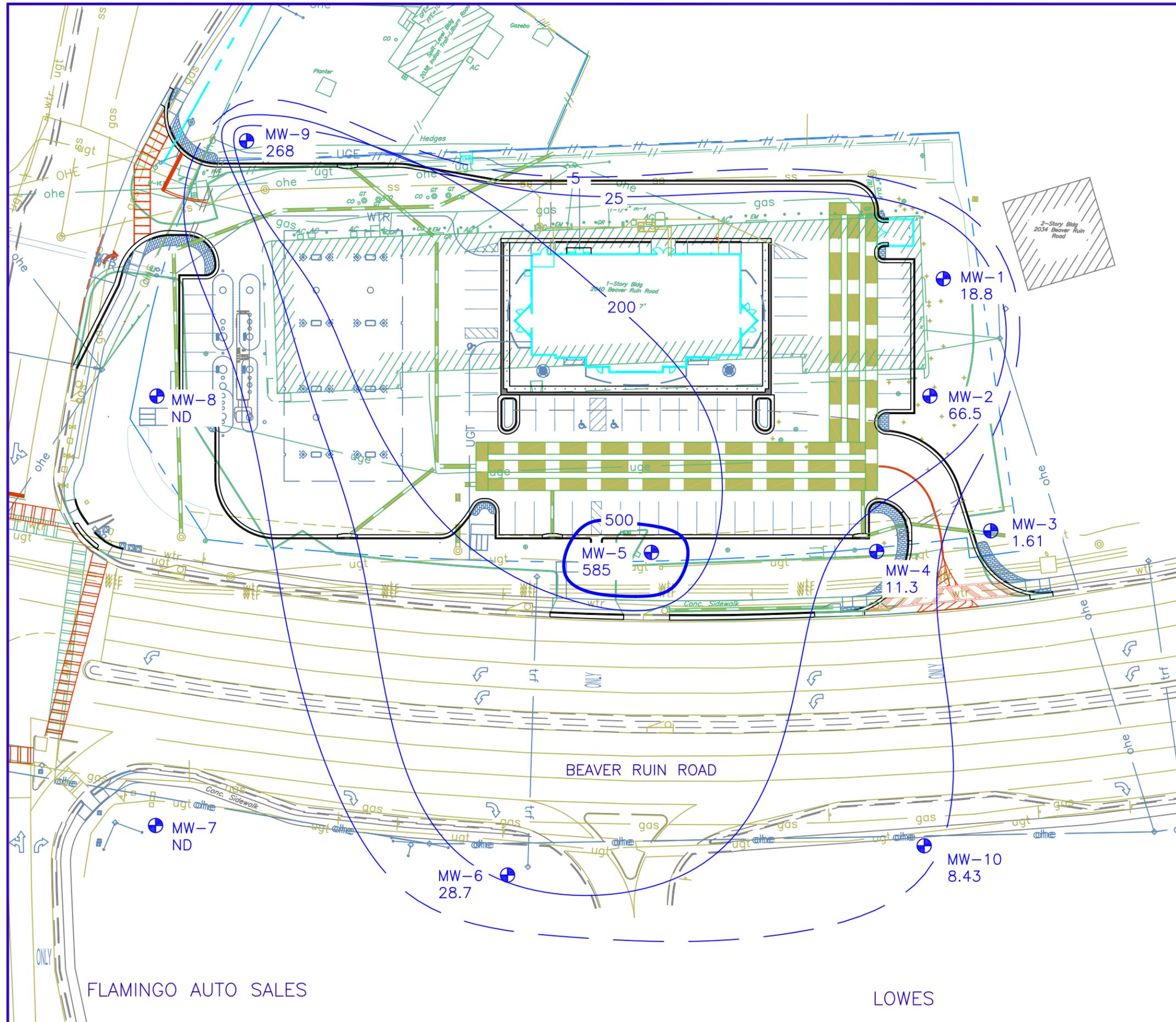
● MONITOR WELL LOCATION
 PCE (ug/L)

REV	DATE	DES	DESCRIPTION	WFM	MDM	MDM
				CADD	CHK	RVW



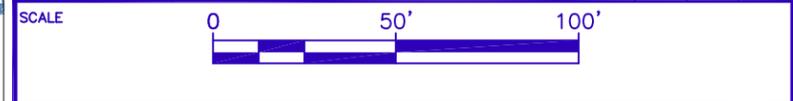
Groundwater Isoconcentration Plan—June 2017
 Former Professional Cleaners & Linen Service
 QuikTrip Store No. 703R
 2040 Beaver Ruin Road
 Norcross—Gwinnett County, Georgia

 Genesis Project, Inc. ENVIRONMENTAL SERVICES Atlanta, Ga	PROJECT No.	FILE No.	--
	DESIGN WFM 3/9/17	SCALE AS SHOWN	REV. 0
	CADD WFM 3/9/17	Figure 5	
	CHECK MDM 3/9/17		
REVIEW MDM 3/9/17			



MW-1 18.8 ● MONITOR WELL LOCATION
PCE (ug/L)

REV	DATE	DES	WFM	MDM	MDM
3/9/17					
REVISION DESCRIPTION			CADD	CHK	RVW



Groundwater Isoconcentration Plan—December 2017
Former Professional Cleaners & Linen Service
QuikTrip Store No. 703R
2040 Beaver Ruin Road
Norcross—Gwinnett County, Georgia

 Atlanta, Ga	PROJECT No.	FILE No.	--
	DESIGN WFM 3/9/17	SCALE AS SHOWN	REV. 0
	CADD WFM 3/9/17	Figure 6	
	CHECK MDM 3/9/17		
REVIEW MDM 3/9/17			

APPENDIX II
Tables

FORMER PROFESSIONAL CLEANERS AND LINEN SERVICE
 PROPOSED QUIKTRIP STORE NO. 703R
 SUMMARY OF LABORATORY RESULTS

Table 1: Summary of Soil VOC's Analytical Data

Sample ID	Sample Date	Sampled Interval (ft bls)	Methylene Chloride (mg/Kg)	Acetone (mg/Kg)	Tetrachloroethene (mg/Kg)	Remaining VOCs (mg/Kg)
TP-1	1/23/17	0-2'	0.0067 J	<0.004	<0.001	BRL
		2-4'	0.012 J	<0.004	<0.001	BRL
		4-6'	0.0063 J	<0.004	<0.001	BRL
		6-8'	0.0067 J	<0.004	<0.001	BRL
TP-2	1/23/17	0-2'	0.0059 J	<0.004	<0.001	BRL
		6-8'	0.0063 J	<0.004	<0.001	BRL
TP-3	1/23/17	0-2'	0.0058 J	<0.004	0.0012 J	BRL
		6-8'	0.0041 J	<0.004	<0.001	BRL
TP-4	1/23/17	0-2'	0.0042 J	<0.004	0.0051 J	BRL
		2-4'	0.0057 J	<0.004	0.0025 J	BRL
		4-6'	0.0087 J	<0.004	0.0023 J	BRL
		6-8'	0.011 J	<0.004	0.0014 J	BRL
TP-5	1/23/17	0-2'	0.0053 J	<0.004	0.0014 J	BRL
		6-8'	0.011 J	<0.004	<0.001	BRL
TP-6	1/23/17	0-2'	0.010 J	0.012 J	<0.001	BRL
		6-8'	0.0074 J	0.019 J	<0.001	BRL
SS-1	1/24/17	1-3'	0.011 J	0.022 J	<0.001	BRL
SS-2	1/24/17	4-5'	0.0085 J	<0.004	0.0099	BRL
SS-3	1/24/17	2-4'	0.0054 J	<0.004	<0.001	BRL
SS-4	1/24/17	3-5'	0.0048 J	0.011 J	<0.001	BRL
SS-5	1/24/17	1-3'	0.0047 J	0.026 J	<0.001	BRL
SS-6	1/24/17	0-2'	0.0059 J	0.089	<0.001	BRL
CS-1 NSW	2/3/17	4'	<0.004	0.012 J	0.0017 J	BRL
CS-2 SSW	2/3/17	4'	<0.004	<0.004	<0.001	BRL
CS-3 ESW	2/3/17	4'	0.0060 J	0.041 J	0.0032 J	BRL
CS-4 WSW	2/3/17	4'	0.010 J	0.018 J	<0.001	BRL
CS-5 EB	2/3/17	8'	0.011 J	<0.004	<0.001	BRL
SW-1	2/6/17	4'	0.0058 J	0.0097 J	<0.001	BRL
SW-3	2/6/17	4'	0.0061 J	<0.004	<0.001	BRL
SW-5	2/6/17	4'	0.0054 J	0.015 J	<0.001	BRL
GA EPD HSRA Soil Notification Concentrations			0.08	2.74	0.18	**

Notes:

The Presence of Acetone is due to a reaction with Laboratory Preservative and Not Representative of On-Site Conditions

- TPH-DRO Total Petroleum Hydrocarbons-Diesel Range Organics
- VOCs Volatile Organic Compounds
- mg/Kg milograms per kilograms
- ft bls feet below ground surface
- NA Constituent Not Analyzed
- NL Constituent Not Listed in HSRA Notification Concentrations
- ** Notification Concentrations Vary-All Remaining VOCs were BRL
- J Estimated Value Detected Below Laboratory Reporting Limits
- BRL Below Laboratory Reporting Limits

Table 1A
 Summary of Soil Analytical Results
 New Monitor Well Locations
 Professional Cleaners-QuikTrip Store No. 703R
 Norcross, GA

Sample ID	Sample Date										
		PCE	TCE	cis 1,2 DCE	Naph.	n P Benz	Tolulene	1,2,4 TMB	1,2,3 TMB	1,3,5 TMB	All other VOCs
MW-1	6/21/2017	0.00239	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	< 0.001	< 0.001	< 0.001	ND
(10-12')											ND
MW-2	6/21/2017	0.00416	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	< 0.001	< 0.001	< 0.001	ND
(10-12')											ND
MW-3	6/21/2017	< 0.001	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	< 0.001	< 0.001	< 0.001	ND
(10-12')											ND
MW-4	6/21/2017	< 0.001	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	< 0.001	< 0.001	< 0.001	ND
(10-12')											ND
MW-5	6/21/2017	< 0.001	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	< 0.001	< 0.001	< 0.001	ND
(10-12')											ND
MW-6	10/19/2017	< 0.001	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	< 0.001	< 0.001	< 0.001	ND
(13-15')											ND
MW-7	10/19/2017	< 0.001	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	< 0.001	< 0.001	< 0.001	ND
(13-15')											ND
MW-8	6/21/2017	< 0.001	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	0.00456	0.00144	0.00167	ND
(12-14')											ND
MW-9	6/21/2017	< 0.001	< 0.001	< 0.001	< 0.006	< 0.001	< 0.006	< 0.001	< 0.001	< 0.001	ND
(10-12')											ND
GA EPD HSRA Soil Notification Concentrations		0.18	0.13	0.02	100	NL	14.4	NL	NL	NL	**

Notes: All analytical results are in mg/kg
 PCE-Tetrachloroethene
 TCE-Trichloroethene
 DCE-Dichloroethene
 Naph.-Naphthalene
 n P Benz.-n-Propylbenzene
 TMB-Trimethylbenzene

VOCs Volatile Organic Compounds
 mg/Kg milograms per kilograms
 ND Below laboratory detection limit
 NL Constituent Not Listed in HSRA Notification Concentrations
 ** Notification Concentrations Vary-All Remaining VOCs were ND
 J Estimated Value Detected Below Laboratory Reporting Limits

Table 2
Summary of Groundwater Elevations
Professional Cleaners-QuikTrip Store No. 703R
Norcross, Georgia

Sample ID	Sample Date	Ground Surface Elevation	Top of Casing Elevation	Depth to Water (feet btoc)	Groundwater Elevation
MW-1	6/28/2017	994.38	993.90	19.82	974.56
	12/19/2017			17.84	976.06
MW-2	6/28/2017	993.38	992.98	19.63	973.75
	12/19/2017			17.99	974.99
MW-3	6/28/2017	989.67	989.16	17.63	972.04
	12/19/2017			16.42	972.74
MW-4	6/28/2017	990.64	990.16	18.04	972.60
	12/19/2017			17.53	972.63
MW-5	6/28/2017	992.04	991.64	19.87	972.17
	12/19/2017			19.65	971.99
MW-6	6/28/2017	995.47	995.12	NR	NR
	12/19/2017			24.81	970.31
MW-7	6/28/2017	992.27	991.62	NR	NR
	12/19/2017			21.62	970.00
MW-8	6/28/2017	994.84	994.42	20.17	974.67
	12/19/2017			19.06	975.36
MW-9	6/28/2017	994.64	994.35	18.43	976.21
	12/19/2017			17.09	977.26
MW-10	6/28/2017	993.68	993.56	22.68	970.88
	12/19/2017			23.23	970.33

Notes:

ft btoc:

NR

NA

Feet Below Top of Casing

Measurement Not Recorded

Not Applicable

Table 3
Summary of Historical Groundwater Analytical Results
Professional Cleaner-Proposed QT 703R
Norcross, Georgia

Sample ID	Sample Period	Sample Date						
			PCE	TCE	Vinyl Chloride	Bromoform	Chloroform	All other VOCs
MW-1	Initial Inv.	7/1/2011	50	NS	NS	NS	NS	NS
	Baseline	4/23/2012	100	NS	NS	NS	NS	NS
	1st Quarter	7/24/2012	46	NS	NS	NS	NS	NS
	2nd Quarter	10/14/2012	< 5	NS	NS	NS	NS	NS
	3rd Quarter	2/13/2013	5	NS	NS	NS	NS	NS
		10/29/2013	100	NS	NS	NS	NS	NS
		11/11/2014	19	NS	NS	NS	NS	NS
		1/19/2015	< 5	NS	NS	NS	NS	NS
		6/8/2015	15	NS	NS	NS	NS	NS
		11/10/2015	14	NS	NS	NS	NS	NS
		6/20/2016	22	NS	NS	NS	NS	NS
	12/29/2016	13.2	< 1	< 1	< 1	< 5	ND	
MW-2	Initial Inv.	7/1/2011	62	NS	NS	NS	NS	NS
	Baseline	3/19/2012	47	NS	NS	NS	NS	NS
	1st Quarter	7/24/2013	41	NS	NS	NS	NS	NS
	2nd Quarter	10/14/2013	29	NS	NS	NS	NS	NS
	3rd Quarter	2/8/2013	35	NS	NS	NS	NS	NS
		10/29/2013	24	NS	NS	NS	NS	NS
		8/25/2014	61	NS	NS	NS	NS	NS
		11/28/2014	< 5	NS	NS	NS	NS	NS
		6/20/2016	100	NS	NS	NS	NS	NS
		12/29/2016	12.3	< 1	< 1	< 1	< 5	ND
MW-2D	Delineation	4/4/2013	< 5	NS	NS	NS	NS	NS
		10/29/2013	< 5	NS	NS	NS	NS	NS
		12/29/2016	< 1	< 1	< 1	< 1	< 5	ND
MW-3	Initial Inv.	7/1/2011	< 5	NS	NS	NS	NS	NS
	Baseline	4/23/2012	< 5	NS	NS	NS	NS	NS
	1st Quarter	7/24/2012	< 5	NS	NS	NS	NS	NS
	2nd Quarter	10/14/2012	< 5	NS	NS	NS	NS	NS
	3rd Quarter	2/8/2013	< 5	NS	NS	NS	NS	NS
		11/28/2014	< 5	NS	NS	NS	NS	NS
	12/29/2016	47	< 1	< 1	< 1	< 5	ND	
MW-4	Initial Inv.	7/22/2011	< 5	NS	NS	NS	NS	NS
	Baseline	4/23/2012	< 5	NS	NS	NS	NS	NS
	1st Quarter	7/24/2012	8.9	NS	NS	NS	NS	NS
	Confirmation	8/23/2012	8.3	NS	NS	NS	NS	NS
	2nd Quarter	10/14/2012	11	NS	NS	NS	NS	NS
	3rd Quarter	2/8/2013	11	NS	NS	NS	NS	NS
		10/29/2013	140	NS	NS	NS	NS	NS
		8/14/2014	200	NS	NS	NS	NS	NS
		11/14/2014	< 5	NS	NS	NS	NS	NS
		6/8/2015	31	NS	NS	NS	NS	NS
	11/10/2015	< 5	NS	NS	NS	NS	NS	
	6/20/2016	310	NS	NS	NS	NS	NS	
	12/29/2016	198	< 1	< 1	< 1	< 5	ND	
MW-5	Baseline	3/19/2012	< 5	NS	NS	NS	NS	NS
	1st Quarter	7/24/2012	< 5	NS	NS	NS	NS	NS
	2nd Quarter	10/14/2012	< 5	NS	NS	NS	NS	NS
	3rd Quarter	2/8/2013	11.0	NS	NS	NS	NS	NS
	Confirmation	2/18/2013	5.2	NS	NS	NS	NS	NS
		10/29/2013	11	NS	NS	NS	NS	NS
		11/28/2013	< 5	NS	NS	NS	NS	NS
	12/29/2016	< 1	< 1	< 1	< 1	< 5	ND	
MW-6	Baseline	3/19/2012	< 5	NS	NS	NS	NS	NS
	1st Quarter	7/24/2012	5.2	NS	NS	NS	NS	NS
	Confirmation	8/23/2012	< 5	NS	NS	NS	NS	NS
	2nd Quarter	10/14/2012	< 5	NS	NS	NS	NS	NS
	3rd Quarter	2/8/2013	11	NS	NS	NS	NS	NS
	Confirmation	2/18/2013	< 5	NS	NS	NS	NS	NS
		10/30/2013	25.0	NS	NS	NS	NS	NS
		8/25/2014	< 5	NS	NS	NS	NS	NS
		11/28/2014	< 5	NS	NS	NS	NS	NS
		6/8/2015	< 5	NS	NS	NS	NS	NS
	12/29/2016	< 1	< 1	< 1	< 1	< 5	ND	

Table 3
Summary of Historical Groundwater Analytical Results
Professional Cleaner-Proposed QT 703R
Norcross, Georgia

Sample ID	Sample Period	Sample Date						
			PCE	TCE	Vinyl Chloride	Bromoform	Chloroform	All other VOCs
MW-7	Baseline	3/19/2012	82	NS	NS	NS	NS	NS
	1st Quarter	7/24/2012	31	NS	NS	NS	NS	NS
	2nd Quarter	10/14/2012	19	NS	NS	NS	NS	NS
	3rd Quarter	2/8/2013	< 5	NS	NS	NS	NS	NS
		10/29/2013	37	NS	NS	NS	NS	NS
		8/25/2014	62	NS	NS	NS	NS	NS
		11/28/2014	58	NS	NS	NS	NS	NS
		1/19/2015	< 5	NS	NS	NS	NS	NS
		6/8/2015	< 5	NS	NS	NS	NS	NS
		11/10/2015	61	NS	NS	NS	NS	NS
	12/29/2016	36.9	< 1	< 1	< 1	< 5	ND	
MW-8	Delineation	12/11/2012	7.9	NS	NS	NS	NS	NS
	Confirmation	12/13/2012	< 5	NS	NS	NS	NS	NS
	3rd Quarter	2/8/2013	< 5	NS	NS	NS	NS	NS
		10/30/2013	< 5	NS	NS	NS	NS	NS
		11/28/2014	< 5	NS	NS	NS	NS	NS
		6/20/2016	< 5	NS	NS	NS	NS	NS
	12/29/2016	NS	< 1	< 1	< 1	< 5	ND	
MW-9	Delineation	12/11/2012	< 5	NS	NS	NS	NS	NS
	3rd Quarter	2/8/2013	< 5	NS	NS	NS	NS	NS
		10/30/2013	< 5	NS	NS	NS	NS	NS
		11/28/2014	< 5	NS	NS	NS	NS	NS
		12/29/2016	< 1	< 1	< 1	< 1	< 5	ND
MW-10	Delineation	2/12/2013	6.6	NS	NS	NS	NS	NS
		10/30/2013	10	NS	NS	NS	NS	NS
		8/25/2014	< 5	NS	NS	NS	NS	NS
		11/28/2014	< 5	NS	NS	NS	NS	NS
		6/20/2016	5	NS	NS	NS	NS	NS
		12/29/2016	3.87	< 1	< 1	< 1	< 5	ND
MW-11	Delineation	4/22/2014	170	NS	NS	NS	NS	NS
		11/28/2014	< 5	NS	NS	NS	NS	NS
		5/29/2015	51	NS	NS	NS	NS	NS
		11/10/2015	110	NS	NS	NS	NS	NS
		6/20/2016	41	NS	NS	NS	NS	NS
		12/29/2016	11	< 1	< 1	< 1	< 5	ND

Notes:

NS Monitor Well Not Sampled
VOCs Volatile Organic Compounds
ug/L micrograms per Liter
PCE tetrachloroethene
TCE trichloroethene
<5 Below Laboratory Detection

Table 4
 Summary of Groundwater Analytical Results
 New Monitor Well Locations
 Professional Cleaners-QuikTrip Store No. 703R
 Norcross, GA

Sample ID	Sample Date														
		PCE	TCE	cis 1,2 DCE	Bromo-form	Chloro-form	E Benz	I Benz	Naph.	n P Benz	Tolulene	1,2,4 TMB	1,2,3 TMB	1,2,3 TMB	All other VOCs
MW-1	6/28/2017	32.0	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
	12/19/2017	18.8	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-2	6/28/2017	123.0	1.85	< 1	3.43	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
	12/19/2017	66.5	2.04	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-3	6/28/2017	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
	12/19/2017	1.61	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-4	6/28/2017	13.4	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
	12/19/2017	11.3	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-5	6/28/2017	24.1	< 1	< 1	< 1	5.91	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
	12/19/2017	585	2.18	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-6	6/28/2017	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	12/19/2017	28.7	2.28	3.24	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-7	6/28/2017	*	*	*	*	*	*	*	*	*	*	*	*	*	*
	12/19/2017	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-8	6/28/2017	< 1	< 1	< 1	< 1	< 5	2.76	1.01	15.9	3.11	3.09	66.8	23.7	22.7	ND
	12/19/2017	< 1	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-9	6/28/2017	52.1	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
	12/29/2016	268	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
MW-10	6/28/2017	6.49	< 1	< 1	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND
	12/19/2017	8.43	< 1	1.60	< 1	< 5	< 1	< 1	< 5	< 1	< 1	< 1	< 1	< 1	ND

Notes: All analytical results are in ug/L
 PCE-Tetrachloroethene *- MW was not installed until October 2017
 TCE-Trichloroethene ND-Below laboratory detection limit
 DCE-Dichloroethene
 E Benz.-Ethylbenzene
 I Benz.-Isopropylbenzene
 Naph.-Naphthalene
 n P Benz.-n-Propylbenzene
 TMB-Trimethylbenzene

APPENDIX III
Boring Logs/ Monitor Well Diagrams
Groundwater Sampling Logs

WELL NUMBER MW-1

PAGE 1 OF 1

CLIENT QuikTrip
PROJECT NUMBER _____
DATE STARTED 6/21/17 **COMPLETED** 6/21/17
DRILLING CONTRACTOR GeoLab
DRILLING METHOD GeoProbe
LOGGED BY J. Love **CHECKED BY** M. Guthrie
NOTES _____

PROJECT NAME Quiktrip Store 703R
PROJECT LOCATION Norcross, GA
GROUND ELEVATION 994.38 ft **HOLE SIZE** 6"
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING 21.50 ft / Elev 972.88 ft
AFTER DRILLING 19.82 ft / Elev 974.56 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:42 - Z:\QIKTRIP\QT703R\BROWN\FIELDS\FIGURES\SOIL BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 993.9 (ft)
		ML		(ML) Sandy SILT, orange-brown, some to trace clay, trace mica, low to non-plastic; FILL (ML-SM)		Grout Seal
3.0				991.4	PID = 0.4	
		ML		(ML) Sandy SILT, orange-tan, some to trace clay, trace mica, moist, low to non-plastic; RESIDUAL (ML-SM)	PID = 0.2	Bentonite Seal PVC Riser
5					PID = 0.7	
		ML		(ML) Sandy SILT, orange-red-tan, trace clay and mica, dry to moist, laminated; SAPROLITE (ML-SM)	PID = 0.7	
12.0				982.4	PID = 0.7	
		ML			PID = 0.7	Sand Filter Pack Screened PVC
15						
20				▼		
				▼		
25						

Bottom of borehole at 25.0 feet.

WELL NUMBER MW-2

PAGE 1 OF 1

CLIENT QuikTrip
PROJECT NUMBER _____
DATE STARTED 6/21/17 **COMPLETED** 6/21/17
DRILLING CONTRACTOR GeoLab
DRILLING METHOD GeoProbe
LOGGED BY J. Love **CHECKED BY** M. Guthrie
NOTES _____

PROJECT NAME Quiktrip Store 703R
PROJECT LOCATION Norcross, GA
GROUND ELEVATION 993.38 ft **HOLE SIZE** 6"
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING 19.01 ft / Elev 974.37 ft
AFTER DRILLING 19.63 ft / Elev 973.75 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:38 - Z:\QIKTRIP\QT703R\BROWNFIELDS\FIGURES\SOIL BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 992.98 (ft)
		ML	(ML) Sandy SILT, orange-red-brown-grey, some to trace mica and clay, moist, non-plastic; FILL (ML-SM)	3.0 990.4	PID = 0.3	Grout Seal
5		ML	(ML) Sandy SILT, orange-tan, some to trace mica and clay; RESIDUAL (ML-SM)		PID = 1	Bentonite Seal PVC Riser
10		ML			PID = 1.9	
15		ML	(ML) Sandy SILT, orange-red-tan, trace mica and clay, dry to moist, non-plastic, laminated; SAPROLITE (ML-SM)	14.0 979.4	PID = 1.8	
20			▼ ▼		PID = 1.9	Sand Filter Pack Screened PVC
25						

Bottom of borehole at 25.0 feet.

WELL NUMBER MW-3

PAGE 1 OF 1

CLIENT QuikTrip
PROJECT NUMBER _____
DATE STARTED 6/21/17 **COMPLETED** 6/21/17
DRILLING CONTRACTOR GeoLab
DRILLING METHOD GeoProbe
LOGGED BY J. Love **CHECKED BY** M. Guthrie
NOTES _____

PROJECT NAME Quiktrip Store 703R
PROJECT LOCATION Norcross, GA
GROUND ELEVATION 989.67 ft **HOLE SIZE** 6"
GROUND WATER LEVELS:
 AT TIME OF DRILLING ---
 AT END OF DRILLING 18.45 ft / Elev 971.22 ft
 AFTER DRILLING 19.63 ft / Elev 970.04 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:38 - Z:\QIKTRIP\QT703R\BROWN\FIELDS\FIGURES\SOIL BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 989.16 (ft)
5		ML	4.0	(ML) Sandy SILT, orange-brown-grey, some to trace mica and clay, moist to wet, low to non-plastic; FILL (ML-SM)	PID = 0.2	<p style="font-size: small;"> Grout Seal Bentonite Seal PVC Riser Sand Filter Pack Screened PVC </p>
10		ML		(ML) Sandy SILT, orange-tan, some to trace clay, trace mica, dry to moist, low to non-plastic; RESIDUAL (ML-SM)	PID = 0.3	
15					PID = 0.1	
20				▼ ▼	PID = 0.1	
25					PID = 0	

Bottom of borehole at 25.0 feet.

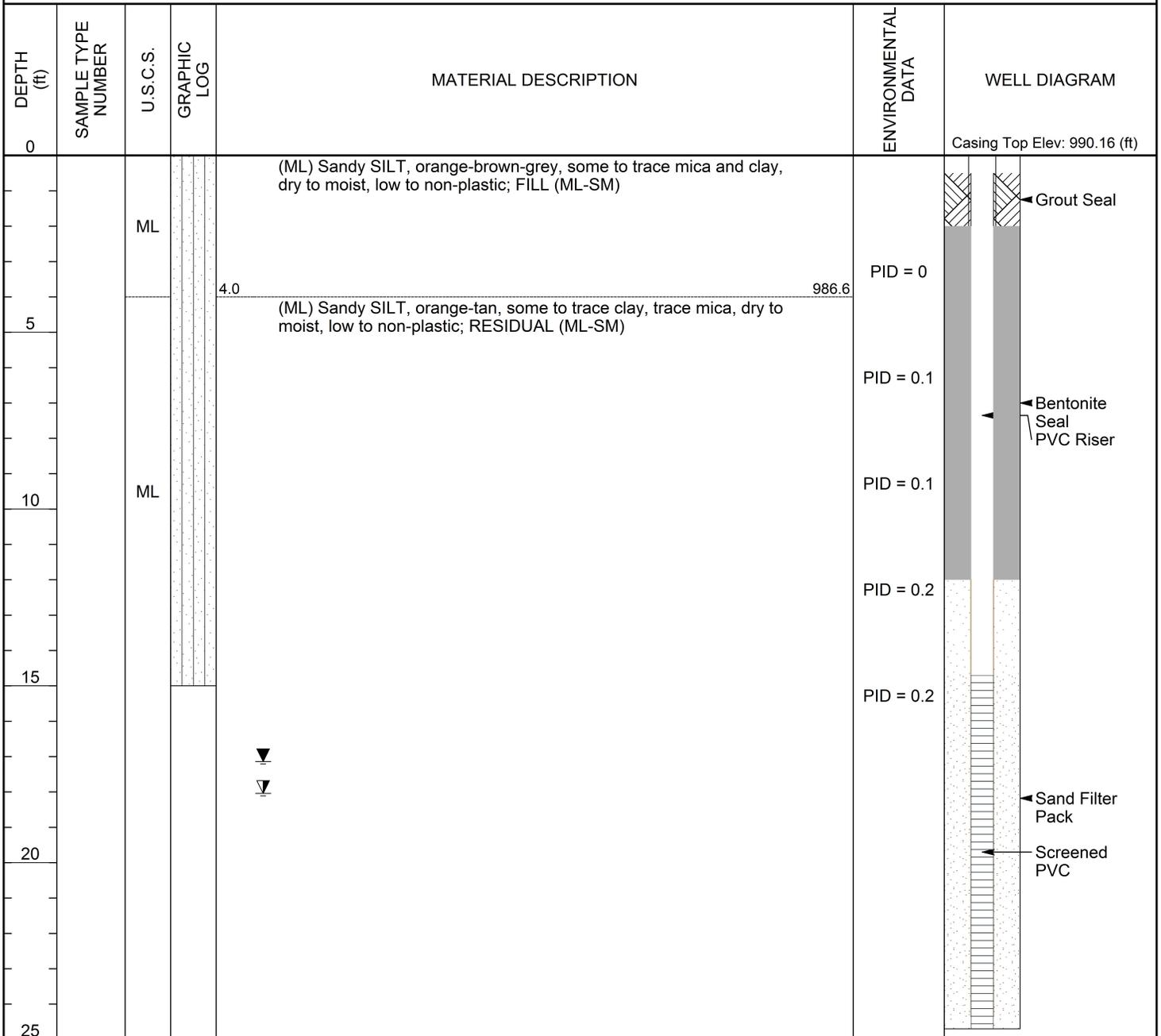
WELL NUMBER MW-4

PAGE 1 OF 1

CLIENT QuikTrip
PROJECT NUMBER _____
DATE STARTED 6/21/17 **COMPLETED** 6/21/17
DRILLING CONTRACTOR GeoLab
DRILLING METHOD GeoProbe
LOGGED BY J. Love **CHECKED BY** M. Guthrie
NOTES _____

PROJECT NAME Quiktrip Store 703R
PROJECT LOCATION Norcross, GA
GROUND ELEVATION 990.64 ft **HOLE SIZE** 6"
GROUND WATER LEVELS:
 AT TIME OF DRILLING ---
 AT END OF DRILLING 17.14 ft / Elev 973.50 ft
 AFTER DRILLING 18.04 ft / Elev 972.60 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:38 - Z:\QUIKTRIP\QT703R\BROWN\FIELDS\FIGURES\SOIL BORINGS.GPJ



Bottom of borehole at 25.0 feet.

WELL NUMBER MW-5

PAGE 1 OF 1

CLIENT QuikTrip
PROJECT NUMBER _____
DATE STARTED 6/20/17 **COMPLETED** 6/20/17
DRILLING CONTRACTOR GeoLab
DRILLING METHOD GeoProbe
LOGGED BY J. Love **CHECKED BY** M. Guthrie
NOTES _____

PROJECT NAME Quiktrip Store 703R
PROJECT LOCATION Norcross, GA
GROUND ELEVATION 992.04 ft **HOLE SIZE** 6"
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING 16.97 ft / Elev 975.07 ft
AFTER DRILLING 19.87 ft / Elev 972.17 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:38 - Z:\QUIKTRIP\QT703R\BROWNFIELDS\FIGURES\SOIL BORINGS.GPJ

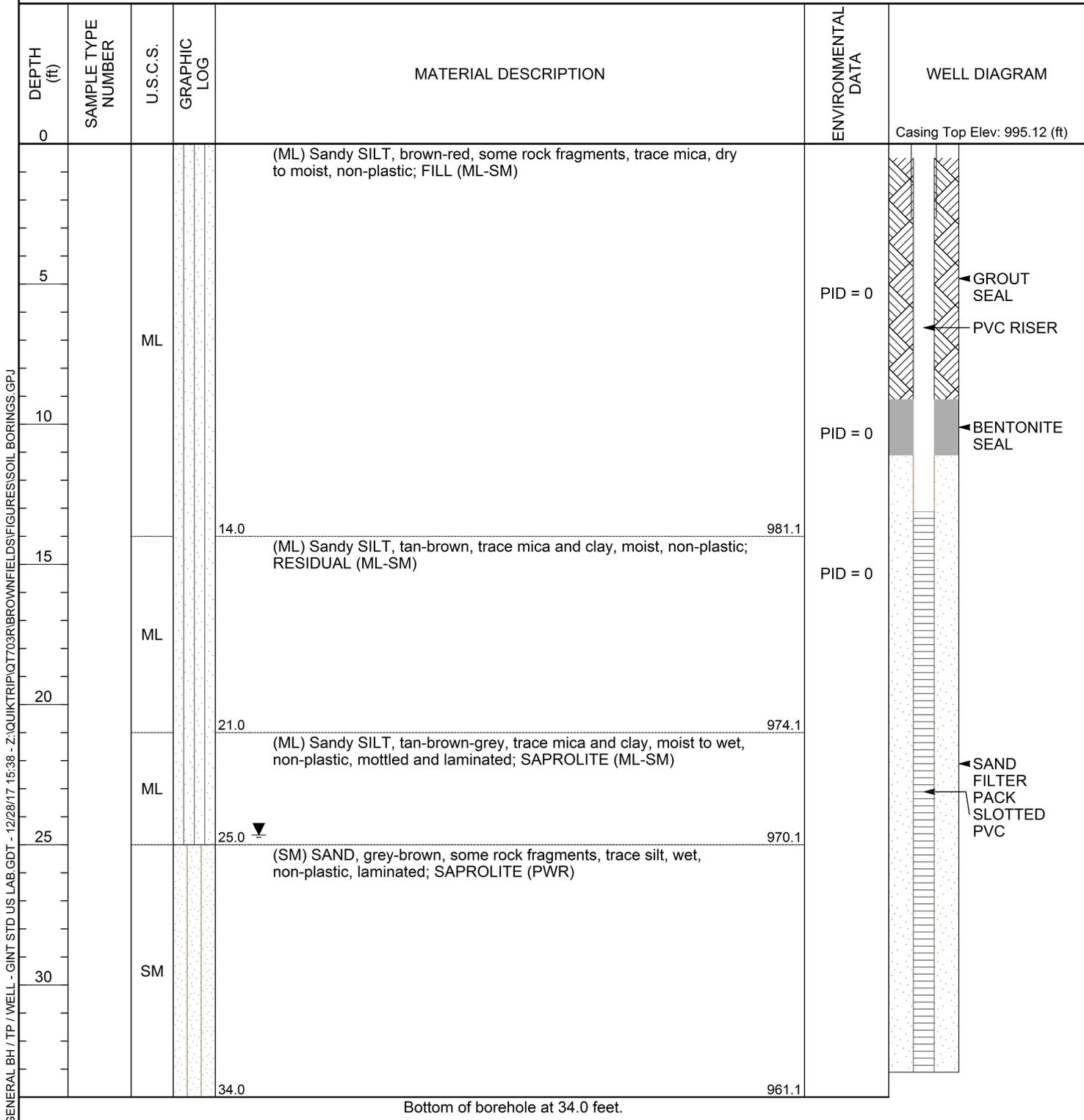
DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 991.64 (ft)
5		ML		(ML) Sandy SILT, orange-brown-grey, some to trace mica and clay, dry to moist, low plastic; FILL (ML-SM)	PID = 0	Grout Seal
8.0		ML		(ML) Sandy SILT, orange, some to trace mica and clay, dry to moist, low to non-plastic; RESIDUAL (ML-SM)	PID = 0.1	Bentonite Seal PVC Riser
13.0		ML		(ML) Sandy SILT, orange-red-tan, some to trace mica and clay, dry, non-plastic; SAPROLITE (ML-SM)	PID = 0.1	
20				▼	PID = 0.1	Sand Filter Pack Screened PVC
25				▼		

Bottom of borehole at 25.0 feet.

WELL NUMBER MW-6

PAGE 1 OF 1

CLIENT <u>QuikTrip</u>	PROJECT NAME <u>Quiktrip Store 703R</u>
PROJECT NUMBER _____	PROJECT LOCATION <u>Norcross, GA</u>
DATE STARTED <u>10/19/17</u> COMPLETED <u>10/19/17</u>	GROUND ELEVATION <u>995.12 ft</u> HOLE SIZE <u>6"</u>
DRILLING CONTRACTOR <u>GeoLab</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>M. Guthrie</u> CHECKED BY <u>M. Guthrie</u>	▼ AT END OF DRILLING <u>24.65 ft / Elev 970.47 ft</u>
NOTES _____	AFTER DRILLING <u>---</u>

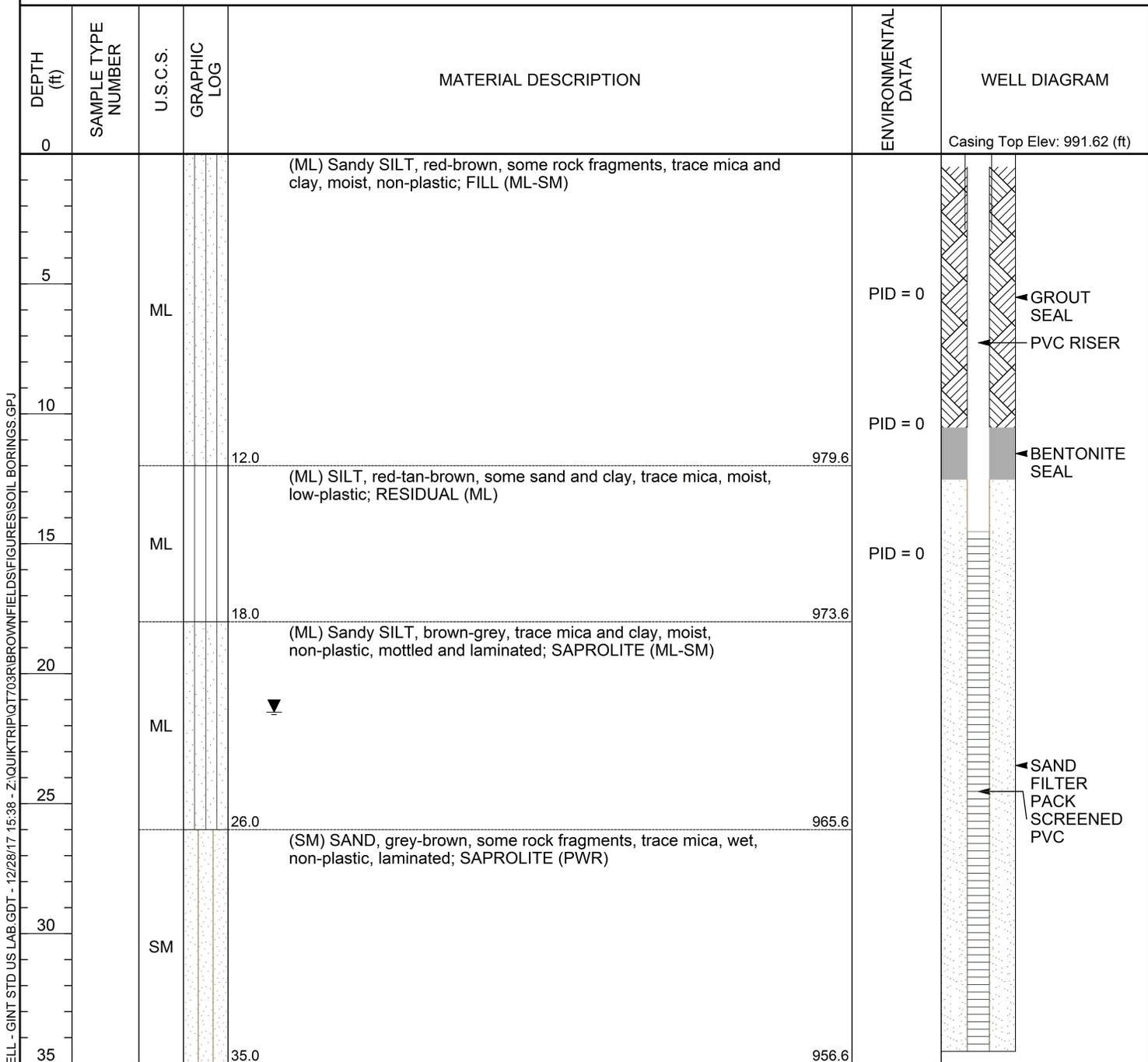


GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:38 - Z:\QUIKTRIP\QT703R\BROWN\FIELDS\FIGURES\SOIL BORINGS.GPJ

WELL NUMBER MW-7

PAGE 1 OF 1

CLIENT <u>QuikTrip</u>	PROJECT NAME <u>Quiktrip Store 703R</u>
PROJECT NUMBER _____	PROJECT LOCATION <u>Norcross, GA</u>
DATE STARTED <u>10/19/17</u> COMPLETED <u>10/19/17</u>	GROUND ELEVATION <u>991.62 ft</u> HOLE SIZE <u>6"</u>
DRILLING CONTRACTOR <u>GeoLab</u>	GROUND WATER LEVELS:
DRILLING METHOD <u>GeoProbe</u>	AT TIME OF DRILLING <u>---</u>
LOGGED BY <u>M. Guthrie</u> CHECKED BY <u>M. Guthrie</u>	▼ AT END OF DRILLING <u>21.48 ft / Elev 970.14 ft</u>
NOTES _____	AFTER DRILLING <u>---</u>



GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:38 - Z:\QIKTRIP\QT703R\BROWNFIELDS\FIGURES\SOIL BORINGS.GPJ

WELL NUMBER MW-8

PAGE 1 OF 1

CLIENT QuikTrip
PROJECT NUMBER _____
DATE STARTED 6/20/17 **COMPLETED** 6/20/17
DRILLING CONTRACTOR GeoLab
DRILLING METHOD GeoProbe
LOGGED BY J. Love **CHECKED BY** M. Guthrie
NOTES _____

PROJECT NAME Quiktrip Store 703R
PROJECT LOCATION Norcross, GA
GROUND ELEVATION 994.84 ft **HOLE SIZE** 6"
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING 20.33 ft / Elev 974.51 ft
AFTER DRILLING 20.17 ft / Elev 974.67 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:38 - Z:\QIKTRIP\QT703R\BROWN\FIELDS\FIGURES\SOIL BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 994.42 (ft)
5		ML	(ML) Sandy SILT, orange-brown-grey, some to trace mica and clay, dry to moist, low to non-plastic; FILL (ML-SM)		PID = 1.1	Grout Seal
9.0		ML	(ML) Sandy SILT, orange-red, some to trace clay, trace mica, dry to moist, low to non-plastic; RESIDUAL (ML-SM)	985.8	PID = 6.2	Bentonite Seal PVC Riser
10					PID = 512.8	
15					PID = 5.7	
20				↓	PID = 1.2	Sand Filter Pack Screened PVC
25				Bottom of borehole at 25.0 feet.		

WELL NUMBER MW-9

PAGE 1 OF 1

CLIENT QuikTrip
PROJECT NUMBER _____
DATE STARTED 6/20/17 **COMPLETED** 6/20/17
DRILLING CONTRACTOR GeoLab
DRILLING METHOD GeoProbe
LOGGED BY J. Love **CHECKED BY** M. Guthrie
NOTES _____

PROJECT NAME Quiktrip Store 703R
PROJECT LOCATION Norcross, GA
GROUND ELEVATION 994.64 ft **HOLE SIZE** 6"
GROUND WATER LEVELS:
AT TIME OF DRILLING ---
AT END OF DRILLING 19.02 ft / Elev 975.62 ft
AFTER DRILLING 18.43 ft / Elev 976.21 ft

GENERAL BH / TP / WELL - GINT STD US LAB.GDT - 12/28/17 15:38 - Z:\QIKTRIP\QT703R\BROWN\FIELDS\FIGURES\SOIL BORINGS.GPJ

DEPTH (ft)	SAMPLE TYPE NUMBER	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA	WELL DIAGRAM
0						Casing Top Elev: 994.35 (ft)
5		ML	5.0	(ML) Sandy SILT, orange-brown-grey, some to trace mica, dry to moist, low to non-plastic; FILL (ML-SM)	PID = 2.3	Grout Seal
5		ML	5.0	(ML) Sandy SILT, orange-tan, trace mica, dry to moist, low to non-plastic; RESIDUAL (ML-SM)	PID = 7.6	Bentonite Seal
8		ML	8.0	(ML) Sandy SILT, orange-red-grey, some to trace mica, dry to moist, non-plastic, laminated; SAPROLITE (ML-SM)	PID = 26.8	PVC Riser
10		ML			PID = 20.8	
15					PID = 32.9	
20						Sand Filter Pack
25						Screened PVC

Bottom of borehole at 25.0 feet.

1350
NW-2

Low-Flow Purging and Sampling Log

Project: 203R Date: 6/28/17 Well ID: NMW-2 Page: _____

Sampling Instrument: _____ Pump Rate: _____ (mL/min)

Initial Readings

Well Depth: 24.42 Screened Interval: 15/10 Water Level: 19.63

After Sample Collection

Well Depth: _____ Water Level: _____

Time (24hr)	Water Level (ft) (TOC)	Purge Volume (gal)	pH	Temp °C	Specific Conductance (mS/cm)	Dissolved Oxygen	Turbidity (NTU)	Redox (Eh)	Comments
1250	19.73	1.5							
1330	19.87	1.75	4.78	25.14	0.078	8.51	2.65		
1335	19.92	0.09	4.59	24.96	0.077	8.14	2.17		
1340	19.95	0.09	4.46	24.77	0.076	8.05	2.84		
1345	19.98	0.90	4.37	24.78	0.076	7.91	1.48		
1350	20.00	0.90	4.40	24.83	0.076	7.91	1.27		

Total Purge Volume 1.5 gal

Parameter Standards:
 pH +/- 0.1, +/-3% conductivity, +/-10mv for Redox potential, and +/-%10 for turbidity or DO.
 Turbidity range (5-10) NTU, if turbidity exceeds 10 NTUs: both filter and unfilter sample must be collected for metals
 water level drawdown in the well not to exceed 0.2 ft.

Low-Flow Purging and Sampling Log

Project: 203R Date: 6/28/17 Well ID: NMW-2 Page: _____

Sampling Instrument: _____ Pump Rate: _____ (mL/min)

Initial Readings

Well Depth: 24.03 Screened Interval: _____ Water Level: 17.10

After Sample Collection

Well Depth: _____ Water Level: _____ sampled @ 1320

Time (24hr)	Water Level (ft) (TOC)	Purge Volume (gal)	pH	Temp °C	Specific Conductance (mS/cm)	Dissolved Oxygen	Turbidity (NTU)	Redox (Eh)	Comments
1230	17.30	0.1	5.10	23.22	0.107	8.27	11.8		
1235	17.41	0.1	5.08	23.23	0.103	7.27	7.82		
1340	17.46	0.2	5.07	23.32	0.101	7.77	7.51		
1345	17.50	0.2	5.03	23.29	0.096	7.89	1.87		
1350	17.54	0.3	5.0	23.26	0.093	7.56	1.81		
1355	17.55	0.3	4.97	23.26	0.090	7.01	0.94		
1300	17.55	0.4	4.97	23.34	0.090	7.24	1.72		
1305	17.58	0.4	4.97	23.42	0.088	7.03	2.27		
1310	17.59	0.5	4.97	23.57	0.087	6.94	1.46		
1315	17.60	0.5	4.96	23.90	0.085	6.99	1.36		

Parameter Standards:

pH +/- 0.1, +/-3% conductivity, +/-10mv for Redox potential, and +/-%10 for turbidity or DO.

Turbidity range (5-10) NTU, if turbidity exceeds 10 NTUs: both filter and unfilter sample must be collected for metals

water level drawdown in the well not to exceed 0.2 ft.

6/29/17
1250
MW-8

Low-Flow Purging and Sampling Log

Project: 703R Date: 6/28/17 Well ID: NMW-8 Page: _____

Sampling Instrument: _____ Pump Rate: _____ (mL/min)

Initial Readings

Well Depth: 24.08 Screened Interval: 15/10 Water Level: 20.17'

After Sample Collection

Well Depth: _____ Water Level: _____

Time (24hr)	Water Level (ft) (TOC)	Purge Volume (gal)	pH	Temp °C	Specific Conductance (mS/cm)	Dissolved Oxygen	Turbidity (NTU)	Redox (Eh)	Comments
1120	20.48	2.0	5.89	23.71	0.419	2.58	68.5		
1125	20.62	1.5	6.04	24.00	0.418	2.37	76.4		
1130	20.62	1.5	6.18	24.11	0.416	2.33	66.7		
1135	20.62	1.5	6.29	24.32	0.407	2.10	54.3		
1140	20.67	1.0	6.28	24.16	0.389	0.96	54.5		
1145	20.68	1.0	6.13	23.92	0.363	0.87	42.5		
1200	20.68	0.2	6.01	23.66	0.349	0.87	38.3		
1205	20.68	0.2	5.93	23.36	0.330	0.87	35.7		
1210	20.68	0.2	6.10	24.34	0.327	0.85	26.5		
1215	20.68	0.1	6.15	25.43	0.322	0.82	21.2		
1220	20.68	0.1	6.08	25.23	0.310	0.85	17.1		
1225	20.68	0.1	6.00	24.91	0.292	0.88	11.2		
1230	20.68	0.1	5.93	24.86	0.274	0.84	6.34		
1235	20.68	0.1	5.95	24.93	0.270	0.84	5.76		
1240	20.68	0.1	5.94	24.83	0.268	0.85	5.12		
1245	20.68	0.1	5.91	24.70	0.265	0.84	4.82		
1250	20.68	0.1	5.88	24.60	0.264	0.85			

Parameter Standards:

pH +/- 0.1, +/-3% conductivity, +/-10mv for Redox potential, and +/-%10 for turbidity or DO.

Turbidity range (5-10) NTU, if turbidity exceeds 10 NTUs: both filter and unfilter sample must be collected for metals

water level drawdown in the well not to exceed 0.2 ft.

Total Purge Volume 3-gal

Low-Flow Purging and Sampling Log

Project: 203R Date: 6/28/17 Well ID: MW-10 Page: 1

Sampling Instrument: _____ Pump Rate: _____ (mL/min)

Initial Readings

Well Depth: 30 Screened Interval: _____ Water Level: 22.68

After Sample Collection

Well Depth: _____ Water Level: 22.68

Sampled @ 1135

Time (24hr)	Water Level (ft) (TOC)	Purge Volume (gal)	pH	Temp °C	Specific Conductance (mS/cm)	Dissolved Oxygen	Turbidity (NTU)	Redox (Eh)	Comments
1005	22.68	0.1	4.03	22.40	0.071	7.35	422		
1010	22.68	0.15	4.51	22.34	0.073	5.23	188		
1015	22.68	0.2	4.64	22.29	0.073	4.73	164		
1020	22.68	0.3	4.71	22.25	0.076	4.78	49.5		
1025	22.68	0.4	4.71	22.22	0.070	5.24	61.3		
1030	22.68	0.5	4.74	22.24	0.069	4.70	35.1		
1035	22.68	0.6	4.72	22.20	0.068	4.72	24.8		
1040	22.68	0.7	4.71	22.17	0.067	4.34	17.8		
1045	22.68	0.8	4.69	22.16	0.067	4.32	12.6		
1050	22.68	0.9	4.68	22.14	0.067	3.90	13.1		
1055	22.68	1.0	4.66	22.22	0.067	4.22	4.71		
1105	22.68	1.1	4.64	22.65	0.070	3.94	9.94		
1110	22.68	1.2	4.62	22.65	0.067	4.17	5.77		
1115	22.68	1.3	4.62	22.63	0.067	4.05	6.56		
1120	22.68	1.4	4.61	22.63	0.067	3.97	7.66		
1125	22.68	1.5	4.60	22.68	0.067	3.70	5.71		
1130	22.68	1.6	4.60	22.74	0.067	3.76	4.78		

Parameter Standards:

pH +/- 0.1, +/-3% conductivity, +/-10mv for Redox potential, and +/-%10 for turbidity or DO.

Turbidity range (5-10) NTU, if turbidity exceeds 10 NTUs: both filter and unfilter sample must be collected for metals

water level drawdown in the well not to exceed 0.2 ft.

Low-Flow Purging and Sampling Log

Project: QT, 703R Date: 12/19/17 Well ID: 11W-1 Page: 1 of 1

Sampling Instrument: _____ Pump Rate: _____ (mL/min)

(SK)

Initial Readings

Well Depth: _____ Screened Interval: _____ Water Level: 17.84

After Sample Collection

Well Depth: _____ Water Level: 18.05

Time (24hr)	Water Level (ft) (TOC)	Purge Volume (gal)	pH	Temp °C	Specific Conductance (mS/cm)	Dissolved Oxygen	Turbidity (NTU)	Redox (Eh)	Comments
1530	17.93	.2	4.09	19.6	1.474	24.91	1.2		
1535	17.97	.2	4.13	19.7	1.440	25.81	0.4		
1540	17.99	.2	4.40	19.9	1.193	28.26	-0.5		
1545	18.03	.2	4.95	20.0	0.772	28.34	-0.3		
1550	18.04	.1	4.81	19.9	0.680	24.77	-0.4		
1555	18.05	.1	4.73	20.0	0.585	19.50	-0.4		
1600	18.05	.1	4.73	19.9	0.554	18.40	-0.5		
1605	18.05	.1	4.71	19.9	0.539	17.46	-0.8		
1610	18.05	.1	4.71	19.9	0.545	17.52	-1.0		
1615	18.05	.1	4.70	19.8	0.563	18.16	-1.0		

Parameter Standards:

pH +/- 0.1, +/-3% conductivity, +/-10mv for Redox potential, and +/-%10 for turbidity or DO.
 Turbidity range (5-10) NTU, if turbidity exceeds 10 NTUs: both filter and unfilter sample must be collected for metals
 water level drawdown in the well not to exceed 0.2 ft.

Low-Flow Purging and Sampling Log

Project: 203R Date: 12/19/17 Well ID: MW-6 Page: 1

Sampling Instrument: Peristaltic Pump Rate: _____ (mL/min)

Initial Readings

Well Depth: _____ Screened Interval: _____ Water Level: 21.81

After Sample Collection

Well Depth: _____ Water Level: _____

sampled @ 1415

Time (24hr)	Water Level (ft) (TOC)	Purge Volume (gal)	pH	Temp (°C)	Specific Conductance (mS/cm)	Dissolved Oxygen	Turbidity (NTU)	Redox (Eh)	Comments
1236	25.02	0.1	4.93	18.9	0.123	2.3	20.6		
1235	25.08	0.2	5.06	19.3	0.123	1.8	21.2		
1200	25.00	0.3	5.12	18.9	0.125	1.7	23.2		
1305	25.00	0.4	5.16	18.7	0.127	1.4	57.1		
1310	25.00	0.3	5.14	18.7	0.126	1.3	64.7		
1315	25.00	0.6	5.12	18.7	0.126	1.3	67.6		
1320	25.00	0.7	5.12	18.7	0.127	1.1	68.8		
1325	25.00	0.8	5.11	18.6	0.127	1.0	114.0		
1330	25.00	0.9	5.11	18.7	0.128	0.9	83.0		
1340	25.00	1.0	5.13	18.4	0.129	1.1	0.6		
1345	25.00	1.1	5.06	18.8	0.124	1.0	0.2		
1350	25.00	1.2	5.07	19.3	0.129	0.8	0		
1355	25.00	1.3	5.15	19.7	0.129	0.8	0		
1400	25.00	1.4	5.18	19.8	0.130	0.8	0		
1405	25.00	1.5	5.20	19.7	0.130	0.8	0		
1410	25.00	1.6	5.20	19.9	0.130	0.7	0		

Parameter Standards:

pH +/- 0.1, +/-3% conductivity, +/-10mv for Redox potential, and +/-%10 for turbidity or DO.

Turbidity range (5-10) NTU, if turbidity exceeds 10 NTUs: both filter and unfilter sample must be collected for metals

water level drawdown in the well not to exceed 0.2 ft.

Low-Flow Purging and Sampling Log

Project: OT 703R Date: 12-19-17 Well ID: MW-9 Page: 1

Sampling Instrument: _____ Pump Rate: _____ (mL/min)

Initial Readings

Well Depth: _____ Screened Interval: _____ Water Level: 17.09

After Sample Collection

Well Depth: _____ Water Level: _____

sampled @ 11:30
11:25

Time (24hr)	Water Level (ft) (TOC)	Purge Volume (gal)	pH	Temp °C	Specific Conductance (mS/cm)	Dissolved Oxygen	Turbidity (NTU)	Redox (Eh)	Comments
1030	17.09	0.1	2.82	17.34	0.039	13.10	1.17		
1040	17.23	0.2	3.55	17.19	0.037	14.05	1.29		
1045	17.24	0.3	3.43	17.29	0.038	14.68	1.06		
1050	17.24	0.4	3.40	17.45	0.038	15.40	0.61		
1055	17.24	0.5	3.37	17.43	0.038	16.11	0.34		
1100	17.24	0.7	3.29	17.49	0.038	16.50	0.34		
1105	17.24	1	3.15	17.65	0.038	16.95	0.32		
1110	17.24	1.1	4.08	17.91	0.038	17.52	0.27		
1115	17.24	1.2	4.09	17.96	0.039	17.98	0.19		
1120	17.24	1.3	4.08	17.90	0.039	18.53	0.24		
1125	17.24	1.4							
1130		1.5							
1135		1.8							

Parameter Standards:
 pH +/- 0.1, +/-3% conductivity, +/-10mv for Redox potential, and +/-%10 for turbidity or DO.
 Turbidity range (5-10) NTU, if turbidity exceeds 10 NTUs: both filter and unfilter sample must be collected for metals
 water level drawdown in the well not to exceed 0.2 ft.

APPENDIX IV
Laboratory Analytical Reports

June 30, 2017

Genesis Project, Inc. - QT GA

Sample Delivery Group: L917916
Samples Received: 06/22/2017
Project Number:
Description: QT 703R Beaver Ruin Rd. Norcross, GA

Report To: Mitch Guthrie, PG
1258 Concord Road
Suite 200
Smyrna, GA 30080

Entire Report Reviewed By:



Chris McCord
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	¹Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	²Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	³Ss
MW-1 10'-12' L917916-01	5	
MW-2 10'-12' L917916-02	7	⁴Cn
MW-3 10'-12' L917916-03	9	⁵Sr
MW-4 10'-12' L917916-04	11	
MW-5 10'-12' L917916-05	13	⁶Qc
MW-8 12'-14' L917916-06	15	
MW-9 10'-12' L917916-07	17	⁷Gl
Qc: Quality Control Summary	19	⁸Al
Total Solids by Method 2540 G-2011	19	
Volatile Organic Compounds (GC/MS) by Method 8260B	20	⁹Sc
Gl: Glossary of Terms	32	
Al: Accreditations & Locations	33	
Sc: Chain of Custody	34	

SAMPLE SUMMARY



MW-1 10'-12' L917916-01 Solid

Collected by
John K Love Collected date/time
06/21/17 13:30 Received date/time
06/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG993080	1	06/27/17 11:11	06/27/17 11:22	MLW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG993970	1	06/21/17 13:30	06/29/17 02:52	JHH

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

MW-2 10'-12' L917916-02 Solid

Collected by
John K Love Collected date/time
06/21/17 11:30 Received date/time
06/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG993080	1	06/27/17 11:11	06/27/17 11:22	MLW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG993698	1	06/21/17 11:30	06/29/17 14:51	JAH

MW-3 10'-12' L917916-03 Solid

Collected by
John K Love Collected date/time
06/21/17 10:30 Received date/time
06/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG993080	1	06/27/17 11:11	06/27/17 11:22	MLW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG993698	1	06/21/17 10:30	06/29/17 15:09	JAH

MW-4 10'-12' L917916-04 Solid

Collected by
John K Love Collected date/time
06/21/17 09:00 Received date/time
06/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG993080	1	06/27/17 11:11	06/27/17 11:22	MLW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG993698	1	06/21/17 09:00	06/29/17 15:26	JAH

MW-5 10'-12' L917916-05 Solid

Collected by
John K Love Collected date/time
06/20/17 13:00 Received date/time
06/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG993080	1	06/27/17 11:11	06/27/17 11:22	MLW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG993698	1	06/20/17 13:00	06/29/17 15:44	JAH

MW-8 12'-14' L917916-06 Solid

Collected by
John K Love Collected date/time
06/20/17 11:00 Received date/time
06/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG993080	1	06/27/17 11:11	06/27/17 11:22	MLW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG993698	1	06/20/17 11:00	06/29/17 16:01	JAH

MW-9 10'-12' L917916-07 Solid

Collected by
John K Love Collected date/time
06/20/17 09:00 Received date/time
06/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG993080	1	06/27/17 11:11	06/27/17 11:22	MLW
Volatile Organic Compounds (GC/MS) by Method 8260B	WG993698	1	06/20/17 09:00	06/29/17 16:19	JAH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.0		1	06/27/2017 11:22	WG993080

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0575	1	06/29/2017 02:52	WG993970
Acrylonitrile	ND		0.0115	1	06/29/2017 02:52	WG993970
Benzene	ND		0.00115	1	06/29/2017 02:52	WG993970
Bromobenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
Bromodichloromethane	ND		0.00115	1	06/29/2017 02:52	WG993970
Bromoform	ND		0.00115	1	06/29/2017 02:52	WG993970
Bromomethane	ND		0.00575	1	06/29/2017 02:52	WG993970
n-Butylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
sec-Butylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
tert-Butylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
Carbon tetrachloride	ND		0.00115	1	06/29/2017 02:52	WG993970
Chlorobenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
Chlorodibromomethane	ND		0.00115	1	06/29/2017 02:52	WG993970
Chloroethane	ND		0.00575	1	06/29/2017 02:52	WG993970
Chloroform	ND		0.00575	1	06/29/2017 02:52	WG993970
Chloromethane	ND		0.00287	1	06/29/2017 02:52	WG993970
2-Chlorotoluene	ND		0.00115	1	06/29/2017 02:52	WG993970
4-Chlorotoluene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,2-Dibromo-3-Chloropropane	ND		0.00575	1	06/29/2017 02:52	WG993970
1,2-Dibromoethane	ND		0.00115	1	06/29/2017 02:52	WG993970
Dibromomethane	ND		0.00115	1	06/29/2017 02:52	WG993970
1,2-Dichlorobenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,3-Dichlorobenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,4-Dichlorobenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
Dichlorodifluoromethane	ND		0.00575	1	06/29/2017 02:52	WG993970
1,1-Dichloroethane	ND		0.00115	1	06/29/2017 02:52	WG993970
1,2-Dichloroethane	ND		0.00115	1	06/29/2017 02:52	WG993970
1,1-Dichloroethene	ND		0.00115	1	06/29/2017 02:52	WG993970
cis-1,2-Dichloroethene	ND		0.00115	1	06/29/2017 02:52	WG993970
trans-1,2-Dichloroethene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,2-Dichloropropane	ND		0.00115	1	06/29/2017 02:52	WG993970
1,1-Dichloropropene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,3-Dichloropropane	ND		0.00115	1	06/29/2017 02:52	WG993970
cis-1,3-Dichloropropene	ND		0.00115	1	06/29/2017 02:52	WG993970
trans-1,3-Dichloropropene	ND		0.00115	1	06/29/2017 02:52	WG993970
2,2-Dichloropropane	ND		0.00115	1	06/29/2017 02:52	WG993970
Di-isopropyl ether	ND		0.00115	1	06/29/2017 02:52	WG993970
Ethylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
Hexachloro-1,3-butadiene	ND		0.00115	1	06/29/2017 02:52	WG993970
Isopropylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
p-Isopropyltoluene	ND		0.00115	1	06/29/2017 02:52	WG993970
2-Butanone (MEK)	ND		0.0115	1	06/29/2017 02:52	WG993970
Methylene Chloride	ND		0.00575	1	06/29/2017 02:52	WG993970
4-Methyl-2-pentanone (MIBK)	ND		0.0115	1	06/29/2017 02:52	WG993970
Methyl tert-butyl ether	ND		0.00115	1	06/29/2017 02:52	WG993970
Naphthalene	ND		0.00575	1	06/29/2017 02:52	WG993970
n-Propylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
Styrene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,1,1,2-Tetrachloroethane	ND		0.00115	1	06/29/2017 02:52	WG993970
1,1,2,2-Tetrachloroethane	ND		0.00115	1	06/29/2017 02:52	WG993970

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.00115	1	06/29/2017 02:52	WG993970
Tetrachloroethene	0.00239		0.00115	1	06/29/2017 02:52	WG993970
Toluene	ND		0.00575	1	06/29/2017 02:52	WG993970
1,2,3-Trichlorobenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,2,4-Trichlorobenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,1,1-Trichloroethane	ND		0.00115	1	06/29/2017 02:52	WG993970
1,1,2-Trichloroethane	ND		0.00115	1	06/29/2017 02:52	WG993970
Trichloroethene	ND		0.00115	1	06/29/2017 02:52	WG993970
Trichlorofluoromethane	ND		0.00575	1	06/29/2017 02:52	WG993970
1,2,3-Trichloropropane	ND		0.00287	1	06/29/2017 02:52	WG993970
1,2,4-Trimethylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,2,3-Trimethylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
1,3,5-Trimethylbenzene	ND		0.00115	1	06/29/2017 02:52	WG993970
Vinyl chloride	ND		0.00115	1	06/29/2017 02:52	WG993970
Xylenes, Total	ND		0.00345	1	06/29/2017 02:52	WG993970
(S) Toluene-d8	107		80.0-120		06/29/2017 02:52	WG993970
(S) Dibromofluoromethane	115		74.0-131		06/29/2017 02:52	WG993970
(S) 4-Bromofluorobenzene	95.1		64.0-132		06/29/2017 02:52	WG993970

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.9		1	06/27/2017 11:22	WG993080

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0589	1	06/29/2017 14:51	WG993698
Acrylonitrile	ND		0.0118	1	06/29/2017 14:51	WG993698
Benzene	ND		0.00118	1	06/29/2017 14:51	WG993698
Bromobenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
Bromodichloromethane	ND		0.00118	1	06/29/2017 14:51	WG993698
Bromoform	ND		0.00118	1	06/29/2017 14:51	WG993698
Bromomethane	ND		0.00589	1	06/29/2017 14:51	WG993698
n-Butylbenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
sec-Butylbenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
tert-Butylbenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
Carbon tetrachloride	ND		0.00118	1	06/29/2017 14:51	WG993698
Chlorobenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
Chlorodibromomethane	ND		0.00118	1	06/29/2017 14:51	WG993698
Chloroethane	ND		0.00589	1	06/29/2017 14:51	WG993698
Chloroform	ND		0.00589	1	06/29/2017 14:51	WG993698
Chloromethane	ND		0.00294	1	06/29/2017 14:51	WG993698
2-Chlorotoluene	ND		0.00118	1	06/29/2017 14:51	WG993698
4-Chlorotoluene	ND		0.00118	1	06/29/2017 14:51	WG993698
1,2-Dibromo-3-Chloropropane	ND		0.00589	1	06/29/2017 14:51	WG993698
1,2-Dibromoethane	ND		0.00118	1	06/29/2017 14:51	WG993698
Dibromomethane	ND		0.00118	1	06/29/2017 14:51	WG993698
1,2-Dichlorobenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
1,3-Dichlorobenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
1,4-Dichlorobenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
Dichlorodifluoromethane	ND		0.00589	1	06/29/2017 14:51	WG993698
1,1-Dichloroethane	ND	<u>J4</u>	0.00118	1	06/29/2017 14:51	WG993698
1,2-Dichloroethane	ND		0.00118	1	06/29/2017 14:51	WG993698
1,1-Dichloroethene	ND		0.00118	1	06/29/2017 14:51	WG993698
cis-1,2-Dichloroethene	ND		0.00118	1	06/29/2017 14:51	WG993698
trans-1,2-Dichloroethene	ND		0.00118	1	06/29/2017 14:51	WG993698
1,2-Dichloropropane	ND		0.00118	1	06/29/2017 14:51	WG993698
1,1-Dichloropropene	ND	<u>J4</u>	0.00118	1	06/29/2017 14:51	WG993698
1,3-Dichloropropane	ND		0.00118	1	06/29/2017 14:51	WG993698
cis-1,3-Dichloropropene	ND	<u>J4</u>	0.00118	1	06/29/2017 14:51	WG993698
trans-1,3-Dichloropropene	ND		0.00118	1	06/29/2017 14:51	WG993698
2,2-Dichloropropane	ND		0.00118	1	06/29/2017 14:51	WG993698
Di-isopropyl ether	ND		0.00118	1	06/29/2017 14:51	WG993698
Ethylbenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
Hexachloro-1,3-butadiene	ND		0.00118	1	06/29/2017 14:51	WG993698
Isopropylbenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
p-Isopropyltoluene	ND		0.00118	1	06/29/2017 14:51	WG993698
2-Butanone (MEK)	ND		0.0118	1	06/29/2017 14:51	WG993698
Methylene Chloride	ND		0.00589	1	06/29/2017 14:51	WG993698
4-Methyl-2-pentanone (MIBK)	ND		0.0118	1	06/29/2017 14:51	WG993698
Methyl tert-butyl ether	ND		0.00118	1	06/29/2017 14:51	WG993698
Naphthalene	ND		0.00589	1	06/29/2017 14:51	WG993698
n-Propylbenzene	ND		0.00118	1	06/29/2017 14:51	WG993698
Styrene	ND		0.00118	1	06/29/2017 14:51	WG993698
1,1,1,2-Tetrachloroethane	ND		0.00118	1	06/29/2017 14:51	WG993698
1,1,2,2-Tetrachloroethane	ND		0.00118	1	06/29/2017 14:51	WG993698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.0018	1	06/29/2017 14:51	WG993698
Tetrachloroethene	0.00416		0.0018	1	06/29/2017 14:51	WG993698
Toluene	ND		0.00589	1	06/29/2017 14:51	WG993698
1,2,3-Trichlorobenzene	ND		0.0018	1	06/29/2017 14:51	WG993698
1,2,4-Trichlorobenzene	ND		0.0018	1	06/29/2017 14:51	WG993698
1,1,1-Trichloroethane	ND		0.0018	1	06/29/2017 14:51	WG993698
1,1,2-Trichloroethane	ND		0.0018	1	06/29/2017 14:51	WG993698
Trichloroethene	ND		0.0018	1	06/29/2017 14:51	WG993698
Trichlorofluoromethane	ND		0.00589	1	06/29/2017 14:51	WG993698
1,2,3-Trichloropropane	ND		0.00294	1	06/29/2017 14:51	WG993698
1,2,4-Trimethylbenzene	ND		0.0018	1	06/29/2017 14:51	WG993698
1,2,3-Trimethylbenzene	ND		0.0018	1	06/29/2017 14:51	WG993698
1,3,5-Trimethylbenzene	ND		0.0018	1	06/29/2017 14:51	WG993698
Vinyl chloride	ND		0.0018	1	06/29/2017 14:51	WG993698
Xylenes, Total	ND		0.00353	1	06/29/2017 14:51	WG993698
(S) Toluene-d8	98.7		80.0-120		06/29/2017 14:51	WG993698
(S) Dibromofluoromethane	91.7		74.0-131		06/29/2017 14:51	WG993698
(S) 4-Bromofluorobenzene	105		64.0-132		06/29/2017 14:51	WG993698

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.6		1	06/27/2017 11:22	WG993080

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0584	1	06/29/2017 15:09	WG993698
Acrylonitrile	ND		0.0117	1	06/29/2017 15:09	WG993698
Benzene	ND		0.00117	1	06/29/2017 15:09	WG993698
Bromobenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
Bromodichloromethane	ND		0.00117	1	06/29/2017 15:09	WG993698
Bromoform	ND		0.00117	1	06/29/2017 15:09	WG993698
Bromomethane	ND		0.00584	1	06/29/2017 15:09	WG993698
n-Butylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
sec-Butylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
tert-Butylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
Carbon tetrachloride	ND		0.00117	1	06/29/2017 15:09	WG993698
Chlorobenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
Chlorodibromomethane	ND		0.00117	1	06/29/2017 15:09	WG993698
Chloroethane	ND		0.00584	1	06/29/2017 15:09	WG993698
Chloroform	ND		0.00584	1	06/29/2017 15:09	WG993698
Chloromethane	ND		0.00292	1	06/29/2017 15:09	WG993698
2-Chlorotoluene	ND		0.00117	1	06/29/2017 15:09	WG993698
4-Chlorotoluene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,2-Dibromo-3-Chloropropane	ND		0.00584	1	06/29/2017 15:09	WG993698
1,2-Dibromoethane	ND		0.00117	1	06/29/2017 15:09	WG993698
Dibromomethane	ND		0.00117	1	06/29/2017 15:09	WG993698
1,2-Dichlorobenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,3-Dichlorobenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,4-Dichlorobenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
Dichlorodifluoromethane	ND		0.00584	1	06/29/2017 15:09	WG993698
1,1-Dichloroethane	ND	J4	0.00117	1	06/29/2017 15:09	WG993698
1,2-Dichloroethane	ND		0.00117	1	06/29/2017 15:09	WG993698
1,1-Dichloroethene	ND		0.00117	1	06/29/2017 15:09	WG993698
cis-1,2-Dichloroethene	ND		0.00117	1	06/29/2017 15:09	WG993698
trans-1,2-Dichloroethene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,2-Dichloropropane	ND		0.00117	1	06/29/2017 15:09	WG993698
1,1-Dichloropropene	ND	J4	0.00117	1	06/29/2017 15:09	WG993698
1,3-Dichloropropane	ND		0.00117	1	06/29/2017 15:09	WG993698
cis-1,3-Dichloropropene	ND	J4	0.00117	1	06/29/2017 15:09	WG993698
trans-1,3-Dichloropropene	ND		0.00117	1	06/29/2017 15:09	WG993698
2,2-Dichloropropane	ND		0.00117	1	06/29/2017 15:09	WG993698
Di-isopropyl ether	ND		0.00117	1	06/29/2017 15:09	WG993698
Ethylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
Hexachloro-1,3-butadiene	ND		0.00117	1	06/29/2017 15:09	WG993698
Isopropylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
p-Isopropyltoluene	ND		0.00117	1	06/29/2017 15:09	WG993698
2-Butanone (MEK)	ND		0.0117	1	06/29/2017 15:09	WG993698
Methylene Chloride	ND		0.00584	1	06/29/2017 15:09	WG993698
4-Methyl-2-pentanone (MIBK)	ND		0.0117	1	06/29/2017 15:09	WG993698
Methyl tert-butyl ether	ND		0.00117	1	06/29/2017 15:09	WG993698
Naphthalene	ND		0.00584	1	06/29/2017 15:09	WG993698
n-Propylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
Styrene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,1,1,2-Tetrachloroethane	ND		0.00117	1	06/29/2017 15:09	WG993698
1,1,2,2-Tetrachloroethane	ND		0.00117	1	06/29/2017 15:09	WG993698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.00117	1	06/29/2017 15:09	WG993698
Tetrachloroethene	ND		0.00117	1	06/29/2017 15:09	WG993698
Toluene	ND		0.00584	1	06/29/2017 15:09	WG993698
1,2,3-Trichlorobenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,2,4-Trichlorobenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,1,1-Trichloroethane	ND		0.00117	1	06/29/2017 15:09	WG993698
1,1,2-Trichloroethane	ND		0.00117	1	06/29/2017 15:09	WG993698
Trichloroethene	ND		0.00117	1	06/29/2017 15:09	WG993698
Trichlorofluoromethane	ND		0.00584	1	06/29/2017 15:09	WG993698
1,2,3-Trichloropropane	ND		0.00292	1	06/29/2017 15:09	WG993698
1,2,4-Trimethylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,2,3-Trimethylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
1,3,5-Trimethylbenzene	ND		0.00117	1	06/29/2017 15:09	WG993698
Vinyl chloride	ND		0.00117	1	06/29/2017 15:09	WG993698
Xylenes, Total	ND		0.00351	1	06/29/2017 15:09	WG993698
(S) Toluene-d8	101		80.0-120		06/29/2017 15:09	WG993698
(S) Dibromofluoromethane	92.9		74.0-131		06/29/2017 15:09	WG993698
(S) 4-Bromofluorobenzene	103		64.0-132		06/29/2017 15:09	WG993698

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.7		1	06/27/2017 11:22	WG993080

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0590	1	06/29/2017 15:26	WG993698
Acrylonitrile	ND		0.0118	1	06/29/2017 15:26	WG993698
Benzene	ND		0.00118	1	06/29/2017 15:26	WG993698
Bromobenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
Bromodichloromethane	ND		0.00118	1	06/29/2017 15:26	WG993698
Bromoform	ND		0.00118	1	06/29/2017 15:26	WG993698
Bromomethane	ND		0.00590	1	06/29/2017 15:26	WG993698
n-Butylbenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
sec-Butylbenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
tert-Butylbenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
Carbon tetrachloride	ND		0.00118	1	06/29/2017 15:26	WG993698
Chlorobenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
Chlorodibromomethane	ND		0.00118	1	06/29/2017 15:26	WG993698
Chloroethane	ND		0.00590	1	06/29/2017 15:26	WG993698
Chloroform	ND		0.00590	1	06/29/2017 15:26	WG993698
Chloromethane	ND		0.00295	1	06/29/2017 15:26	WG993698
2-Chlorotoluene	ND		0.00118	1	06/29/2017 15:26	WG993698
4-Chlorotoluene	ND		0.00118	1	06/29/2017 15:26	WG993698
1,2-Dibromo-3-Chloropropane	ND		0.00590	1	06/29/2017 15:26	WG993698
1,2-Dibromoethane	ND		0.00118	1	06/29/2017 15:26	WG993698
Dibromomethane	ND		0.00118	1	06/29/2017 15:26	WG993698
1,2-Dichlorobenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
1,3-Dichlorobenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
1,4-Dichlorobenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
Dichlorodifluoromethane	ND		0.00590	1	06/29/2017 15:26	WG993698
1,1-Dichloroethane	ND	<u>J4</u>	0.00118	1	06/29/2017 15:26	WG993698
1,2-Dichloroethane	ND		0.00118	1	06/29/2017 15:26	WG993698
1,1-Dichloroethene	ND		0.00118	1	06/29/2017 15:26	WG993698
cis-1,2-Dichloroethene	ND		0.00118	1	06/29/2017 15:26	WG993698
trans-1,2-Dichloroethene	ND		0.00118	1	06/29/2017 15:26	WG993698
1,2-Dichloropropane	ND		0.00118	1	06/29/2017 15:26	WG993698
1,1-Dichloropropene	ND	<u>J4</u>	0.00118	1	06/29/2017 15:26	WG993698
1,3-Dichloropropane	ND		0.00118	1	06/29/2017 15:26	WG993698
cis-1,3-Dichloropropene	ND	<u>J4</u>	0.00118	1	06/29/2017 15:26	WG993698
trans-1,3-Dichloropropene	ND		0.00118	1	06/29/2017 15:26	WG993698
2,2-Dichloropropane	ND		0.00118	1	06/29/2017 15:26	WG993698
Di-isopropyl ether	ND		0.00118	1	06/29/2017 15:26	WG993698
Ethylbenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
Hexachloro-1,3-butadiene	ND		0.00118	1	06/29/2017 15:26	WG993698
Isopropylbenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
p-Isopropyltoluene	ND		0.00118	1	06/29/2017 15:26	WG993698
2-Butanone (MEK)	ND		0.0118	1	06/29/2017 15:26	WG993698
Methylene Chloride	ND		0.00590	1	06/29/2017 15:26	WG993698
4-Methyl-2-pentanone (MIBK)	ND		0.0118	1	06/29/2017 15:26	WG993698
Methyl tert-butyl ether	ND		0.00118	1	06/29/2017 15:26	WG993698
Naphthalene	ND		0.00590	1	06/29/2017 15:26	WG993698
n-Propylbenzene	ND		0.00118	1	06/29/2017 15:26	WG993698
Styrene	ND		0.00118	1	06/29/2017 15:26	WG993698
1,1,1,2-Tetrachloroethane	ND		0.00118	1	06/29/2017 15:26	WG993698
1,1,2,2-Tetrachloroethane	ND		0.00118	1	06/29/2017 15:26	WG993698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.0018	1	06/29/2017 15:26	WG993698
Tetrachloroethene	ND		0.0018	1	06/29/2017 15:26	WG993698
Toluene	ND		0.00590	1	06/29/2017 15:26	WG993698
1,2,3-Trichlorobenzene	ND		0.0018	1	06/29/2017 15:26	WG993698
1,2,4-Trichlorobenzene	ND		0.0018	1	06/29/2017 15:26	WG993698
1,1,1-Trichloroethane	ND		0.0018	1	06/29/2017 15:26	WG993698
1,1,2-Trichloroethane	ND		0.0018	1	06/29/2017 15:26	WG993698
Trichloroethene	ND		0.0018	1	06/29/2017 15:26	WG993698
Trichlorofluoromethane	ND		0.00590	1	06/29/2017 15:26	WG993698
1,2,3-Trichloropropane	ND		0.00295	1	06/29/2017 15:26	WG993698
1,2,4-Trimethylbenzene	ND		0.0018	1	06/29/2017 15:26	WG993698
1,2,3-Trimethylbenzene	ND		0.0018	1	06/29/2017 15:26	WG993698
1,3,5-Trimethylbenzene	ND		0.0018	1	06/29/2017 15:26	WG993698
Vinyl chloride	ND		0.0018	1	06/29/2017 15:26	WG993698
Xylenes, Total	ND		0.00354	1	06/29/2017 15:26	WG993698
(S) Toluene-d8	100		80.0-120		06/29/2017 15:26	WG993698
(S) Dibromofluoromethane	96.1		74.0-131		06/29/2017 15:26	WG993698
(S) 4-Bromofluorobenzene	102		64.0-132		06/29/2017 15:26	WG993698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.8		1	06/27/2017 11:22	WG993080

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0570	1	06/29/2017 15:44	WG993698
Acrylonitrile	ND		0.0114	1	06/29/2017 15:44	WG993698
Benzene	ND		0.00114	1	06/29/2017 15:44	WG993698
Bromobenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
Bromodichloromethane	ND		0.00114	1	06/29/2017 15:44	WG993698
Bromoform	ND		0.00114	1	06/29/2017 15:44	WG993698
Bromomethane	ND		0.00570	1	06/29/2017 15:44	WG993698
n-Butylbenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
sec-Butylbenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
tert-Butylbenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
Carbon tetrachloride	ND		0.00114	1	06/29/2017 15:44	WG993698
Chlorobenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
Chlorodibromomethane	ND		0.00114	1	06/29/2017 15:44	WG993698
Chloroethane	ND		0.00570	1	06/29/2017 15:44	WG993698
Chloroform	ND		0.00570	1	06/29/2017 15:44	WG993698
Chloromethane	ND		0.00285	1	06/29/2017 15:44	WG993698
2-Chlorotoluene	ND		0.00114	1	06/29/2017 15:44	WG993698
4-Chlorotoluene	ND		0.00114	1	06/29/2017 15:44	WG993698
1,2-Dibromo-3-Chloropropane	ND		0.00570	1	06/29/2017 15:44	WG993698
1,2-Dibromoethane	ND		0.00114	1	06/29/2017 15:44	WG993698
Dibromomethane	ND		0.00114	1	06/29/2017 15:44	WG993698
1,2-Dichlorobenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
1,3-Dichlorobenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
1,4-Dichlorobenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
Dichlorodifluoromethane	ND		0.00570	1	06/29/2017 15:44	WG993698
1,1-Dichloroethane	ND	<u>J4</u>	0.00114	1	06/29/2017 15:44	WG993698
1,2-Dichloroethane	ND		0.00114	1	06/29/2017 15:44	WG993698
1,1-Dichloroethene	ND		0.00114	1	06/29/2017 15:44	WG993698
cis-1,2-Dichloroethene	ND		0.00114	1	06/29/2017 15:44	WG993698
trans-1,2-Dichloroethene	ND		0.00114	1	06/29/2017 15:44	WG993698
1,2-Dichloropropane	ND		0.00114	1	06/29/2017 15:44	WG993698
1,1-Dichloropropene	ND	<u>J4</u>	0.00114	1	06/29/2017 15:44	WG993698
1,3-Dichloropropane	ND		0.00114	1	06/29/2017 15:44	WG993698
cis-1,3-Dichloropropene	ND	<u>J4</u>	0.00114	1	06/29/2017 15:44	WG993698
trans-1,3-Dichloropropene	ND		0.00114	1	06/29/2017 15:44	WG993698
2,2-Dichloropropane	ND		0.00114	1	06/29/2017 15:44	WG993698
Di-isopropyl ether	ND		0.00114	1	06/29/2017 15:44	WG993698
Ethylbenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
Hexachloro-1,3-butadiene	ND		0.00114	1	06/29/2017 15:44	WG993698
Isopropylbenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
p-Isopropyltoluene	ND		0.00114	1	06/29/2017 15:44	WG993698
2-Butanone (MEK)	ND		0.0114	1	06/29/2017 15:44	WG993698
Methylene Chloride	ND		0.00570	1	06/29/2017 15:44	WG993698
4-Methyl-2-pentanone (MIBK)	ND		0.0114	1	06/29/2017 15:44	WG993698
Methyl tert-butyl ether	ND		0.00114	1	06/29/2017 15:44	WG993698
Naphthalene	ND		0.00570	1	06/29/2017 15:44	WG993698
n-Propylbenzene	ND		0.00114	1	06/29/2017 15:44	WG993698
Styrene	ND		0.00114	1	06/29/2017 15:44	WG993698
1,1,1,2-Tetrachloroethane	ND		0.00114	1	06/29/2017 15:44	WG993698
1,1,2,2-Tetrachloroethane	ND		0.00114	1	06/29/2017 15:44	WG993698

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.0014	1	06/29/2017 15:44	WG993698
Tetrachloroethene	ND		0.0014	1	06/29/2017 15:44	WG993698
Toluene	ND		0.00570	1	06/29/2017 15:44	WG993698
1,2,3-Trichlorobenzene	ND		0.0014	1	06/29/2017 15:44	WG993698
1,2,4-Trichlorobenzene	ND		0.0014	1	06/29/2017 15:44	WG993698
1,1,1-Trichloroethane	ND		0.0014	1	06/29/2017 15:44	WG993698
1,1,2-Trichloroethane	ND		0.0014	1	06/29/2017 15:44	WG993698
Trichloroethene	ND		0.0014	1	06/29/2017 15:44	WG993698
Trichlorofluoromethane	ND		0.00570	1	06/29/2017 15:44	WG993698
1,2,3-Trichloropropane	ND		0.00285	1	06/29/2017 15:44	WG993698
1,2,4-Trimethylbenzene	ND		0.0014	1	06/29/2017 15:44	WG993698
1,2,3-Trimethylbenzene	ND		0.0014	1	06/29/2017 15:44	WG993698
1,3,5-Trimethylbenzene	ND		0.0014	1	06/29/2017 15:44	WG993698
Vinyl chloride	ND		0.0014	1	06/29/2017 15:44	WG993698
Xylenes, Total	ND		0.00342	1	06/29/2017 15:44	WG993698
(S) Toluene-d8	100		80.0-120		06/29/2017 15:44	WG993698
(S) Dibromofluoromethane	96.6		74.0-131		06/29/2017 15:44	WG993698
(S) 4-Bromofluorobenzene	97.8		64.0-132		06/29/2017 15:44	WG993698

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	78.5		1	06/27/2017 11:22	WG993080

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0637	1	06/29/2017 16:01	WG993698
Acrylonitrile	ND		0.0127	1	06/29/2017 16:01	WG993698
Benzene	ND		0.00127	1	06/29/2017 16:01	WG993698
Bromobenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
Bromodichloromethane	ND		0.00127	1	06/29/2017 16:01	WG993698
Bromoform	ND		0.00127	1	06/29/2017 16:01	WG993698
Bromomethane	ND		0.00637	1	06/29/2017 16:01	WG993698
n-Butylbenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
sec-Butylbenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
tert-Butylbenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
Carbon tetrachloride	ND		0.00127	1	06/29/2017 16:01	WG993698
Chlorobenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
Chlorodibromomethane	ND		0.00127	1	06/29/2017 16:01	WG993698
Chloroethane	ND		0.00637	1	06/29/2017 16:01	WG993698
Chloroform	ND		0.00637	1	06/29/2017 16:01	WG993698
Chloromethane	ND		0.00318	1	06/29/2017 16:01	WG993698
2-Chlorotoluene	ND		0.00127	1	06/29/2017 16:01	WG993698
4-Chlorotoluene	ND		0.00127	1	06/29/2017 16:01	WG993698
1,2-Dibromo-3-Chloropropane	ND		0.00637	1	06/29/2017 16:01	WG993698
1,2-Dibromoethane	ND		0.00127	1	06/29/2017 16:01	WG993698
Dibromomethane	ND		0.00127	1	06/29/2017 16:01	WG993698
1,2-Dichlorobenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
1,3-Dichlorobenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
1,4-Dichlorobenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
Dichlorodifluoromethane	ND		0.00637	1	06/29/2017 16:01	WG993698
1,1-Dichloroethane	ND	<u>J4</u>	0.00127	1	06/29/2017 16:01	WG993698
1,2-Dichloroethane	ND		0.00127	1	06/29/2017 16:01	WG993698
1,1-Dichloroethene	ND		0.00127	1	06/29/2017 16:01	WG993698
cis-1,2-Dichloroethene	ND		0.00127	1	06/29/2017 16:01	WG993698
trans-1,2-Dichloroethene	ND		0.00127	1	06/29/2017 16:01	WG993698
1,2-Dichloropropane	ND		0.00127	1	06/29/2017 16:01	WG993698
1,1-Dichloropropene	ND	<u>J4</u>	0.00127	1	06/29/2017 16:01	WG993698
1,3-Dichloropropane	ND		0.00127	1	06/29/2017 16:01	WG993698
cis-1,3-Dichloropropene	ND	<u>J4</u>	0.00127	1	06/29/2017 16:01	WG993698
trans-1,3-Dichloropropene	ND		0.00127	1	06/29/2017 16:01	WG993698
2,2-Dichloropropane	ND		0.00127	1	06/29/2017 16:01	WG993698
Di-isopropyl ether	ND		0.00127	1	06/29/2017 16:01	WG993698
Ethylbenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
Hexachloro-1,3-butadiene	ND		0.00127	1	06/29/2017 16:01	WG993698
Isopropylbenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
p-Isopropyltoluene	ND		0.00127	1	06/29/2017 16:01	WG993698
2-Butanone (MEK)	ND		0.0127	1	06/29/2017 16:01	WG993698
Methylene Chloride	ND		0.00637	1	06/29/2017 16:01	WG993698
4-Methyl-2-pentanone (MIBK)	ND		0.0127	1	06/29/2017 16:01	WG993698
Methyl tert-butyl ether	ND		0.00127	1	06/29/2017 16:01	WG993698
Naphthalene	ND		0.00637	1	06/29/2017 16:01	WG993698
n-Propylbenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
Styrene	ND		0.00127	1	06/29/2017 16:01	WG993698
1,1,1,2-Tetrachloroethane	ND		0.00127	1	06/29/2017 16:01	WG993698
1,1,2,2-Tetrachloroethane	ND		0.00127	1	06/29/2017 16:01	WG993698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.00127	1	06/29/2017 16:01	WG993698
Tetrachloroethene	ND		0.00127	1	06/29/2017 16:01	WG993698
Toluene	ND		0.00637	1	06/29/2017 16:01	WG993698
1,2,3-Trichlorobenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
1,2,4-Trichlorobenzene	ND		0.00127	1	06/29/2017 16:01	WG993698
1,1,1-Trichloroethane	ND		0.00127	1	06/29/2017 16:01	WG993698
1,1,2-Trichloroethane	ND		0.00127	1	06/29/2017 16:01	WG993698
Trichloroethene	ND		0.00127	1	06/29/2017 16:01	WG993698
Trichlorofluoromethane	ND		0.00637	1	06/29/2017 16:01	WG993698
1,2,3-Trichloropropane	ND		0.00318	1	06/29/2017 16:01	WG993698
1,2,4-Trimethylbenzene	0.00456		0.00127	1	06/29/2017 16:01	WG993698
1,2,3-Trimethylbenzene	0.00144		0.00127	1	06/29/2017 16:01	WG993698
1,3,5-Trimethylbenzene	0.00167		0.00127	1	06/29/2017 16:01	WG993698
Vinyl chloride	ND		0.00127	1	06/29/2017 16:01	WG993698
Xylenes, Total	ND		0.00382	1	06/29/2017 16:01	WG993698
(S) Toluene-d8	99.9		80.0-120		06/29/2017 16:01	WG993698
(S) Dibromofluoromethane	93.9		74.0-131		06/29/2017 16:01	WG993698
(S) 4-Bromofluorobenzene	102		64.0-132		06/29/2017 16:01	WG993698

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.0		1	06/27/2017 11:22	WG993080

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	ND		0.0610	1	06/29/2017 16:19	WG993698
Acrylonitrile	ND		0.0122	1	06/29/2017 16:19	WG993698
Benzene	ND		0.00122	1	06/29/2017 16:19	WG993698
Bromobenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
Bromodichloromethane	ND		0.00122	1	06/29/2017 16:19	WG993698
Bromoform	ND		0.00122	1	06/29/2017 16:19	WG993698
Bromomethane	ND		0.00610	1	06/29/2017 16:19	WG993698
n-Butylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
sec-Butylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
tert-Butylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
Carbon tetrachloride	ND		0.00122	1	06/29/2017 16:19	WG993698
Chlorobenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
Chlorodibromomethane	ND		0.00122	1	06/29/2017 16:19	WG993698
Chloroethane	ND		0.00610	1	06/29/2017 16:19	WG993698
Chloroform	ND		0.00610	1	06/29/2017 16:19	WG993698
Chloromethane	ND		0.00305	1	06/29/2017 16:19	WG993698
2-Chlorotoluene	ND		0.00122	1	06/29/2017 16:19	WG993698
4-Chlorotoluene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,2-Dibromo-3-Chloropropane	ND		0.00610	1	06/29/2017 16:19	WG993698
1,2-Dibromoethane	ND		0.00122	1	06/29/2017 16:19	WG993698
Dibromomethane	ND		0.00122	1	06/29/2017 16:19	WG993698
1,2-Dichlorobenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,3-Dichlorobenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,4-Dichlorobenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
Dichlorodifluoromethane	ND		0.00610	1	06/29/2017 16:19	WG993698
1,1-Dichloroethane	ND	<u>J4</u>	0.00122	1	06/29/2017 16:19	WG993698
1,2-Dichloroethane	ND		0.00122	1	06/29/2017 16:19	WG993698
1,1-Dichloroethene	ND		0.00122	1	06/29/2017 16:19	WG993698
cis-1,2-Dichloroethene	ND		0.00122	1	06/29/2017 16:19	WG993698
trans-1,2-Dichloroethene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,2-Dichloropropane	ND		0.00122	1	06/29/2017 16:19	WG993698
1,1-Dichloropropene	ND	<u>J4</u>	0.00122	1	06/29/2017 16:19	WG993698
1,3-Dichloropropane	ND		0.00122	1	06/29/2017 16:19	WG993698
cis-1,3-Dichloropropene	ND	<u>J4</u>	0.00122	1	06/29/2017 16:19	WG993698
trans-1,3-Dichloropropene	ND		0.00122	1	06/29/2017 16:19	WG993698
2,2-Dichloropropane	ND		0.00122	1	06/29/2017 16:19	WG993698
Di-isopropyl ether	ND		0.00122	1	06/29/2017 16:19	WG993698
Ethylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
Hexachloro-1,3-butadiene	ND		0.00122	1	06/29/2017 16:19	WG993698
Isopropylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
p-Isopropyltoluene	ND		0.00122	1	06/29/2017 16:19	WG993698
2-Butanone (MEK)	ND		0.0122	1	06/29/2017 16:19	WG993698
Methylene Chloride	ND		0.00610	1	06/29/2017 16:19	WG993698
4-Methyl-2-pentanone (MIBK)	ND		0.0122	1	06/29/2017 16:19	WG993698
Methyl tert-butyl ether	ND		0.00122	1	06/29/2017 16:19	WG993698
Naphthalene	ND		0.00610	1	06/29/2017 16:19	WG993698
n-Propylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
Styrene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,1,1,2-Tetrachloroethane	ND		0.00122	1	06/29/2017 16:19	WG993698
1,1,2,2-Tetrachloroethane	ND		0.00122	1	06/29/2017 16:19	WG993698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.00122	1	06/29/2017 16:19	WG993698
Tetrachloroethene	ND		0.00122	1	06/29/2017 16:19	WG993698
Toluene	ND		0.00610	1	06/29/2017 16:19	WG993698
1,2,3-Trichlorobenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,2,4-Trichlorobenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,1,1-Trichloroethane	ND		0.00122	1	06/29/2017 16:19	WG993698
1,1,2-Trichloroethane	ND		0.00122	1	06/29/2017 16:19	WG993698
Trichloroethene	ND		0.00122	1	06/29/2017 16:19	WG993698
Trichlorofluoromethane	ND		0.00610	1	06/29/2017 16:19	WG993698
1,2,3-Trichloropropane	ND		0.00305	1	06/29/2017 16:19	WG993698
1,2,4-Trimethylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,2,3-Trimethylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
1,3,5-Trimethylbenzene	ND		0.00122	1	06/29/2017 16:19	WG993698
Vinyl chloride	ND		0.00122	1	06/29/2017 16:19	WG993698
Xylenes, Total	ND		0.00366	1	06/29/2017 16:19	WG993698
(S) Toluene-d8	101		80.0-120		06/29/2017 16:19	WG993698
(S) Dibromofluoromethane	91.2		74.0-131		06/29/2017 16:19	WG993698
(S) 4-Bromofluorobenzene	106		64.0-132		06/29/2017 16:19	WG993698

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3229306-1 06/27/17 11:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	%		%	%
Total Solids	0.000500			

¹Cp

²Tc

³Ss

L917916-01 Original Sample (OS) • Duplicate (DUP)

(OS) L917916-01 06/27/17 11:22 • (DUP) R3229306-3 06/27/17 11:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	%	%		%		%
Total Solids	87.0	83.6	1	3.90		5

⁴Cn

⁵Sr

Laboratory Control Sample (LCS)

(LCS) R3229306-2 06/27/17 11:22

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3229972-3 06/29/17 11:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	0.000379	J	0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3229972-3 06/29/17 11:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	0.000389	J	0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	99.6			80.0-120
(S) Dibromofluoromethane	91.3			74.0-131
(S) 4-Bromofluorobenzene	107			64.0-132

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3229972-1 06/29/17 10:59 • (LCSD) R3229972-2 06/29/17 11:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0795	0.0783	63.6	62.6	11.0-160			1.47	23
Acrylonitrile	0.125	0.0935	0.0881	74.8	70.5	61.0-143			5.96	20
Benzene	0.0250	0.0193	0.0178	77.3	71.0	71.0-124			8.47	20
Bromobenzene	0.0250	0.0226	0.0225	90.6	89.9	78.0-120			0.730	20
Bromodichloromethane	0.0250	0.0204	0.0199	81.8	79.6	75.0-120			2.70	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3229972-1 06/29/17 10:59 • (LCSD) R3229972-2 06/29/17 11:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.0250	0.0224	0.0231	89.4	92.2	65.0-133			3.09	20
Bromomethane	0.0250	0.0266	0.0234	106	93.4	26.0-160			13.0	20
n-Butylbenzene	0.0250	0.0205	0.0185	82.2	74.2	73.0-126			10.2	20
sec-Butylbenzene	0.0250	0.0249	0.0234	99.7	93.7	75.0-121			6.24	20
tert-Butylbenzene	0.0250	0.0251	0.0240	101	96.0	74.0-122			4.58	20
Carbon tetrachloride	0.0250	0.0233	0.0205	93.3	82.1	66.0-123			12.7	20
Chlorobenzene	0.0250	0.0250	0.0243	100	97.2	79.0-121			2.96	20
Chlorodibromomethane	0.0250	0.0233	0.0233	93.1	93.1	74.0-128			0.0200	20
Chloroethane	0.0250	0.0230	0.0196	92.2	78.6	51.0-147			16.0	20
Chloroform	0.0250	0.0212	0.0190	84.7	76.0	73.0-123			10.8	20
Chloromethane	0.0250	0.0155	0.0133	62.0	53.2	51.0-138			15.2	20
2-Chlorotoluene	0.0250	0.0247	0.0237	98.6	94.7	72.0-124			4.07	20
4-Chlorotoluene	0.0250	0.0241	0.0234	96.4	93.4	78.0-120			3.10	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0185	0.0175	74.1	70.0	65.0-126			5.79	20
1,2-Dibromoethane	0.0250	0.0250	0.0251	100	100	78.0-122			0.240	20
Dibromomethane	0.0250	0.0232	0.0222	93.0	88.6	79.0-120			4.81	20
1,2-Dichlorobenzene	0.0250	0.0227	0.0217	91.0	86.8	80.0-120			4.65	20
1,3-Dichlorobenzene	0.0250	0.0266	0.0261	106	105	72.0-123			1.78	20
1,4-Dichlorobenzene	0.0250	0.0226	0.0217	90.6	87.0	77.0-120			4.06	20
Dichlorodifluoromethane	0.0250	0.0163	0.0136	65.2	54.2	49.0-155			18.3	20
1,1-Dichloroethane	0.0250	0.0190	0.0173	76.1	69.1	70.0-128	J4	J4	9.62	20
1,2-Dichloroethane	0.0250	0.0229	0.0212	91.5	84.6	69.0-128			7.84	20
1,1-Dichloroethene	0.0250	0.0254	0.0222	102	88.7	63.0-131			13.7	20
cis-1,2-Dichloroethene	0.0250	0.0212	0.0190	84.7	75.8	74.0-123			11.0	20
trans-1,2-Dichloroethene	0.0250	0.0210	0.0189	84.1	75.5	72.0-122			10.8	20
1,2-Dichloropropane	0.0250	0.0208	0.0193	83.3	77.0	75.0-126			7.76	20
1,1-Dichloropropene	0.0250	0.0201	0.0180	80.6	71.8	72.0-130		J4	11.5	20
1,3-Dichloropropane	0.0250	0.0230	0.0226	92.1	90.2	80.0-121			2.07	20
cis-1,3-Dichloropropene	0.0250	0.0201	0.0196	80.4	78.2	80.0-125		J4	2.73	20
trans-1,3-Dichloropropene	0.0250	0.0212	0.0207	84.8	82.7	75.0-129			2.52	20
2,2-Dichloropropane	0.0250	0.0197	0.0175	78.9	69.9	60.0-129			12.1	20
Di-isopropyl ether	0.0250	0.0171	0.0157	68.3	62.6	62.0-133			8.65	20
Ethylbenzene	0.0250	0.0239	0.0226	95.8	90.5	77.0-120			5.68	20
Hexachloro-1,3-butadiene	0.0250	0.0248	0.0228	99.4	91.0	68.0-128			8.78	20
Isopropylbenzene	0.0250	0.0244	0.0229	97.5	91.5	75.0-120			6.45	20
p-Isopropyltoluene	0.0250	0.0255	0.0242	102	96.8	74.0-125			5.42	20
2-Butanone (MEK)	0.125	0.0932	0.0903	74.6	72.2	37.0-159			3.16	20
Methylene Chloride	0.0250	0.0198	0.0176	79.4	70.2	67.0-123			12.3	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0886	0.0856	70.9	68.5	60.0-144			3.44	20
Methyl tert-butyl ether	0.0250	0.0214	0.0196	85.7	78.3	66.0-125			9.10	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3229972-1 06/29/17 10:59 • (LCSD) R3229972-2 06/29/17 11:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.0250	0.0221	0.0207	88.5	83.0	64.0-125			6.45	20
n-Propylbenzene	0.0250	0.0238	0.0227	95.3	90.9	78.0-120			4.71	20
Styrene	0.0250	0.0253	0.0240	101	96.1	78.0-124			5.17	20
1,1,1,2-Tetrachloroethane	0.0250	0.0248	0.0240	99.1	96.1	74.0-124			3.08	20
1,1,2,2-Tetrachloroethane	0.0250	0.0230	0.0223	92.1	89.2	73.0-120			3.27	20
Tetrachloroethene	0.0250	0.0268	0.0254	107	101	70.0-127			5.53	20
Toluene	0.0250	0.0216	0.0202	86.3	80.9	77.0-120			6.50	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0260	0.0219	104	87.7	64.0-135			17.0	20
1,2,3-Trichlorobenzene	0.0250	0.0237	0.0218	94.7	87.2	68.0-126			8.31	20
1,2,4-Trichlorobenzene	0.0250	0.0242	0.0219	96.7	87.4	70.0-127			10.1	20
1,1,1-Trichloroethane	0.0250	0.0228	0.0201	91.3	80.3	69.0-125			12.8	20
1,1,2-Trichloroethane	0.0250	0.0245	0.0246	97.9	98.3	78.0-120			0.370	20
Trichloroethene	0.0250	0.0252	0.0236	101	94.6	79.0-120			6.29	20
Trichlorofluoromethane	0.0250	0.0262	0.0224	105	89.5	59.0-136			15.7	20
1,2,3-Trichloropropane	0.0250	0.0248	0.0252	99.1	101	73.0-124			1.84	20
1,2,3-Trimethylbenzene	0.0250	0.0211	0.0198	84.6	79.2	76.0-120			6.51	20
1,2,4-Trimethylbenzene	0.0250	0.0250	0.0241	99.9	96.2	75.0-120			3.71	20
1,3,5-Trimethylbenzene	0.0250	0.0250	0.0237	100	94.9	75.0-120			5.44	20
Vinyl chloride	0.0250	0.0189	0.0159	75.7	63.5	63.0-134			17.6	20
Xylenes, Total	0.0750	0.0711	0.0694	94.8	92.5	77.0-120			2.42	20
(S) Toluene-d8				99.1	100	80.0-120				
(S) Dibromofluoromethane				93.0	92.0	74.0-131				
(S) 4-Bromofluorobenzene				97.8	102	64.0-132				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L917912-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L917912-02 06/29/17 16:53 • (MS) R3229972-4 06/29/17 17:12 • (MSD) R3229972-5 06/29/17 17:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.151	U	0.291	0.350	9.90	11.9	19.5	10.0-160	J6		18.2	36
Acrylonitrile	0.151	U	1.49	1.69	50.5	57.4	19.5	14.0-160			12.8	33
Benzene	0.0302	U	0.275	0.317	46.7	53.8	19.5	13.0-146			14.3	27
Bromobenzene	0.0302	U	0.651	0.602	111	102	19.5	10.0-149			7.81	33
Bromodichloromethane	0.0302	U	0.312	0.348	53.0	59.1	19.5	15.0-142			10.8	28
Bromoform	0.0302	U	0.407	0.422	69.1	71.7	19.5	10.0-147			3.71	31
Bromomethane	0.0302	U	0.183	0.217	31.1	36.9	19.5	10.0-160			17.2	32
n-Butylbenzene	0.0302	0.846	1.12	1.15	47.2	52.3	19.5	10.0-154			2.59	37
sec-Butylbenzene	0.0302	1.11	1.54	1.40	73.4	49.0	19.5	10.0-151			9.77	36
tert-Butylbenzene	0.0302	0.0314	0.581	0.549	93.3	88.0	19.5	10.0-152			5.57	35



L917912-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L917912-02 06/29/17 16:53 • (MS) R3229972-4 06/29/17 17:12 • (MSD) R3229972-5 06/29/17 17:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0302	U	0.285	0.319	48.5	54.2	19.5	13.0-140			11.2	30
Chlorobenzene	0.0302	U	0.501	0.490	85.2	83.3	19.5	10.0-149			2.21	31
Chlorodibromomethane	0.0302	U	0.447	0.449	75.9	76.2	19.5	12.0-147			0.410	29
Chloroethane	0.0302	U	0.109	0.136	18.5	23.1	19.5	10.0-159			22.4	33
Chloroform	0.0302	U	0.348	0.405	59.2	68.8	19.5	18.0-148			15.0	28
Chloromethane	0.0302	U	0.141	0.172	23.9	29.2	19.5	10.0-146			20.0	29
2-Chlorotoluene	0.0302	U	0.512	0.487	87.0	82.7	19.5	10.0-151			5.00	35
4-Chlorotoluene	0.0302	U	0.579	0.558	98.3	94.8	19.5	10.0-150			3.60	35
1,2-Dibromo-3-Chloropropane	0.0302	U	0.364	0.410	61.9	69.6	19.5	10.0-149			11.8	34
1,2-Dibromoethane	0.0302	U	0.504	0.498	85.7	84.6	19.5	14.0-145			1.33	28
Dibromomethane	0.0302	U	0.432	0.467	73.4	79.4	19.5	18.0-144			7.81	27
1,2-Dichlorobenzene	0.0302	U	0.440	0.466	74.8	79.1	19.5	10.0-153			5.54	34
1,3-Dichlorobenzene	0.0302	U	0.576	0.546	97.9	92.7	19.5	10.0-150			5.44	35
1,4-Dichlorobenzene	0.0302	U	0.427	0.448	72.6	76.1	19.5	10.0-148			4.72	34
Dichlorodifluoromethane	0.0302	U	0.184	0.213	31.3	36.2	19.5	10.0-160			14.5	30
1,1-Dichloroethane	0.0302	U	0.284	0.322	48.3	54.7	19.5	19.0-148			12.4	28
1,2-Dichloroethane	0.0302	U	0.381	0.422	64.7	71.8	19.5	17.0-147			10.3	27
1,1-Dichloroethene	0.0302	U	0.204	0.216	34.6	36.6	19.5	10.0-150			5.58	31
cis-1,2-Dichloroethene	0.0302	U	0.334	0.378	56.7	64.3	19.5	16.0-145			12.6	28
trans-1,2-Dichloroethene	0.0302	U	0.249	0.279	42.2	47.4	19.5	11.0-142			11.4	29
1,2-Dichloropropane	0.0302	U	0.371	0.400	63.1	67.9	19.5	17.0-148			7.46	28
1,1-Dichloropropene	0.0302	U	0.257	0.299	43.7	50.9	19.5	10.0-150			15.1	30
1,3-Dichloropropane	0.0302	U	0.508	0.480	86.4	81.5	19.5	16.0-148			5.81	27
cis-1,3-Dichloropropene	0.0302	U	0.373	0.404	63.4	68.6	19.5	13.0-150			7.91	28
trans-1,3-Dichloropropene	0.0302	U	0.412	0.412	70.0	70.0	19.5	10.0-152			0.0200	29
2,2-Dichloropropane	0.0302	U	0.211	0.232	35.9	39.4	19.5	16.0-143			9.26	30
Di-isopropyl ether	0.0302	U	0.292	0.324	49.6	55.1	19.5	16.0-149			10.4	28
Ethylbenzene	0.0302	U	0.455	0.443	77.4	75.2	19.5	10.0-147			2.83	31
Hexachloro-1,3-butadiene	0.0302	U	0.488	0.504	83.0	85.7	19.5	10.0-154			3.23	40
Isopropylbenzene	0.0302	1.13	1.48	1.34	57.9	35.3	19.5	10.0-147			9.45	33
p-Isopropyltoluene	0.0302	0.0881	0.658	0.631	96.8	92.3	19.5	10.0-156			4.10	37
2-Butanone (MEK)	0.151	U	3.16	3.43	107	117	19.5	10.0-160			8.35	33
Methylene Chloride	0.0302	U	0.288	0.322	48.9	54.7	19.5	16.0-139			11.1	29
4-Methyl-2-pentanone (MIBK)	0.151	U	5.88	5.44	200	185	19.5	12.0-160	J5	J5	7.85	32
Methyl tert-butyl ether	0.0302	U	0.346	0.392	58.8	66.6	19.5	21.0-145			12.4	29
Naphthalene	0.0302	1.32	1.81	1.72	82.8	67.2	19.5	10.0-153			5.20	36
n-Propylbenzene	0.0302	1.75	1.99	1.83	41.5	13.1	19.5	10.0-151			8.77	34
Styrene	0.0302	U	0.547	0.518	93.0	88.0	19.5	10.0-155			5.53	34
1,1,1,2-Tetrachloroethane	0.0302	U	0.506	0.478	86.0	81.2	19.5	10.0-147			5.66	30

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L917912-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L917912-02 06/29/17 16:53 • (MS) R3229972-4 06/29/17 17:12 • (MSD) R3229972-5 06/29/17 17:30

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
1,1,2,2-Tetrachloroethane	0.0302	U	1.86	1.50	317	255	19.5	10.0-155	<u>J5</u>	<u>J5</u>	21.5	31
Tetrachloroethene	0.0302	U	0.425	0.423	72.3	71.9	19.5	10.0-144			0.480	32
Toluene	0.0302	U	0.353	0.386	59.9	65.6	19.5	10.0-144			9.03	28
1,1,2-Trichlorotrifluoroethane	0.0302	U	0.238	0.250	40.5	42.5	19.5	10.0-153			5.00	33
1,2,3-Trichlorobenzene	0.0302	U	0.474	0.487	80.5	82.7	19.5	10.0-153			2.80	40
1,2,4-Trichlorobenzene	0.0302	U	0.487	0.524	82.8	89.0	19.5	10.0-156			7.20	40
1,1,1-Trichloroethane	0.0302	U	0.299	0.338	50.8	57.5	19.5	18.0-145			12.4	29
1,1,2-Trichloroethane	0.0302	U	2.18	2.04	370	347	19.5	12.0-151	<u>J5</u>	<u>J5</u>	6.43	28
Trichloroethene	0.0302	U	0.375	0.404	63.8	68.6	19.5	11.0-148			7.30	29
Trichlorofluoromethane	0.0302	U	0.0984	0.180	16.7	30.6	19.5	10.0-157		<u>J3</u>	58.6	34
1,2,3-Trichloropropane	0.0302	U	0.851	0.903	145	153	19.5	10.0-154			5.93	32
1,2,3-Trimethylbenzene	0.0302	0.0395	0.431	0.454	66.5	70.5	19.5	10.0-150			5.21	33
1,2,4-Trimethylbenzene	0.0302	0.00913	0.548	0.558	91.6	93.2	19.5	10.0-151			1.69	34
1,3,5-Trimethylbenzene	0.0302	U	0.528	0.503	89.8	85.5	19.5	10.0-150			4.85	33
Vinyl chloride	0.0302	U	0.158	0.192	26.9	32.6	19.5	10.0-150			19.1	29
Xylenes, Total	0.0905	U	1.41	1.37	79.6	77.5	19.5	10.0-150			2.70	31
(S) Toluene-d8					96.3	95.0		80.0-120				
(S) Dibromofluoromethane					86.6	93.2		74.0-131				
(S) 4-Bromofluorobenzene					199	156		64.0-132	<u>J1</u>	<u>J1</u>		

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3229719-3 06/29/17 01:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3229719-3 06/29/17 01:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	0.00259	J	0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	107			80.0-120
(S) Dibromofluoromethane	109			74.0-131
(S) 4-Bromofluorobenzene	94.3			64.0-132

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3229719-1 06/29/17 00:37 • (LCSD) R3229719-2 06/29/17 01:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.102	0.0983	81.5	78.6	11.0-160			3.57	23
Acrylonitrile	0.125	0.113	0.110	90.4	87.7	61.0-143			3.00	20
Benzene	0.0250	0.0252	0.0247	101	98.9	71.0-124			1.79	20
Bromobenzene	0.0250	0.0222	0.0220	88.7	87.9	78.0-120			0.910	20
Bromodichloromethane	0.0250	0.0219	0.0213	87.5	85.2	75.0-120			2.65	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3229719-1 06/29/17 00:37 • (LCSD) R3229719-2 06/29/17 01:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	0.0250	0.0187	0.0185	74.8	73.8	65.0-133			1.34	20
Bromomethane	0.0250	0.0200	0.0204	80.2	81.7	26.0-160			1.87	20
n-Butylbenzene	0.0250	0.0261	0.0257	105	103	73.0-126			1.46	20
sec-Butylbenzene	0.0250	0.0217	0.0217	86.7	87.0	75.0-121			0.310	20
tert-Butylbenzene	0.0250	0.0205	0.0207	81.9	82.6	74.0-122			0.950	20
Carbon tetrachloride	0.0250	0.0203	0.0202	81.2	80.7	66.0-123			0.550	20
Chlorobenzene	0.0250	0.0223	0.0219	89.1	87.6	79.0-121			1.66	20
Chlorodibromomethane	0.0250	0.0205	0.0200	82.1	80.0	74.0-128			2.60	20
Chloroethane	0.0250	0.0205	0.0207	82.0	83.0	51.0-147			1.21	20
Chloroform	0.0250	0.0240	0.0233	95.9	93.1	73.0-123			2.98	20
Chloromethane	0.0250	0.0243	0.0240	97.1	96.0	51.0-138			1.19	20
2-Chlorotoluene	0.0250	0.0224	0.0221	89.5	88.2	72.0-124			1.39	20
4-Chlorotoluene	0.0250	0.0223	0.0220	89.1	88.1	78.0-120			1.11	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0201	0.0205	80.2	82.0	65.0-126			2.25	20
1,2-Dibromoethane	0.0250	0.0225	0.0220	90.1	87.9	78.0-122			2.43	20
Dibromomethane	0.0250	0.0220	0.0215	87.9	85.9	79.0-120			2.29	20
1,2-Dichlorobenzene	0.0250	0.0245	0.0239	98.0	95.7	80.0-120			2.30	20
1,3-Dichlorobenzene	0.0250	0.0213	0.0210	85.2	84.1	72.0-123			1.23	20
1,4-Dichlorobenzene	0.0250	0.0234	0.0232	93.4	92.7	77.0-120			0.810	20
Dichlorodifluoromethane	0.0250	0.0255	0.0249	102	99.5	49.0-155			2.52	20
1,1-Dichloroethane	0.0250	0.0220	0.0232	87.8	92.9	70.0-128			5.67	20
1,2-Dichloroethane	0.0250	0.0242	0.0236	96.6	94.4	69.0-128			2.38	20
1,1-Dichloroethene	0.0250	0.0230	0.0228	92.2	91.4	63.0-131			0.860	20
cis-1,2-Dichloroethene	0.0250	0.0232	0.0228	92.9	91.3	74.0-123			1.78	20
trans-1,2-Dichloroethene	0.0250	0.0226	0.0228	90.3	91.4	72.0-122			1.13	20
1,2-Dichloropropane	0.0250	0.0236	0.0227	94.4	90.8	75.0-126			3.87	20
1,1-Dichloropropene	0.0250	0.0245	0.0239	97.9	95.6	72.0-130			2.33	20
1,3-Dichloropropane	0.0250	0.0241	0.0236	96.2	94.3	80.0-121			2.00	20
cis-1,3-Dichloropropene	0.0250	0.0239	0.0230	95.4	92.1	80.0-125			3.50	20
trans-1,3-Dichloropropene	0.0250	0.0232	0.0226	92.9	90.6	75.0-129			2.47	20
2,2-Dichloropropane	0.0250	0.0204	0.0204	81.4	81.8	60.0-129			0.470	20
Di-isopropyl ether	0.0250	0.0241	0.0235	96.5	94.1	62.0-133			2.48	20
Ethylbenzene	0.0250	0.0210	0.0211	84.0	84.4	77.0-120			0.440	20
Hexachloro-1,3-butadiene	0.0250	0.0199	0.0198	79.6	79.1	68.0-128			0.650	20
Isopropylbenzene	0.0250	0.0206	0.0205	82.3	82.2	75.0-120			0.220	20
p-Isopropyltoluene	0.0250	0.0211	0.0212	84.4	84.8	74.0-125			0.460	20
2-Butanone (MEK)	0.125	0.117	0.110	93.2	88.1	37.0-159			5.66	20
Methylene Chloride	0.0250	0.0241	0.0236	96.3	94.5	67.0-123			1.88	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0927	0.0880	74.1	70.4	60.0-144			5.21	20
Methyl tert-butyl ether	0.0250	0.0224	0.0217	89.6	86.9	66.0-125			3.04	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3229719-1 06/29/17 00:37 • (LCSD) R3229719-2 06/29/17 01:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Naphthalene	0.0250	0.0233	0.0237	93.2	95.0	64.0-125			1.90	20
n-Propylbenzene	0.0250	0.0226	0.0226	90.5	90.3	78.0-120			0.190	20
Styrene	0.0250	0.0225	0.0219	90.0	87.7	78.0-124			2.56	20
1,1,1,2-Tetrachloroethane	0.0250	0.0206	0.0207	82.6	83.0	74.0-124			0.470	20
1,1,2,2-Tetrachloroethane	0.0250	0.0225	0.0226	90.0	90.3	73.0-120			0.240	20
Tetrachloroethene	0.0250	0.0201	0.0199	80.6	79.5	70.0-127			1.37	20
Toluene	0.0250	0.0222	0.0217	88.7	86.9	77.0-120			2.07	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0220	0.0219	88.0	87.8	64.0-135			0.280	20
1,2,3-Trichlorobenzene	0.0250	0.0234	0.0234	93.6	93.4	68.0-126			0.180	20
1,2,4-Trichlorobenzene	0.0250	0.0234	0.0227	93.6	90.7	70.0-127			3.12	20
1,1,1-Trichloroethane	0.0250	0.0213	0.0211	85.4	84.3	69.0-125			1.25	20
1,1,2-Trichloroethane	0.0250	0.0226	0.0217	90.6	87.0	78.0-120			4.08	20
Trichloroethene	0.0250	0.0211	0.0208	84.6	83.3	79.0-120			1.54	20
Trichlorofluoromethane	0.0250	0.0208	0.0210	83.0	83.9	59.0-136			1.07	20
1,2,3-Trichloropropane	0.0250	0.0209	0.0212	83.6	84.9	73.0-124			1.57	20
1,2,3-Trimethylbenzene	0.0250	0.0239	0.0236	95.8	94.5	76.0-120			1.38	20
1,2,4-Trimethylbenzene	0.0250	0.0210	0.0208	83.9	83.2	75.0-120			0.830	20
1,3,5-Trimethylbenzene	0.0250	0.0212	0.0211	84.8	84.2	75.0-120			0.730	20
Vinyl chloride	0.0250	0.0229	0.0230	91.5	92.0	63.0-134			0.540	20
Xylenes, Total	0.0750	0.0634	0.0626	84.5	83.5	77.0-120			1.27	20
(S) Toluene-d8				107	108	80.0-120				
(S) Dibromofluoromethane				107	107	74.0-131				
(S) 4-Bromofluorobenzene				94.8	95.3	64.0-132				

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L918106-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L918106-01 06/29/17 03:19 • (MS) R3229719-4 06/29/17 10:00 • (MSD) R3229719-5 06/29/17 10:27

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	ND	2.43	2.12	94.7	82.8	20.5	10.0-160			13.4	36
Acrylonitrile	0.125	ND	2.57	2.47	100	96.3	20.5	14.0-160			4.12	33
Benzene	0.0250	ND	0.515	0.497	101	96.9	20.5	13.0-146			3.65	27
Bromobenzene	0.0250	ND	0.457	0.445	89.1	86.8	20.5	10.0-149			2.62	33
Bromodichloromethane	0.0250	ND	0.440	0.433	85.8	84.5	20.5	15.0-142			1.56	28
Bromoform	0.0250	ND	0.379	0.376	74.0	73.4	20.5	10.0-147			0.800	31
Bromomethane	0.0250	ND	0.284	0.280	55.4	54.5	20.5	10.0-160			1.63	32
n-Butylbenzene	0.0250	ND	0.558	0.529	109	103	20.5	10.0-154			5.28	37
sec-Butylbenzene	0.0250	ND	0.460	0.450	89.8	87.9	20.5	10.0-151			2.12	36
tert-Butylbenzene	0.0250	ND	0.444	0.434	86.7	84.6	20.5	10.0-152			2.40	35



L918106-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L918106-01 06/29/17 03:19 • (MS) R3229719-4 06/29/17 10:00 • (MSD) R3229719-5 06/29/17 10:27

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0250	ND	0.404	0.395	78.8	77.0	20.5	13.0-140			2.33	30
Chlorobenzene	0.0250	ND	0.457	0.444	89.1	86.6	20.5	10.0-149			2.85	31
Chlorodibromomethane	0.0250	ND	0.421	0.414	82.1	80.7	20.5	12.0-147			1.68	29
Chloroethane	0.0250	ND	0.132	0.126	25.9	24.6	20.5	10.0-159			5.14	33
Chloroform	0.0250	ND	0.489	0.476	95.4	92.9	20.5	18.0-148			2.73	28
Chloromethane	0.0250	ND	0.448	0.441	87.5	86.0	20.5	10.0-146			1.65	29
2-Chlorotoluene	0.0250	ND	0.462	0.448	90.2	87.4	20.5	10.0-151			3.18	35
4-Chlorotoluene	0.0250	ND	0.441	0.446	86.0	87.1	20.5	10.0-150			1.31	35
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.453	0.458	88.5	89.4	20.5	10.0-149			1.04	34
1,2-Dibromoethane	0.0250	ND	0.477	0.463	93.1	90.4	20.5	14.0-145			2.96	28
Dibromomethane	0.0250	ND	0.455	0.445	88.7	86.8	20.5	18.0-144			2.21	27
1,2-Dichlorobenzene	0.0250	ND	0.509	0.496	99.2	96.7	20.5	10.0-153			2.53	34
1,3-Dichlorobenzene	0.0250	ND	0.426	0.425	83.2	83.0	20.5	10.0-150			0.230	35
1,4-Dichlorobenzene	0.0250	ND	0.476	0.463	92.9	90.4	20.5	10.0-148			2.72	34
Dichlorodifluoromethane	0.0250	ND	0.440	0.435	85.8	84.9	20.5	10.0-160			0.980	30
1,1-Dichloroethane	0.0250	ND	0.466	0.443	90.9	86.5	20.5	19.0-148			5.02	28
1,2-Dichloroethane	0.0250	ND	0.482	0.464	94.1	90.5	20.5	17.0-147			3.88	27
1,1-Dichloroethene	0.0250	ND	0.457	0.455	89.1	88.7	20.5	10.0-150			0.430	31
cis-1,2-Dichloroethene	0.0250	ND	0.475	0.460	92.8	89.8	20.5	16.0-145			3.25	28
trans-1,2-Dichloroethene	0.0250	ND	0.452	0.429	88.1	83.8	20.5	11.0-142			5.04	29
1,2-Dichloropropane	0.0250	ND	0.488	0.473	95.2	92.3	20.5	17.0-148			3.12	28
1,1-Dichloropropene	0.0250	ND	0.485	0.466	94.6	90.9	20.5	10.0-150			4.00	30
1,3-Dichloropropane	0.0250	ND	0.507	0.495	98.9	96.6	20.5	16.0-148			2.26	27
cis-1,3-Dichloropropene	0.0250	ND	0.480	0.468	93.7	91.2	20.5	13.0-150			2.63	28
trans-1,3-Dichloropropene	0.0250	ND	0.452	0.452	88.3	88.1	20.5	10.0-152			0.130	29
2,2-Dichloropropane	0.0250	ND	0.370	0.355	72.2	69.2	20.5	16.0-143			4.26	30
Di-isopropyl ether	0.0250	ND	0.481	0.456	93.9	89.0	20.5	16.0-149			5.37	28
Ethylbenzene	0.0250	ND	0.479	0.433	93.6	84.6	20.5	10.0-147			10.1	31
Hexachloro-1,3-butadiene	0.0250	ND	0.460	0.466	89.8	91.0	20.5	10.0-154			1.35	40
Isopropylbenzene	0.0250	ND	0.436	0.423	85.1	82.5	20.5	10.0-147			3.15	33
p-Isopropyltoluene	0.0250	ND	0.445	0.435	86.8	84.9	20.5	10.0-156			2.24	37
2-Butanone (MEK)	0.125	ND	2.97	2.92	116	114	20.5	10.0-160			1.91	33
Methylene Chloride	0.0250	ND	0.460	0.436	89.7	85.0	20.5	16.0-139			5.37	29
4-Methyl-2-pentanone (MIBK)	0.125	ND	2.11	2.12	82.3	82.8	20.5	12.0-160			0.680	32
Methyl tert-butyl ether	0.0250	ND	0.478	0.454	93.3	88.6	20.5	21.0-145			5.18	29
Naphthalene	0.0250	ND	0.780	0.633	137	108	20.5	10.0-153			20.8	36
n-Propylbenzene	0.0250	ND	0.486	0.457	94.8	89.1	20.5	10.0-151			6.19	34
Styrene	0.0250	ND	0.470	0.460	91.7	89.8	20.5	10.0-155			2.10	34
1,1,1,2-Tetrachloroethane	0.0250	ND	0.430	0.422	84.0	82.3	20.5	10.0-147			1.97	30
1,1,2,2-Tetrachloroethane	0.0250	ND	0.428	0.413	83.4	80.7	20.5	10.0-155			3.37	31

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L918106-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L918106-01 06/29/17 03:19 • (MS) R3229719-4 06/29/17 10:00 • (MSD) R3229719-5 06/29/17 10:27

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.415	0.406	80.9	79.2	20.5	10.0-144			2.12	32
Toluene	0.0250	ND	0.542	0.455	106	88.8	20.5	10.0-144			17.4	28
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.449	0.443	87.6	86.4	20.5	10.0-153			1.38	33
1,2,3-Trichlorobenzene	0.0250	ND	0.531	0.519	104	101	20.5	10.0-153			2.29	40
1,2,4-Trichlorobenzene	0.0250	ND	0.513	0.500	100	97.5	20.5	10.0-156			2.63	40
1,1,1-Trichloroethane	0.0250	ND	0.430	0.427	84.0	83.3	20.5	18.0-145			0.730	29
1,1,2-Trichloroethane	0.0250	ND	0.473	0.460	92.4	89.7	20.5	12.0-151			2.88	28
Trichloroethene	0.0250	ND	0.464	0.452	90.6	88.2	20.5	11.0-148			2.68	29
Trichlorofluoromethane	0.0250	ND	0.0922	0.0857	18.0	16.7	20.5	10.0-157			7.26	34
1,2,3-Trichloropropane	0.0250	ND	0.441	0.441	86.0	86.1	20.5	10.0-154			0.190	32
1,2,3-Trimethylbenzene	0.0250	ND	0.546	0.494	106	96.3	20.5	10.0-150			10.0	33
1,2,4-Trimethylbenzene	0.0250	ND	0.582	0.446	114	87.1	20.5	10.0-151			26.5	34
1,3,5-Trimethylbenzene	0.0250	ND	0.481	0.439	93.8	85.6	20.5	10.0-150			9.16	33
Vinyl chloride	0.0250	ND	0.417	0.408	81.4	79.6	20.5	10.0-150			2.28	29
Xylenes, Total	0.0750	ND	1.54	1.31	99.8	85.1	20.5	10.0-150			16.0	31
(S) Toluene-d8					104	105		80.0-120				
(S) Dibromofluoromethane					106	106		74.0-131				
(S) 4-Bromofluorobenzene					93.9	95.8		64.0-132				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL (dry)	Reported Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

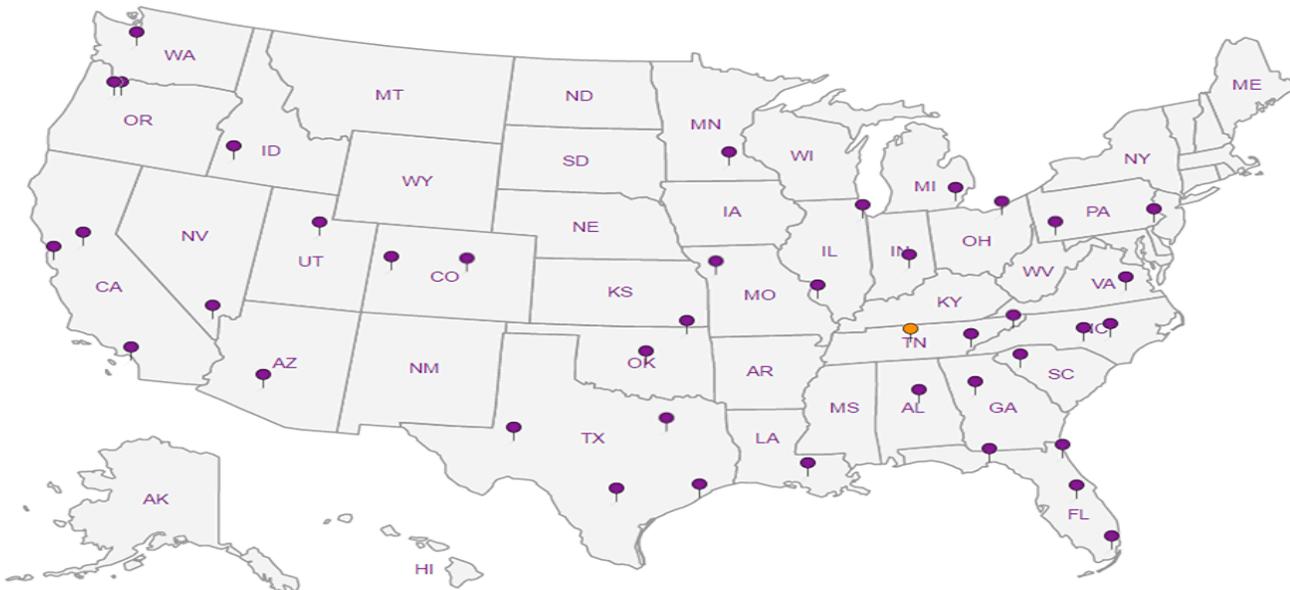
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Genesis Project, Inc. - QT GA

1258 Concord Road
Suite 200
Smvna GA 30080

Report to:
Mitch Guthrie, PG

Billing Information:
Attn: Accounts Payable
4705 S. 129th E. Ave.
Tulsa, OK 74134

Email To: mguthrie@genproject.com

Project Description: QT 703R Beaver Ruin Rd. Norcross, GA

Phone: 770-713-0666
Fax:

Client Project #

City/State Collected:

Lab Project #
QTGENSIS-QT 703R

P.O. #

Quote #

Rush? (Lab MUST Be Notified)

Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Date Results Needed

Standard

Collected by (print):
John K Love

Collected by (signature):
[Signature]

Immediately Packed on Ice N Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No of Cntrs	Total Solids	4ozClr-NoPres	V8260 40ml/NaHSO4/Syr/MeOH	V8260 40mlAmb-HCl	Analysis / Container / Preservative	Chain of Custody
MW-1	10-12'	Grab	SS	10-12'	6/21/2017	1330	4	X	X			ESC L.A.B S.C.I.E.N.C.E.S YOUR LAB OF CHOICE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 L# 917916 H028 Acctnum: QTGENSIS Template: T124691 Prelogin: P606009 TSR: 526 - Chris McCord PB: 6/15/17 mb Shipped Via: FedEx Ground
MW-2	10-12'		SS	10-12'	1130	4	X	X				
MW-3	10-12'		SS	10-12'	1030	4	X	X				
MW-4	10-12'		SS	10-12'	6/21/2017	0900	4	X	X			
MW-5	10-12'		SS	10-12'	6/20/2017	1300	4	X	X			
MW-8	12-14'		SS	12-14'	1100	4	X	X				
MW-9	10-12'	Grab	SS	10-12'	6/20/2017	0900	4	X	X			
			SS			4	X	X				
			SS			4	X	X				

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - Waste Water
 DW - Drinking Water
 OT - Other

Remarks:

Samples returned via:
 UPS FedEx Courier

Tracking # 7372 1959 3480

Relinquished by: (Signature)

Date: 6/21/2017 Time: 1500

Received by: (Signature)

Trip Blank Received: (Yes/No)
 HCl/MeOH
 TBR

Relinquished by: (Signature)

Date: Time:

Received by: (Signature)

Temp: 2.7 °C Bottles Received: 28

Relinquished by: (Signature)

Date: Time:

Received for lab by: (Signature)

Date: 6/22/17 Time: 0845

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y	N
COC Signed/Accurate:		Y	N
Bottles arrive intact:		Y	N
Correct bottles used:		Y	N
Sufficient volume sent:		Y	N
If Applicable			
VQA Zero Headpace:		Y	N
Preservation Correct/Checked:		Y	N

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

July 10, 2017

Genesis Project, Inc. - QT GA

Sample Delivery Group: L919571
Samples Received: 06/30/2017
Project Number:
Description: QT 703R Beaver Ruin Rd. Norcross, GA
Site: BEAVER RUIN RD
Report To: Mitch Guthrie, PG
1258 Concord Road
Suite 200
Smyrna, GA 30080

Entire Report Reviewed By:



Chris McCord
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	¹Cp
Tc: Table of Contents	2	
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Cn: Case Narrative	4	
Sr: Sample Results	5	³Ss
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MW-2 L919571-02	7	⁴Cn
MW-3 L919571-03	9	⁵Sr
MW-4 L919571-04	11	
MW-5 L919571-05	13	⁶Qc
MW-8 L919571-06	15	
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Qc: Quality Control Summary	21	
Volatile Organic Compounds (GC/MS) by Method 8260B	21	⁹Sc
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SAMPLE SUMMARY



MW-1 L919571-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by John Love				Collected date/time 06/28/17 12:25	Received date/time 06/30/17 08:45
Volatile Organic Compounds (GC/MS) by Method 8260B	WG996553	1	07/07/17 15:18	07/07/17 15:18	LRL

MW-2 L919571-02 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by John Love				Collected date/time 06/28/17 13:50	Received date/time 06/30/17 08:45
Volatile Organic Compounds (GC/MS) by Method 8260B	WG996553	1	07/07/17 15:41	07/07/17 15:41	LRL

MW-3 L919571-03 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by John Love				Collected date/time 06/28/17 13:20	Received date/time 06/30/17 08:45
Volatile Organic Compounds (GC/MS) by Method 8260B	WG996553	1	07/07/17 18:03	07/07/17 18:03	LRL

MW-4 L919571-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by John Love				Collected date/time 06/28/17 16:10	Received date/time 06/30/17 08:45
Volatile Organic Compounds (GC/MS) by Method 8260B	WG996553	1	07/07/17 18:26	07/07/17 18:26	LRL

MW-5 L919571-05 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by John Love				Collected date/time 06/29/17 14:20	Received date/time 06/30/17 08:45
Volatile Organic Compounds (GC/MS) by Method 8260B	WG996553	1	07/07/17 18:50	07/07/17 18:50	LRL

MW-8 L919571-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by John Love				Collected date/time 06/29/17 12:50	Received date/time 06/30/17 08:45
Volatile Organic Compounds (GC/MS) by Method 8260B	WG996553	1	07/07/17 19:14	07/07/17 19:14	LRL

MW-9 L919571-07 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by John Love				Collected date/time 06/28/17 15:55	Received date/time 06/30/17 08:45
Volatile Organic Compounds (GC/MS) by Method 8260B	WG996553	1	07/07/17 19:37	07/07/17 19:37	LRL

MW-10 L919571-08 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by John Love				Collected date/time 06/28/17 11:35	Received date/time 06/30/17 08:45
Volatile Organic Compounds (GC/MS) by Method 8260B	WG996553	1	07/07/17 20:01	07/07/17 20:01	LRL

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Collected date/time: 06/28/17 12:25

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	J3	50.0	1	07/07/2017 15:18	WG996553
Acrolein	ND		50.0	1	07/07/2017 15:18	WG996553
Acrylonitrile	ND		10.0	1	07/07/2017 15:18	WG996553
Benzene	ND		1.00	1	07/07/2017 15:18	WG996553
Bromobenzene	ND		1.00	1	07/07/2017 15:18	WG996553
Bromodichloromethane	ND		1.00	1	07/07/2017 15:18	WG996553
Bromoform	ND		1.00	1	07/07/2017 15:18	WG996553
Bromomethane	ND		5.00	1	07/07/2017 15:18	WG996553
n-Butylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
sec-Butylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
tert-Butylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
Carbon tetrachloride	ND		1.00	1	07/07/2017 15:18	WG996553
Chlorobenzene	ND		1.00	1	07/07/2017 15:18	WG996553
Chlorodibromomethane	ND		1.00	1	07/07/2017 15:18	WG996553
Chloroethane	ND		5.00	1	07/07/2017 15:18	WG996553
Chloroform	ND		5.00	1	07/07/2017 15:18	WG996553
Chloromethane	ND		2.50	1	07/07/2017 15:18	WG996553
2-Chlorotoluene	ND		1.00	1	07/07/2017 15:18	WG996553
4-Chlorotoluene	ND		1.00	1	07/07/2017 15:18	WG996553
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/07/2017 15:18	WG996553
1,2-Dibromoethane	ND		1.00	1	07/07/2017 15:18	WG996553
Dibromomethane	ND		1.00	1	07/07/2017 15:18	WG996553
1,2-Dichlorobenzene	ND		1.00	1	07/07/2017 15:18	WG996553
1,3-Dichlorobenzene	ND		1.00	1	07/07/2017 15:18	WG996553
1,4-Dichlorobenzene	ND		1.00	1	07/07/2017 15:18	WG996553
Dichlorodifluoromethane	ND		5.00	1	07/07/2017 15:18	WG996553
1,1-Dichloroethane	ND		1.00	1	07/07/2017 15:18	WG996553
1,2-Dichloroethane	ND		1.00	1	07/07/2017 15:18	WG996553
1,1-Dichloroethene	ND		1.00	1	07/07/2017 15:18	WG996553
cis-1,2-Dichloroethene	ND		1.00	1	07/07/2017 15:18	WG996553
trans-1,2-Dichloroethene	ND		1.00	1	07/07/2017 15:18	WG996553
1,2-Dichloropropane	ND		1.00	1	07/07/2017 15:18	WG996553
1,1-Dichloropropene	ND		1.00	1	07/07/2017 15:18	WG996553
1,3-Dichloropropane	ND		1.00	1	07/07/2017 15:18	WG996553
cis-1,3-Dichloropropene	ND		1.00	1	07/07/2017 15:18	WG996553
trans-1,3-Dichloropropene	ND		1.00	1	07/07/2017 15:18	WG996553
2,2-Dichloropropane	ND		1.00	1	07/07/2017 15:18	WG996553
Di-isopropyl ether	ND		1.00	1	07/07/2017 15:18	WG996553
Ethylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
Hexachloro-1,3-butadiene	ND		1.00	1	07/07/2017 15:18	WG996553
Isopropylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
p-Isopropyltoluene	ND		1.00	1	07/07/2017 15:18	WG996553
2-Butanone (MEK)	ND		10.0	1	07/07/2017 15:18	WG996553
Methylene Chloride	ND		5.00	1	07/07/2017 15:18	WG996553
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/07/2017 15:18	WG996553
Methyl tert-butyl ether	ND		1.00	1	07/07/2017 15:18	WG996553
Naphthalene	ND		5.00	1	07/07/2017 15:18	WG996553
n-Propylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
Styrene	ND		1.00	1	07/07/2017 15:18	WG996553
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/07/2017 15:18	WG996553
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/07/2017 15:18	WG996553
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/07/2017 15:18	WG996553
Tetrachloroethene	32.0		1.00	1	07/07/2017 15:18	WG996553
Toluene	ND		1.00	1	07/07/2017 15:18	WG996553
1,2,3-Trichlorobenzene	ND		1.00	1	07/07/2017 15:18	WG996553
1,2,4-Trichlorobenzene	ND		1.00	1	07/07/2017 15:18	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	07/07/2017 15:18	WG996553
1,1,2-Trichloroethane	ND		1.00	1	07/07/2017 15:18	WG996553
Trichloroethene	ND		1.00	1	07/07/2017 15:18	WG996553
Trichlorofluoromethane	ND		5.00	1	07/07/2017 15:18	WG996553
1,2,3-Trichloropropane	ND		2.50	1	07/07/2017 15:18	WG996553
1,2,4-Trimethylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
1,2,3-Trimethylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
1,3,5-Trimethylbenzene	ND		1.00	1	07/07/2017 15:18	WG996553
Vinyl chloride	ND		1.00	1	07/07/2017 15:18	WG996553
Xylenes, Total	ND		3.00	1	07/07/2017 15:18	WG996553
(S) Toluene-d8	101		80.0-120		07/07/2017 15:18	WG996553
(S) Dibromofluoromethane	94.4		76.0-123		07/07/2017 15:18	WG996553
(S) 4-Bromofluorobenzene	109		80.0-120		07/07/2017 15:18	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/28/17 13:50

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	J3	50.0	1	07/07/2017 15:41	WG996553
Acrolein	ND		50.0	1	07/07/2017 15:41	WG996553
Acrylonitrile	ND		10.0	1	07/07/2017 15:41	WG996553
Benzene	ND		1.00	1	07/07/2017 15:41	WG996553
Bromobenzene	ND		1.00	1	07/07/2017 15:41	WG996553
Bromodichloromethane	ND		1.00	1	07/07/2017 15:41	WG996553
Bromoform	3.43		1.00	1	07/07/2017 15:41	WG996553
Bromomethane	ND		5.00	1	07/07/2017 15:41	WG996553
n-Butylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
sec-Butylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
tert-Butylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
Carbon tetrachloride	ND		1.00	1	07/07/2017 15:41	WG996553
Chlorobenzene	ND		1.00	1	07/07/2017 15:41	WG996553
Chlorodibromomethane	ND		1.00	1	07/07/2017 15:41	WG996553
Chloroethane	ND		5.00	1	07/07/2017 15:41	WG996553
Chloroform	ND		5.00	1	07/07/2017 15:41	WG996553
Chloromethane	ND		2.50	1	07/07/2017 15:41	WG996553
2-Chlorotoluene	ND		1.00	1	07/07/2017 15:41	WG996553
4-Chlorotoluene	ND		1.00	1	07/07/2017 15:41	WG996553
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/07/2017 15:41	WG996553
1,2-Dibromoethane	ND		1.00	1	07/07/2017 15:41	WG996553
Dibromomethane	ND		1.00	1	07/07/2017 15:41	WG996553
1,2-Dichlorobenzene	ND		1.00	1	07/07/2017 15:41	WG996553
1,3-Dichlorobenzene	ND		1.00	1	07/07/2017 15:41	WG996553
1,4-Dichlorobenzene	ND		1.00	1	07/07/2017 15:41	WG996553
Dichlorodifluoromethane	ND		5.00	1	07/07/2017 15:41	WG996553
1,1-Dichloroethane	ND		1.00	1	07/07/2017 15:41	WG996553
1,2-Dichloroethane	ND		1.00	1	07/07/2017 15:41	WG996553
1,1-Dichloroethene	ND		1.00	1	07/07/2017 15:41	WG996553
cis-1,2-Dichloroethene	ND		1.00	1	07/07/2017 15:41	WG996553
trans-1,2-Dichloroethene	ND		1.00	1	07/07/2017 15:41	WG996553
1,2-Dichloropropane	ND		1.00	1	07/07/2017 15:41	WG996553
1,1-Dichloropropene	ND		1.00	1	07/07/2017 15:41	WG996553
1,3-Dichloropropane	ND		1.00	1	07/07/2017 15:41	WG996553
cis-1,3-Dichloropropene	ND		1.00	1	07/07/2017 15:41	WG996553
trans-1,3-Dichloropropene	ND		1.00	1	07/07/2017 15:41	WG996553
2,2-Dichloropropane	ND		1.00	1	07/07/2017 15:41	WG996553
Di-isopropyl ether	ND		1.00	1	07/07/2017 15:41	WG996553
Ethylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
Hexachloro-1,3-butadiene	ND		1.00	1	07/07/2017 15:41	WG996553
Isopropylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
p-Isopropyltoluene	ND		1.00	1	07/07/2017 15:41	WG996553
2-Butanone (MEK)	ND		10.0	1	07/07/2017 15:41	WG996553
Methylene Chloride	ND		5.00	1	07/07/2017 15:41	WG996553
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/07/2017 15:41	WG996553
Methyl tert-butyl ether	ND		1.00	1	07/07/2017 15:41	WG996553
Naphthalene	ND		5.00	1	07/07/2017 15:41	WG996553
n-Propylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
Styrene	ND		1.00	1	07/07/2017 15:41	WG996553
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/07/2017 15:41	WG996553
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/07/2017 15:41	WG996553
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/07/2017 15:41	WG996553
Tetrachloroethene	123		1.00	1	07/07/2017 15:41	WG996553
Toluene	ND		1.00	1	07/07/2017 15:41	WG996553
1,2,3-Trichlorobenzene	ND		1.00	1	07/07/2017 15:41	WG996553
1,2,4-Trichlorobenzene	ND		1.00	1	07/07/2017 15:41	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	07/07/2017 15:41	WG996553
1,1,2-Trichloroethane	ND		1.00	1	07/07/2017 15:41	WG996553
Trichloroethene	1.85		1.00	1	07/07/2017 15:41	WG996553
Trichlorofluoromethane	ND		5.00	1	07/07/2017 15:41	WG996553
1,2,3-Trichloropropane	ND		2.50	1	07/07/2017 15:41	WG996553
1,2,4-Trimethylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
1,2,3-Trimethylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
1,3,5-Trimethylbenzene	ND		1.00	1	07/07/2017 15:41	WG996553
Vinyl chloride	ND		1.00	1	07/07/2017 15:41	WG996553
Xylenes, Total	ND		3.00	1	07/07/2017 15:41	WG996553
(S) Toluene-d8	102		80.0-120		07/07/2017 15:41	WG996553
(S) Dibromofluoromethane	93.1		76.0-123		07/07/2017 15:41	WG996553
(S) 4-Bromofluorobenzene	109		80.0-120		07/07/2017 15:41	WG996553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 06/28/17 13:20

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	J3	50.0	1	07/07/2017 18:03	WG996553
Acrolein	ND		50.0	1	07/07/2017 18:03	WG996553
Acrylonitrile	ND		10.0	1	07/07/2017 18:03	WG996553
Benzene	ND		1.00	1	07/07/2017 18:03	WG996553
Bromobenzene	ND		1.00	1	07/07/2017 18:03	WG996553
Bromodichloromethane	ND		1.00	1	07/07/2017 18:03	WG996553
Bromoform	ND		1.00	1	07/07/2017 18:03	WG996553
Bromomethane	ND		5.00	1	07/07/2017 18:03	WG996553
n-Butylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
sec-Butylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
tert-Butylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
Carbon tetrachloride	ND		1.00	1	07/07/2017 18:03	WG996553
Chlorobenzene	ND		1.00	1	07/07/2017 18:03	WG996553
Chlorodibromomethane	ND		1.00	1	07/07/2017 18:03	WG996553
Chloroethane	ND		5.00	1	07/07/2017 18:03	WG996553
Chloroform	ND		5.00	1	07/07/2017 18:03	WG996553
Chloromethane	ND		2.50	1	07/07/2017 18:03	WG996553
2-Chlorotoluene	ND		1.00	1	07/07/2017 18:03	WG996553
4-Chlorotoluene	ND		1.00	1	07/07/2017 18:03	WG996553
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/07/2017 18:03	WG996553
1,2-Dibromoethane	ND		1.00	1	07/07/2017 18:03	WG996553
Dibromomethane	ND		1.00	1	07/07/2017 18:03	WG996553
1,2-Dichlorobenzene	ND		1.00	1	07/07/2017 18:03	WG996553
1,3-Dichlorobenzene	ND		1.00	1	07/07/2017 18:03	WG996553
1,4-Dichlorobenzene	ND		1.00	1	07/07/2017 18:03	WG996553
Dichlorodifluoromethane	ND		5.00	1	07/07/2017 18:03	WG996553
1,1-Dichloroethane	ND		1.00	1	07/07/2017 18:03	WG996553
1,2-Dichloroethane	ND		1.00	1	07/07/2017 18:03	WG996553
1,1-Dichloroethene	ND		1.00	1	07/07/2017 18:03	WG996553
cis-1,2-Dichloroethene	ND		1.00	1	07/07/2017 18:03	WG996553
trans-1,2-Dichloroethene	ND		1.00	1	07/07/2017 18:03	WG996553
1,2-Dichloropropane	ND		1.00	1	07/07/2017 18:03	WG996553
1,1-Dichloropropene	ND		1.00	1	07/07/2017 18:03	WG996553
1,3-Dichloropropane	ND		1.00	1	07/07/2017 18:03	WG996553
cis-1,3-Dichloropropene	ND		1.00	1	07/07/2017 18:03	WG996553
trans-1,3-Dichloropropene	ND		1.00	1	07/07/2017 18:03	WG996553
2,2-Dichloropropane	ND		1.00	1	07/07/2017 18:03	WG996553
Di-isopropyl ether	ND		1.00	1	07/07/2017 18:03	WG996553
Ethylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
Hexachloro-1,3-butadiene	ND		1.00	1	07/07/2017 18:03	WG996553
Isopropylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
p-Isopropyltoluene	ND		1.00	1	07/07/2017 18:03	WG996553
2-Butanone (MEK)	ND		10.0	1	07/07/2017 18:03	WG996553
Methylene Chloride	ND		5.00	1	07/07/2017 18:03	WG996553
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/07/2017 18:03	WG996553
Methyl tert-butyl ether	ND		1.00	1	07/07/2017 18:03	WG996553
Naphthalene	ND		5.00	1	07/07/2017 18:03	WG996553
n-Propylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
Styrene	ND		1.00	1	07/07/2017 18:03	WG996553
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/07/2017 18:03	WG996553
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/07/2017 18:03	WG996553
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/07/2017 18:03	WG996553
Tetrachloroethene	ND		1.00	1	07/07/2017 18:03	WG996553
Toluene	ND		1.00	1	07/07/2017 18:03	WG996553
1,2,3-Trichlorobenzene	ND		1.00	1	07/07/2017 18:03	WG996553
1,2,4-Trichlorobenzene	ND		1.00	1	07/07/2017 18:03	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/28/17 13:20

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	07/07/2017 18:03	WG996553
1,1,2-Trichloroethane	ND		1.00	1	07/07/2017 18:03	WG996553
Trichloroethene	ND		1.00	1	07/07/2017 18:03	WG996553
Trichlorofluoromethane	ND		5.00	1	07/07/2017 18:03	WG996553
1,2,3-Trichloropropane	ND		2.50	1	07/07/2017 18:03	WG996553
1,2,4-Trimethylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
1,2,3-Trimethylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
1,3,5-Trimethylbenzene	ND		1.00	1	07/07/2017 18:03	WG996553
Vinyl chloride	ND		1.00	1	07/07/2017 18:03	WG996553
Xylenes, Total	ND		3.00	1	07/07/2017 18:03	WG996553
(S) Toluene-d8	101		80.0-120		07/07/2017 18:03	WG996553
(S) Dibromofluoromethane	94.8		76.0-123		07/07/2017 18:03	WG996553
(S) 4-Bromofluorobenzene	107		80.0-120		07/07/2017 18:03	WG996553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 06/28/17 16:10

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	J3	50.0	1	07/07/2017 18:26	WG996553
Acrolein	ND		50.0	1	07/07/2017 18:26	WG996553
Acrylonitrile	ND		10.0	1	07/07/2017 18:26	WG996553
Benzene	ND		1.00	1	07/07/2017 18:26	WG996553
Bromobenzene	ND		1.00	1	07/07/2017 18:26	WG996553
Bromodichloromethane	ND		1.00	1	07/07/2017 18:26	WG996553
Bromoform	ND		1.00	1	07/07/2017 18:26	WG996553
Bromomethane	ND		5.00	1	07/07/2017 18:26	WG996553
n-Butylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
sec-Butylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
tert-Butylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
Carbon tetrachloride	ND		1.00	1	07/07/2017 18:26	WG996553
Chlorobenzene	ND		1.00	1	07/07/2017 18:26	WG996553
Chlorodibromomethane	ND		1.00	1	07/07/2017 18:26	WG996553
Chloroethane	ND		5.00	1	07/07/2017 18:26	WG996553
Chloroform	ND		5.00	1	07/07/2017 18:26	WG996553
Chloromethane	ND		2.50	1	07/07/2017 18:26	WG996553
2-Chlorotoluene	ND		1.00	1	07/07/2017 18:26	WG996553
4-Chlorotoluene	ND		1.00	1	07/07/2017 18:26	WG996553
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/07/2017 18:26	WG996553
1,2-Dibromoethane	ND		1.00	1	07/07/2017 18:26	WG996553
Dibromomethane	ND		1.00	1	07/07/2017 18:26	WG996553
1,2-Dichlorobenzene	ND		1.00	1	07/07/2017 18:26	WG996553
1,3-Dichlorobenzene	ND		1.00	1	07/07/2017 18:26	WG996553
1,4-Dichlorobenzene	ND		1.00	1	07/07/2017 18:26	WG996553
Dichlorodifluoromethane	ND		5.00	1	07/07/2017 18:26	WG996553
1,1-Dichloroethane	ND		1.00	1	07/07/2017 18:26	WG996553
1,2-Dichloroethane	ND		1.00	1	07/07/2017 18:26	WG996553
1,1-Dichloroethene	ND		1.00	1	07/07/2017 18:26	WG996553
cis-1,2-Dichloroethene	ND		1.00	1	07/07/2017 18:26	WG996553
trans-1,2-Dichloroethene	ND		1.00	1	07/07/2017 18:26	WG996553
1,2-Dichloropropane	ND		1.00	1	07/07/2017 18:26	WG996553
1,1-Dichloropropene	ND		1.00	1	07/07/2017 18:26	WG996553
1,3-Dichloropropane	ND		1.00	1	07/07/2017 18:26	WG996553
cis-1,3-Dichloropropene	ND		1.00	1	07/07/2017 18:26	WG996553
trans-1,3-Dichloropropene	ND		1.00	1	07/07/2017 18:26	WG996553
2,2-Dichloropropane	ND		1.00	1	07/07/2017 18:26	WG996553
Di-isopropyl ether	ND		1.00	1	07/07/2017 18:26	WG996553
Ethylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
Hexachloro-1,3-butadiene	ND		1.00	1	07/07/2017 18:26	WG996553
Isopropylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
p-Isopropyltoluene	ND		1.00	1	07/07/2017 18:26	WG996553
2-Butanone (MEK)	ND		10.0	1	07/07/2017 18:26	WG996553
Methylene Chloride	ND		5.00	1	07/07/2017 18:26	WG996553
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/07/2017 18:26	WG996553
Methyl tert-butyl ether	ND		1.00	1	07/07/2017 18:26	WG996553
Naphthalene	ND		5.00	1	07/07/2017 18:26	WG996553
n-Propylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
Styrene	ND		1.00	1	07/07/2017 18:26	WG996553
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/07/2017 18:26	WG996553
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/07/2017 18:26	WG996553
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/07/2017 18:26	WG996553
Tetrachloroethene	13.4		1.00	1	07/07/2017 18:26	WG996553
Toluene	ND		1.00	1	07/07/2017 18:26	WG996553
1,2,3-Trichlorobenzene	ND		1.00	1	07/07/2017 18:26	WG996553
1,2,4-Trichlorobenzene	ND		1.00	1	07/07/2017 18:26	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	07/07/2017 18:26	WG996553
1,1,2-Trichloroethane	ND		1.00	1	07/07/2017 18:26	WG996553
Trichloroethene	ND		1.00	1	07/07/2017 18:26	WG996553
Trichlorofluoromethane	ND		5.00	1	07/07/2017 18:26	WG996553
1,2,3-Trichloropropane	ND		2.50	1	07/07/2017 18:26	WG996553
1,2,4-Trimethylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
1,2,3-Trimethylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
1,3,5-Trimethylbenzene	ND		1.00	1	07/07/2017 18:26	WG996553
Vinyl chloride	ND		1.00	1	07/07/2017 18:26	WG996553
Xylenes, Total	ND		3.00	1	07/07/2017 18:26	WG996553
(S) Toluene-d8	101		80.0-120		07/07/2017 18:26	WG996553
(S) Dibromofluoromethane	93.4		76.0-123		07/07/2017 18:26	WG996553
(S) 4-Bromofluorobenzene	106		80.0-120		07/07/2017 18:26	WG996553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 06/29/17 14:20

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	J3	50.0	1	07/07/2017 18:50	WG996553
Acrolein	ND		50.0	1	07/07/2017 18:50	WG996553
Acrylonitrile	ND		10.0	1	07/07/2017 18:50	WG996553
Benzene	ND		1.00	1	07/07/2017 18:50	WG996553
Bromobenzene	ND		1.00	1	07/07/2017 18:50	WG996553
Bromodichloromethane	ND		1.00	1	07/07/2017 18:50	WG996553
Bromoform	ND		1.00	1	07/07/2017 18:50	WG996553
Bromomethane	ND		5.00	1	07/07/2017 18:50	WG996553
n-Butylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
sec-Butylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
tert-Butylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
Carbon tetrachloride	ND		1.00	1	07/07/2017 18:50	WG996553
Chlorobenzene	ND		1.00	1	07/07/2017 18:50	WG996553
Chlorodibromomethane	ND		1.00	1	07/07/2017 18:50	WG996553
Chloroethane	ND		5.00	1	07/07/2017 18:50	WG996553
Chloroform	5.91		5.00	1	07/07/2017 18:50	WG996553
Chloromethane	ND		2.50	1	07/07/2017 18:50	WG996553
2-Chlorotoluene	ND		1.00	1	07/07/2017 18:50	WG996553
4-Chlorotoluene	ND		1.00	1	07/07/2017 18:50	WG996553
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/07/2017 18:50	WG996553
1,2-Dibromoethane	ND		1.00	1	07/07/2017 18:50	WG996553
Dibromomethane	ND		1.00	1	07/07/2017 18:50	WG996553
1,2-Dichlorobenzene	ND		1.00	1	07/07/2017 18:50	WG996553
1,3-Dichlorobenzene	ND		1.00	1	07/07/2017 18:50	WG996553
1,4-Dichlorobenzene	ND		1.00	1	07/07/2017 18:50	WG996553
Dichlorodifluoromethane	ND		5.00	1	07/07/2017 18:50	WG996553
1,1-Dichloroethane	ND		1.00	1	07/07/2017 18:50	WG996553
1,2-Dichloroethane	ND		1.00	1	07/07/2017 18:50	WG996553
1,1-Dichloroethene	ND		1.00	1	07/07/2017 18:50	WG996553
cis-1,2-Dichloroethene	ND		1.00	1	07/07/2017 18:50	WG996553
trans-1,2-Dichloroethene	ND		1.00	1	07/07/2017 18:50	WG996553
1,2-Dichloropropane	ND		1.00	1	07/07/2017 18:50	WG996553
1,1-Dichloropropene	ND		1.00	1	07/07/2017 18:50	WG996553
1,3-Dichloropropane	ND		1.00	1	07/07/2017 18:50	WG996553
cis-1,3-Dichloropropene	ND		1.00	1	07/07/2017 18:50	WG996553
trans-1,3-Dichloropropene	ND		1.00	1	07/07/2017 18:50	WG996553
2,2-Dichloropropane	ND		1.00	1	07/07/2017 18:50	WG996553
Di-isopropyl ether	ND		1.00	1	07/07/2017 18:50	WG996553
Ethylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
Hexachloro-1,3-butadiene	ND		1.00	1	07/07/2017 18:50	WG996553
Isopropylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
p-Isopropyltoluene	ND		1.00	1	07/07/2017 18:50	WG996553
2-Butanone (MEK)	ND		10.0	1	07/07/2017 18:50	WG996553
Methylene Chloride	ND		5.00	1	07/07/2017 18:50	WG996553
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/07/2017 18:50	WG996553
Methyl tert-butyl ether	ND		1.00	1	07/07/2017 18:50	WG996553
Naphthalene	ND		5.00	1	07/07/2017 18:50	WG996553
n-Propylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
Styrene	ND		1.00	1	07/07/2017 18:50	WG996553
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/07/2017 18:50	WG996553
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/07/2017 18:50	WG996553
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/07/2017 18:50	WG996553
Tetrachloroethene	24.1		1.00	1	07/07/2017 18:50	WG996553
Toluene	ND		1.00	1	07/07/2017 18:50	WG996553
1,2,3-Trichlorobenzene	ND		1.00	1	07/07/2017 18:50	WG996553
1,2,4-Trichlorobenzene	ND		1.00	1	07/07/2017 18:50	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/29/17 14:20

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	07/07/2017 18:50	WG996553
1,1,2-Trichloroethane	ND		1.00	1	07/07/2017 18:50	WG996553
Trichloroethene	ND		1.00	1	07/07/2017 18:50	WG996553
Trichlorofluoromethane	ND		5.00	1	07/07/2017 18:50	WG996553
1,2,3-Trichloropropane	ND		2.50	1	07/07/2017 18:50	WG996553
1,2,4-Trimethylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
1,2,3-Trimethylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
1,3,5-Trimethylbenzene	ND		1.00	1	07/07/2017 18:50	WG996553
Vinyl chloride	ND		1.00	1	07/07/2017 18:50	WG996553
Xylenes, Total	ND		3.00	1	07/07/2017 18:50	WG996553
(S) Toluene-d8	102		80.0-120		07/07/2017 18:50	WG996553
(S) Dibromofluoromethane	92.6		76.0-123		07/07/2017 18:50	WG996553
(S) 4-Bromofluorobenzene	108		80.0-120		07/07/2017 18:50	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/29/17 12:50

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	ND	J3	50.0	1	07/07/2017 19:14	WG996553
Acrolein	ND		50.0	1	07/07/2017 19:14	WG996553
Acrylonitrile	ND		10.0	1	07/07/2017 19:14	WG996553
Benzene	ND		1.00	1	07/07/2017 19:14	WG996553
Bromobenzene	ND		1.00	1	07/07/2017 19:14	WG996553
Bromodichloromethane	ND		1.00	1	07/07/2017 19:14	WG996553
Bromoform	ND		1.00	1	07/07/2017 19:14	WG996553
Bromomethane	ND		5.00	1	07/07/2017 19:14	WG996553
n-Butylbenzene	ND		1.00	1	07/07/2017 19:14	WG996553
sec-Butylbenzene	ND		1.00	1	07/07/2017 19:14	WG996553
tert-Butylbenzene	ND		1.00	1	07/07/2017 19:14	WG996553
Carbon tetrachloride	ND		1.00	1	07/07/2017 19:14	WG996553
Chlorobenzene	ND		1.00	1	07/07/2017 19:14	WG996553
Chlorodibromomethane	ND		1.00	1	07/07/2017 19:14	WG996553
Chloroethane	ND		5.00	1	07/07/2017 19:14	WG996553
Chloroform	ND		5.00	1	07/07/2017 19:14	WG996553
Chloromethane	ND		2.50	1	07/07/2017 19:14	WG996553
2-Chlorotoluene	ND		1.00	1	07/07/2017 19:14	WG996553
4-Chlorotoluene	ND		1.00	1	07/07/2017 19:14	WG996553
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/07/2017 19:14	WG996553
1,2-Dibromoethane	ND		1.00	1	07/07/2017 19:14	WG996553
Dibromomethane	ND		1.00	1	07/07/2017 19:14	WG996553
1,2-Dichlorobenzene	ND		1.00	1	07/07/2017 19:14	WG996553
1,3-Dichlorobenzene	ND		1.00	1	07/07/2017 19:14	WG996553
1,4-Dichlorobenzene	ND		1.00	1	07/07/2017 19:14	WG996553
Dichlorodifluoromethane	ND		5.00	1	07/07/2017 19:14	WG996553
1,1-Dichloroethane	ND		1.00	1	07/07/2017 19:14	WG996553
1,2-Dichloroethane	ND		1.00	1	07/07/2017 19:14	WG996553
1,1-Dichloroethene	ND		1.00	1	07/07/2017 19:14	WG996553
cis-1,2-Dichloroethene	ND		1.00	1	07/07/2017 19:14	WG996553
trans-1,2-Dichloroethene	ND		1.00	1	07/07/2017 19:14	WG996553
1,2-Dichloropropane	ND		1.00	1	07/07/2017 19:14	WG996553
1,1-Dichloropropene	ND		1.00	1	07/07/2017 19:14	WG996553
1,3-Dichloropropane	ND		1.00	1	07/07/2017 19:14	WG996553
cis-1,3-Dichloropropene	ND		1.00	1	07/07/2017 19:14	WG996553
trans-1,3-Dichloropropene	ND		1.00	1	07/07/2017 19:14	WG996553
2,2-Dichloropropane	ND		1.00	1	07/07/2017 19:14	WG996553
Di-isopropyl ether	ND		1.00	1	07/07/2017 19:14	WG996553
Ethylbenzene	2.76		1.00	1	07/07/2017 19:14	WG996553
Hexachloro-1,3-butadiene	ND		1.00	1	07/07/2017 19:14	WG996553
Isopropylbenzene	1.01		1.00	1	07/07/2017 19:14	WG996553
p-Isopropyltoluene	ND		1.00	1	07/07/2017 19:14	WG996553
2-Butanone (MEK)	ND		10.0	1	07/07/2017 19:14	WG996553
Methylene Chloride	ND		5.00	1	07/07/2017 19:14	WG996553
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/07/2017 19:14	WG996553
Methyl tert-butyl ether	ND		1.00	1	07/07/2017 19:14	WG996553
Naphthalene	15.9		5.00	1	07/07/2017 19:14	WG996553
n-Propylbenzene	3.11		1.00	1	07/07/2017 19:14	WG996553
Styrene	ND		1.00	1	07/07/2017 19:14	WG996553
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/07/2017 19:14	WG996553
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/07/2017 19:14	WG996553
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/07/2017 19:14	WG996553
Tetrachloroethene	ND		1.00	1	07/07/2017 19:14	WG996553
Toluene	3.09		1.00	1	07/07/2017 19:14	WG996553
1,2,3-Trichlorobenzene	ND		1.00	1	07/07/2017 19:14	WG996553
1,2,4-Trichlorobenzene	ND		1.00	1	07/07/2017 19:14	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/29/17 12:50

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result ug/l	Qualifier	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	07/07/2017 19:14	WG996553
1,1,2-Trichloroethane	ND		1.00	1	07/07/2017 19:14	WG996553
Trichloroethene	ND		1.00	1	07/07/2017 19:14	WG996553
Trichlorofluoromethane	ND		5.00	1	07/07/2017 19:14	WG996553
1,2,3-Trichloropropane	ND		2.50	1	07/07/2017 19:14	WG996553
1,2,4-Trimethylbenzene	66.8		1.00	1	07/07/2017 19:14	WG996553
1,2,3-Trimethylbenzene	23.7		1.00	1	07/07/2017 19:14	WG996553
1,3,5-Trimethylbenzene	22.7		1.00	1	07/07/2017 19:14	WG996553
Vinyl chloride	ND		1.00	1	07/07/2017 19:14	WG996553
Xylenes, Total	62.7		3.00	1	07/07/2017 19:14	WG996553
(S) Toluene-d8	104		80.0-120		07/07/2017 19:14	WG996553
(S) Dibromofluoromethane	92.3		76.0-123		07/07/2017 19:14	WG996553
(S) 4-Bromofluorobenzene	104		80.0-120		07/07/2017 19:14	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/28/17 15:55

L919571

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	J3	50.0	1	07/07/2017 19:37	WG996553
Acrolein	ND		50.0	1	07/07/2017 19:37	WG996553
Acrylonitrile	ND		10.0	1	07/07/2017 19:37	WG996553
Benzene	ND		1.00	1	07/07/2017 19:37	WG996553
Bromobenzene	ND		1.00	1	07/07/2017 19:37	WG996553
Bromodichloromethane	ND		1.00	1	07/07/2017 19:37	WG996553
Bromoform	ND		1.00	1	07/07/2017 19:37	WG996553
Bromomethane	ND		5.00	1	07/07/2017 19:37	WG996553
n-Butylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
sec-Butylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
tert-Butylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
Carbon tetrachloride	ND		1.00	1	07/07/2017 19:37	WG996553
Chlorobenzene	ND		1.00	1	07/07/2017 19:37	WG996553
Chlorodibromomethane	ND		1.00	1	07/07/2017 19:37	WG996553
Chloroethane	ND		5.00	1	07/07/2017 19:37	WG996553
Chloroform	ND		5.00	1	07/07/2017 19:37	WG996553
Chloromethane	ND		2.50	1	07/07/2017 19:37	WG996553
2-Chlorotoluene	ND		1.00	1	07/07/2017 19:37	WG996553
4-Chlorotoluene	ND		1.00	1	07/07/2017 19:37	WG996553
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/07/2017 19:37	WG996553
1,2-Dibromoethane	ND		1.00	1	07/07/2017 19:37	WG996553
Dibromomethane	ND		1.00	1	07/07/2017 19:37	WG996553
1,2-Dichlorobenzene	ND		1.00	1	07/07/2017 19:37	WG996553
1,3-Dichlorobenzene	ND		1.00	1	07/07/2017 19:37	WG996553
1,4-Dichlorobenzene	ND		1.00	1	07/07/2017 19:37	WG996553
Dichlorodifluoromethane	ND		5.00	1	07/07/2017 19:37	WG996553
1,1-Dichloroethane	ND		1.00	1	07/07/2017 19:37	WG996553
1,2-Dichloroethane	ND		1.00	1	07/07/2017 19:37	WG996553
1,1-Dichloroethene	ND		1.00	1	07/07/2017 19:37	WG996553
cis-1,2-Dichloroethene	ND		1.00	1	07/07/2017 19:37	WG996553
trans-1,2-Dichloroethene	ND		1.00	1	07/07/2017 19:37	WG996553
1,2-Dichloropropane	ND		1.00	1	07/07/2017 19:37	WG996553
1,1-Dichloropropene	ND		1.00	1	07/07/2017 19:37	WG996553
1,3-Dichloropropane	ND		1.00	1	07/07/2017 19:37	WG996553
cis-1,3-Dichloropropene	ND		1.00	1	07/07/2017 19:37	WG996553
trans-1,3-Dichloropropene	ND		1.00	1	07/07/2017 19:37	WG996553
2,2-Dichloropropane	ND		1.00	1	07/07/2017 19:37	WG996553
Di-isopropyl ether	ND		1.00	1	07/07/2017 19:37	WG996553
Ethylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
Hexachloro-1,3-butadiene	ND		1.00	1	07/07/2017 19:37	WG996553
Isopropylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
p-Isopropyltoluene	ND		1.00	1	07/07/2017 19:37	WG996553
2-Butanone (MEK)	ND		10.0	1	07/07/2017 19:37	WG996553
Methylene Chloride	ND		5.00	1	07/07/2017 19:37	WG996553
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/07/2017 19:37	WG996553
Methyl tert-butyl ether	ND		1.00	1	07/07/2017 19:37	WG996553
Naphthalene	ND		5.00	1	07/07/2017 19:37	WG996553
n-Propylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
Styrene	ND		1.00	1	07/07/2017 19:37	WG996553
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/07/2017 19:37	WG996553
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/07/2017 19:37	WG996553
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/07/2017 19:37	WG996553
Tetrachloroethene	52.1		1.00	1	07/07/2017 19:37	WG996553
Toluene	ND		1.00	1	07/07/2017 19:37	WG996553
1,2,3-Trichlorobenzene	ND		1.00	1	07/07/2017 19:37	WG996553
1,2,4-Trichlorobenzene	ND		1.00	1	07/07/2017 19:37	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	07/07/2017 19:37	WG996553
1,1,2-Trichloroethane	ND		1.00	1	07/07/2017 19:37	WG996553
Trichloroethene	ND		1.00	1	07/07/2017 19:37	WG996553
Trichlorofluoromethane	ND		5.00	1	07/07/2017 19:37	WG996553
1,2,3-Trichloropropane	ND		2.50	1	07/07/2017 19:37	WG996553
1,2,4-Trimethylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
1,2,3-Trimethylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
1,3,5-Trimethylbenzene	ND		1.00	1	07/07/2017 19:37	WG996553
Vinyl chloride	ND		1.00	1	07/07/2017 19:37	WG996553
Xylenes, Total	ND		3.00	1	07/07/2017 19:37	WG996553
(S) Toluene-d8	101		80.0-120		07/07/2017 19:37	WG996553
(S) Dibromofluoromethane	92.7		76.0-123		07/07/2017 19:37	WG996553
(S) 4-Bromofluorobenzene	103		80.0-120		07/07/2017 19:37	WG996553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	J3	50.0	1	07/07/2017 20:01	WG996553
Acrolein	ND		50.0	1	07/07/2017 20:01	WG996553
Acrylonitrile	ND		10.0	1	07/07/2017 20:01	WG996553
Benzene	ND		1.00	1	07/07/2017 20:01	WG996553
Bromobenzene	ND		1.00	1	07/07/2017 20:01	WG996553
Bromodichloromethane	ND		1.00	1	07/07/2017 20:01	WG996553
Bromoform	ND		1.00	1	07/07/2017 20:01	WG996553
Bromomethane	ND		5.00	1	07/07/2017 20:01	WG996553
n-Butylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
sec-Butylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
tert-Butylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
Carbon tetrachloride	ND		1.00	1	07/07/2017 20:01	WG996553
Chlorobenzene	ND		1.00	1	07/07/2017 20:01	WG996553
Chlorodibromomethane	ND		1.00	1	07/07/2017 20:01	WG996553
Chloroethane	ND		5.00	1	07/07/2017 20:01	WG996553
Chloroform	ND		5.00	1	07/07/2017 20:01	WG996553
Chloromethane	ND		2.50	1	07/07/2017 20:01	WG996553
2-Chlorotoluene	ND		1.00	1	07/07/2017 20:01	WG996553
4-Chlorotoluene	ND		1.00	1	07/07/2017 20:01	WG996553
1,2-Dibromo-3-Chloropropane	ND		5.00	1	07/07/2017 20:01	WG996553
1,2-Dibromoethane	ND		1.00	1	07/07/2017 20:01	WG996553
Dibromomethane	ND		1.00	1	07/07/2017 20:01	WG996553
1,2-Dichlorobenzene	ND		1.00	1	07/07/2017 20:01	WG996553
1,3-Dichlorobenzene	ND		1.00	1	07/07/2017 20:01	WG996553
1,4-Dichlorobenzene	ND		1.00	1	07/07/2017 20:01	WG996553
Dichlorodifluoromethane	ND		5.00	1	07/07/2017 20:01	WG996553
1,1-Dichloroethane	ND		1.00	1	07/07/2017 20:01	WG996553
1,2-Dichloroethane	ND		1.00	1	07/07/2017 20:01	WG996553
1,1-Dichloroethene	ND		1.00	1	07/07/2017 20:01	WG996553
cis-1,2-Dichloroethene	1.45		1.00	1	07/07/2017 20:01	WG996553
trans-1,2-Dichloroethene	ND		1.00	1	07/07/2017 20:01	WG996553
1,2-Dichloropropane	ND		1.00	1	07/07/2017 20:01	WG996553
1,1-Dichloropropene	ND		1.00	1	07/07/2017 20:01	WG996553
1,3-Dichloropropane	ND		1.00	1	07/07/2017 20:01	WG996553
cis-1,3-Dichloropropene	ND		1.00	1	07/07/2017 20:01	WG996553
trans-1,3-Dichloropropene	ND		1.00	1	07/07/2017 20:01	WG996553
2,2-Dichloropropane	ND		1.00	1	07/07/2017 20:01	WG996553
Di-isopropyl ether	ND		1.00	1	07/07/2017 20:01	WG996553
Ethylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
Hexachloro-1,3-butadiene	ND		1.00	1	07/07/2017 20:01	WG996553
Isopropylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
p-Isopropyltoluene	ND		1.00	1	07/07/2017 20:01	WG996553
2-Butanone (MEK)	ND		10.0	1	07/07/2017 20:01	WG996553
Methylene Chloride	ND		5.00	1	07/07/2017 20:01	WG996553
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	07/07/2017 20:01	WG996553
Methyl tert-butyl ether	ND		1.00	1	07/07/2017 20:01	WG996553
Naphthalene	ND		5.00	1	07/07/2017 20:01	WG996553
n-Propylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
Styrene	ND		1.00	1	07/07/2017 20:01	WG996553
1,1,1,2-Tetrachloroethane	ND		1.00	1	07/07/2017 20:01	WG996553
1,1,2,2-Tetrachloroethane	ND		1.00	1	07/07/2017 20:01	WG996553
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	07/07/2017 20:01	WG996553
Tetrachloroethene	6.49		1.00	1	07/07/2017 20:01	WG996553
Toluene	ND		1.00	1	07/07/2017 20:01	WG996553
1,2,3-Trichlorobenzene	ND		1.00	1	07/07/2017 20:01	WG996553
1,2,4-Trichlorobenzene	ND		1.00	1	07/07/2017 20:01	WG996553

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	07/07/2017 20:01	WG996553
1,1,2-Trichloroethane	ND		1.00	1	07/07/2017 20:01	WG996553
Trichloroethene	ND		1.00	1	07/07/2017 20:01	WG996553
Trichlorofluoromethane	ND		5.00	1	07/07/2017 20:01	WG996553
1,2,3-Trichloropropane	ND		2.50	1	07/07/2017 20:01	WG996553
1,2,4-Trimethylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
1,2,3-Trimethylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
1,3,5-Trimethylbenzene	ND		1.00	1	07/07/2017 20:01	WG996553
Vinyl chloride	ND		1.00	1	07/07/2017 20:01	WG996553
Xylenes, Total	ND		3.00	1	07/07/2017 20:01	WG996553
(S) Toluene-d8	99.3		80.0-120		07/07/2017 20:01	WG996553
(S) Dibromofluoromethane	92.6		76.0-123		07/07/2017 20:01	WG996553
(S) 4-Bromofluorobenzene	106		80.0-120		07/07/2017 20:01	WG996553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3231603-3 07/07/17 10:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		10.0	50.0
Acrolein	U		8.87	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromobenzene	U		0.352	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
2-Chlorotoluene	U		0.375	1.00
4-Chlorotoluene	U		0.351	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
1,1-Dichloropropene	U		0.352	1.00
1,3-Dichloropropane	U		0.366	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
2,2-Dichloropropane	U		0.321	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00
Hexachloro-1,3-butadiene	U		0.256	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3231603-3 07/07/17 10:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
n-Propylbenzene	U		0.349	1.00
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
Tetrachloroethene	U		0.372	1.00
Toluene	U		0.412	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
Trichloroethene	U		0.398	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
1,2,3-Trimethylbenzene	U		0.321	1.00
1,2,4-Trimethylbenzene	U		0.373	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Vinyl chloride	U		0.259	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	91.0			76.0-123
(S) 4-Bromofluorobenzene	106			80.0-120

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3231603-1 07/07/17 08:53 • (LCSD) R3231603-2 07/07/17 09:17

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acetone	125	64.2	100	51.3	80.2	10.0-160		J3	43.9	23
Acrolein	125	125	131	100	105	10.0-160			4.96	20
Acrylonitrile	125	131	126	105	101	60.0-142			3.49	20
Benzene	25.0	22.6	22.6	90.4	90.6	69.0-123			0.230	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3231603-1 07/07/17 08:53 • (LCSD) R3231603-2 07/07/17 09:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	25.0	23.3	23.0	93.2	92.0	79.0-120			1.23	20
Bromodichloromethane	25.0	23.7	23.8	94.7	95.1	76.0-120			0.470	20
Bromoform	25.0	27.2	26.7	109	107	67.0-132			1.86	20
Bromomethane	25.0	14.7	14.5	58.7	58.1	18.0-160			0.980	20
n-Butylbenzene	25.0	22.7	23.4	90.9	93.7	72.0-126			3.05	20
sec-Butylbenzene	25.0	22.4	22.7	89.6	90.9	74.0-121			1.43	20
tert-Butylbenzene	25.0	22.2	22.6	88.7	90.3	75.0-122			1.75	20
Carbon tetrachloride	25.0	20.1	20.1	80.3	80.6	63.0-122			0.360	20
Chlorobenzene	25.0	22.0	21.0	88.2	84.1	79.0-121			4.74	20
Chlorodibromomethane	25.0	23.2	23.2	92.7	93.0	75.0-125			0.310	20
Chloroethane	25.0	23.3	24.2	93.2	96.8	47.0-152			3.73	20
Chloroform	25.0	21.2	21.2	85.0	84.9	72.0-121			0.0500	20
Chloromethane	25.0	25.5	26.8	102	107	48.0-139			4.67	20
2-Chlorotoluene	25.0	21.8	22.3	87.2	89.3	74.0-122			2.40	20
4-Chlorotoluene	25.0	23.1	23.6	92.2	94.3	79.0-120			2.21	20
1,2-Dibromo-3-Chloropropane	25.0	27.1	24.6	108	98.2	64.0-127			9.92	20
1,2-Dibromoethane	25.0	23.7	23.2	95.0	92.9	77.0-123			2.17	20
Dibromomethane	25.0	22.7	22.6	90.8	90.6	78.0-120			0.170	20
1,2-Dichlorobenzene	25.0	24.6	24.4	98.4	97.7	80.0-120			0.790	20
1,3-Dichlorobenzene	25.0	23.8	23.6	95.2	94.5	72.0-123			0.680	20
1,4-Dichlorobenzene	25.0	21.6	21.9	86.3	87.7	77.0-120			1.65	20
Dichlorodifluoromethane	25.0	22.9	23.6	91.7	94.3	49.0-155			2.71	20
1,1-Dichloroethane	25.0	23.2	23.3	92.9	93.2	70.0-126			0.320	20
1,2-Dichloroethane	25.0	21.9	21.7	87.5	86.7	67.0-126			0.980	20
1,1-Dichloroethene	25.0	24.6	23.9	98.2	95.5	64.0-129			2.77	20
cis-1,2-Dichloroethene	25.0	21.1	21.9	84.3	87.5	73.0-120			3.81	20
trans-1,2-Dichloroethene	25.0	23.3	22.8	93.1	91.1	71.0-121			2.19	20
1,2-Dichloropropane	25.0	25.2	26.0	101	104	75.0-125			3.05	20
1,1-Dichloropropene	25.0	22.0	22.2	87.9	88.8	71.0-129			1.04	20
1,3-Dichloropropane	25.0	24.3	23.9	97.0	95.5	80.0-121			1.60	20
cis-1,3-Dichloropropene	25.0	22.0	21.7	87.9	86.8	79.0-123			1.28	20
trans-1,3-Dichloropropene	25.0	22.7	23.4	90.8	93.7	74.0-127			3.06	20
2,2-Dichloropropane	25.0	22.4	22.8	89.6	91.3	60.0-125			1.88	20
Di-isopropyl ether	25.0	25.7	26.6	103	107	59.0-133			3.47	20
Ethylbenzene	25.0	22.5	22.6	90.2	90.5	77.0-120			0.310	20
Hexachloro-1,3-butadiene	25.0	32.2	30.9	129	124	64.0-131			4.33	20
Isopropylbenzene	25.0	23.2	23.6	92.9	94.2	75.0-120			1.41	20
p-Isopropyltoluene	25.0	21.2	21.3	85.0	85.1	74.0-126			0.210	20
2-Butanone (MEK)	125	90.4	106	72.3	84.5	37.0-158			15.5	20
Methylene Chloride	25.0	23.9	24.1	95.4	96.6	66.0-121			1.16	20

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3231603-1 07/07/17 08:53 • (LCSD) R3231603-2 07/07/17 09:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	125	121	118	96.4	94.4	59.0-143			2.14	20
Methyl tert-butyl ether	25.0	25.1	24.6	100	98.5	64.0-123			1.70	20
Naphthalene	25.0	21.9	23.2	87.5	93.0	62.0-128			6.08	20
n-Propylbenzene	25.0	22.3	22.6	89.2	90.5	79.0-120			1.48	20
Styrene	25.0	23.1	22.7	92.3	91.0	78.0-124			1.48	20
1,1,1,2-Tetrachloroethane	25.0	23.4	23.3	93.7	93.0	75.0-122			0.660	20
1,1,2,2-Tetrachloroethane	25.0	26.0	25.7	104	103	71.0-122			1.09	20
Tetrachloroethene	25.0	25.5	24.6	102	98.4	70.0-127			3.51	20
Toluene	25.0	23.3	22.6	93.4	90.2	77.0-120			3.45	20
1,1,2-Trichlorotrifluoroethane	25.0	25.5	24.7	102	98.8	61.0-136			3.25	20
1,2,3-Trichlorobenzene	25.0	25.3	26.2	101	105	61.0-133			3.38	20
1,2,4-Trichlorobenzene	25.0	24.6	26.0	98.5	104	69.0-129			5.26	20
1,1,1-Trichloroethane	25.0	21.0	21.5	84.0	86.1	68.0-122			2.53	20
1,1,2-Trichloroethane	25.0	23.7	23.7	94.7	94.7	78.0-120			0.0400	20
Trichloroethene	25.0	23.6	22.6	94.4	90.5	78.0-120			4.23	20
Trichlorofluoromethane	25.0	17.1	17.9	68.4	71.6	56.0-137			4.49	20
1,2,3-Trichloropropane	25.0	22.9	23.4	91.7	93.5	72.0-124			1.91	20
1,2,3-Trimethylbenzene	25.0	22.3	22.4	89.2	89.6	75.0-120			0.490	20
1,2,4-Trimethylbenzene	25.0	22.8	23.3	91.3	93.0	75.0-120			1.86	20
1,3,5-Trimethylbenzene	25.0	22.6	22.9	90.3	91.7	75.0-120			1.56	20
Vinyl chloride	25.0	24.6	26.2	98.5	105	64.0-133			6.23	20
Xylenes, Total	75.0	69.6	68.4	92.8	91.2	77.0-120			1.74	20
(S) Toluene-d8				103	100	80.0-120				
(S) Dibromofluoromethane				90.2	92.0	76.0-123				
(S) 4-Bromofluorobenzene				101	103	80.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J3	The associated batch QC was outside the established quality control range for precision.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.



State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Genesis Project, Inc. - QT GA

1258 Concord Road
Suite 200
Smarna GA 30080

Report to:
Matthew McDuffie / Mitch Guthrie

Billing Information:
Attn: Accounts Payable
4705 S. 129th E. Ave.
Tulsa, OK 74134

Email To: mmcduffie@genproject.com

Project Description: **QT-715-703R**
City/State Collected: **Norcross GA**

Phone: **770-713-0666**
Fax:
Client Project #
Lab Project # **QTGENSIS-QT715-703R**

Collected by (print): **John Love**
Site/Facility ID # **Beaver Run Rd, POWDER SPRINGS RD,**
P.O. #

Collected by (signature): *[Signature]*
Rush? (Lab MUST Be Notified)
Date Results Needed: **Standard**

Immediately Racked on Ice **N** **Y** **X**
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Pres Chk	Analysis / Container / Preservative
MW-1	Grab	GW		6/28/17	1225	2	X	
MW-2		GW			1350	2	X	
MW-3		GW			1320	2	X	
MW-4		GW		6/28/17	1610	2	X	
MW-5		GW		6/29/17	1420	2	X	
MW-8		GW		6/29/17	1250	2	X	
MW-9		GW		6/28/17	1555	2	X	
MW-10	Grab	GW		6/28/17	1135	2	X	
		GW				2	X	
		GW				2	X	

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

Samples returned via:
 UPS FedEx Courier

Tracking # **7372 1960 4984**

Relinquished by: (Signature) *[Signature]*
Date: **6/29/2017**
Time: **1657**

Date: _____ Time: _____
Received by: (Signature) _____
Date: _____ Time: _____

Received by: (Signature) *[Signature]*
Date: **6/30/17**
Time: **8:45**

Trip Blank Received: No Yes
HCL / MeOH TBR
Temp: **1.75W °C**
Bottles Received: **16**

Sample Receipt Checklist	
COC Seal Present/Intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
COC Signed/Accurate:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Bottles arrive intact:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Correct bottles used:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Sufficient volume sent:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
VOA Zero Headspace:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N
Preservation Correct/Checked:	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N

If preservation required by Login: Date/Time
Hold: _____
Condition: **NCF / OK**

Total VOCs
V8260BTEXM 40MIAMB-HCl

Chain of Custody Page 1 of 1



ESC
L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# **L919571**
C009
Acctnum: **QTGENSIS**
Template: **T117642**
Prelogin: **P606721**
TSR: **526 - Chris McCord**
PB: **6/19/17**
Shipped Via: **FedEx Ground**

Remarks	Sample # (lab only)
	01
	02
	03
	04
	05
	06
	07
	08

Genesis Project, Inc. - QT GA

Sample Delivery Group: L945348
Samples Received: 10/20/2017
Project Number:
Description: QT 703R Norcross, GA

Report To: Mitch Guthrie
32 N. Main Street
Suite 200
Belmont, NC 28012

Entire Report Reviewed By:



Chris McCord
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	¹Cp
Tc: Table of Contents	2	²Tc
Ss: Sample Summary	3	³Ss
Cn: Case Narrative	4	⁴Cn
Sr: Sample Results	5	⁵Sr
MW-6 15' L945348-01	5	
MW-7 15' L945348-02	7	
Qc: Quality Control Summary	9	⁶Qc
Total Solids by Method 2540 G-2011	9	
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Gl: Glossary of Terms	16	⁷Gl
Al: Accreditations & Locations	17	⁸Al
Sc: Sample Chain of Custody	18	⁹Sc

SAMPLE SUMMARY



MW-6 15' L945348-01 Solid

Collected by: Mitch Guthrie
 Collected date/time: 10/19/17 10:00
 Received date/time: 10/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1035764	1	10/26/17 09:44	10/26/17 10:05	JD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1034260	1	10/19/17 10:00	10/22/17 04:31	BMB

¹Cp

²Tc

³Ss

MW-7 15' L945348-02 Solid

Collected by: Mitch Guthrie
 Collected date/time: 10/19/17 14:30
 Received date/time: 10/20/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1035764	1	10/26/17 09:44	10/26/17 10:05	JD
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1034260	1	10/19/17 14:30	10/22/17 04:52	BMB

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Chris McCord
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/19/17 10:00

L945348

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.8		1	10/26/2017 10:05	WG1035764

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0545	1	10/22/2017 04:31	WG1034260
Acrylonitrile	ND		0.0109	1	10/22/2017 04:31	WG1034260
Benzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Bromobenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Bromodichloromethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
Bromoform	ND		0.00109	1	10/22/2017 04:31	WG1034260
Bromomethane	ND		0.00545	1	10/22/2017 04:31	WG1034260
n-Butylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
sec-Butylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
tert-Butylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Carbon tetrachloride	ND		0.00109	1	10/22/2017 04:31	WG1034260
Chlorobenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Chlorodibromomethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
Chloroethane	ND		0.00545	1	10/22/2017 04:31	WG1034260
Chloroform	ND		0.00545	1	10/22/2017 04:31	WG1034260
Chloromethane	ND		0.00272	1	10/22/2017 04:31	WG1034260
2-Chlorotoluene	ND		0.00109	1	10/22/2017 04:31	WG1034260
4-Chlorotoluene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,2-Dibromo-3-Chloropropane	ND		0.00545	1	10/22/2017 04:31	WG1034260
1,2-Dibromoethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
Dibromomethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,2-Dichlorobenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,3-Dichlorobenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,4-Dichlorobenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Dichlorodifluoromethane	ND		0.00545	1	10/22/2017 04:31	WG1034260
1,1-Dichloroethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,2-Dichloroethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,1-Dichloroethene	ND		0.00109	1	10/22/2017 04:31	WG1034260
cis-1,2-Dichloroethene	ND		0.00109	1	10/22/2017 04:31	WG1034260
trans-1,2-Dichloroethene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,2-Dichloropropane	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,1-Dichloropropene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,3-Dichloropropane	ND		0.00109	1	10/22/2017 04:31	WG1034260
cis-1,3-Dichloropropene	ND		0.00109	1	10/22/2017 04:31	WG1034260
trans-1,3-Dichloropropene	ND		0.00109	1	10/22/2017 04:31	WG1034260
2,2-Dichloropropane	ND		0.00109	1	10/22/2017 04:31	WG1034260
Di-isopropyl ether	ND		0.00109	1	10/22/2017 04:31	WG1034260
Ethylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Hexachloro-1,3-butadiene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Isopropylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
p-Isopropyltoluene	ND		0.00109	1	10/22/2017 04:31	WG1034260
2-Butanone (MEK)	ND		0.0109	1	10/22/2017 04:31	WG1034260
Methylene Chloride	ND		0.00545	1	10/22/2017 04:31	WG1034260
4-Methyl-2-pentanone (MIBK)	ND		0.0109	1	10/22/2017 04:31	WG1034260
Methyl tert-butyl ether	ND		0.00109	1	10/22/2017 04:31	WG1034260
Naphthalene	ND		0.00545	1	10/22/2017 04:31	WG1034260
n-Propylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Styrene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,1,1,2-Tetrachloroethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,1,2,2-Tetrachloroethane	ND		0.00109	1	10/22/2017 04:31	WG1034260

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
Tetrachloroethene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Toluene	ND		0.00545	1	10/22/2017 04:31	WG1034260
1,2,3-Trichlorobenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,2,4-Trichlorobenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,1,1-Trichloroethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,1,2-Trichloroethane	ND		0.00109	1	10/22/2017 04:31	WG1034260
Trichloroethene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Trichlorofluoromethane	ND		0.00545	1	10/22/2017 04:31	WG1034260
1,2,3-Trichloropropane	ND		0.00272	1	10/22/2017 04:31	WG1034260
1,2,4-Trimethylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,2,3-Trimethylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
1,3,5-Trimethylbenzene	ND		0.00109	1	10/22/2017 04:31	WG1034260
Vinyl chloride	ND		0.00109	1	10/22/2017 04:31	WG1034260
Xylenes, Total	ND		0.00327	1	10/22/2017 04:31	WG1034260
(S) Toluene-d8	93.8		80.0-120		10/22/2017 04:31	WG1034260
(S) Dibromofluoromethane	113		74.0-131		10/22/2017 04:31	WG1034260
(S) 4-Bromofluorobenzene	96.9		64.0-132		10/22/2017 04:31	WG1034260

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/19/17 14:30

L945348

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	70.9		1	10/26/2017 10:05	WG1035764

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry)	Qualifier	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg		date / time	
Acetone	ND		0.0705	1	10/22/2017 04:52	WG1034260
Acrylonitrile	ND		0.0141	1	10/22/2017 04:52	WG1034260
Benzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Bromobenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Bromodichloromethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
Bromoform	ND		0.00141	1	10/22/2017 04:52	WG1034260
Bromomethane	ND		0.00705	1	10/22/2017 04:52	WG1034260
n-Butylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
sec-Butylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
tert-Butylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Carbon tetrachloride	ND		0.00141	1	10/22/2017 04:52	WG1034260
Chlorobenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Chlorodibromomethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
Chloroethane	ND		0.00705	1	10/22/2017 04:52	WG1034260
Chloroform	ND		0.00705	1	10/22/2017 04:52	WG1034260
Chloromethane	ND		0.00352	1	10/22/2017 04:52	WG1034260
2-Chlorotoluene	ND		0.00141	1	10/22/2017 04:52	WG1034260
4-Chlorotoluene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,2-Dibromo-3-Chloropropane	ND		0.00705	1	10/22/2017 04:52	WG1034260
1,2-Dibromoethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
Dibromomethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,2-Dichlorobenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,3-Dichlorobenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,4-Dichlorobenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Dichlorodifluoromethane	ND		0.00705	1	10/22/2017 04:52	WG1034260
1,1-Dichloroethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,2-Dichloroethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,1-Dichloroethene	ND		0.00141	1	10/22/2017 04:52	WG1034260
cis-1,2-Dichloroethene	ND		0.00141	1	10/22/2017 04:52	WG1034260
trans-1,2-Dichloroethene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,2-Dichloropropane	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,1-Dichloropropene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,3-Dichloropropane	ND		0.00141	1	10/22/2017 04:52	WG1034260
cis-1,3-Dichloropropene	ND		0.00141	1	10/22/2017 04:52	WG1034260
trans-1,3-Dichloropropene	ND		0.00141	1	10/22/2017 04:52	WG1034260
2,2-Dichloropropane	ND		0.00141	1	10/22/2017 04:52	WG1034260
Di-isopropyl ether	ND		0.00141	1	10/22/2017 04:52	WG1034260
Ethylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Hexachloro-1,3-butadiene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Isopropylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
p-Isopropyltoluene	ND		0.00141	1	10/22/2017 04:52	WG1034260
2-Butanone (MEK)	ND		0.0141	1	10/22/2017 04:52	WG1034260
Methylene Chloride	ND		0.00705	1	10/22/2017 04:52	WG1034260
4-Methyl-2-pentanone (MIBK)	ND		0.0141	1	10/22/2017 04:52	WG1034260
Methyl tert-butyl ether	ND		0.00141	1	10/22/2017 04:52	WG1034260
Naphthalene	ND		0.00705	1	10/22/2017 04:52	WG1034260
n-Propylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Styrene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,1,1,2-Tetrachloroethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,1,2,2-Tetrachloroethane	ND		0.00141	1	10/22/2017 04:52	WG1034260

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result (dry) mg/kg	Qualifier	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
Tetrachloroethene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Toluene	ND		0.00705	1	10/22/2017 04:52	WG1034260
1,2,3-Trichlorobenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,2,4-Trichlorobenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,1,1-Trichloroethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,1,2-Trichloroethane	ND		0.00141	1	10/22/2017 04:52	WG1034260
Trichloroethene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Trichlorofluoromethane	ND		0.00705	1	10/22/2017 04:52	WG1034260
1,2,3-Trichloropropane	ND		0.00352	1	10/22/2017 04:52	WG1034260
1,2,4-Trimethylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,2,3-Trimethylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
1,3,5-Trimethylbenzene	ND		0.00141	1	10/22/2017 04:52	WG1034260
Vinyl chloride	ND		0.00141	1	10/22/2017 04:52	WG1034260
Xylenes, Total	ND		0.00423	1	10/22/2017 04:52	WG1034260
(S) Toluene-d8	94.0		80.0-120		10/22/2017 04:52	WG1034260
(S) Dibromofluoromethane	109		74.0-131		10/22/2017 04:52	WG1034260
(S) 4-Bromofluorobenzene	96.6		64.0-132		10/22/2017 04:52	WG1034260

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3260921-1 10/26/17 10:05

Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
	%		%	%
Total Solids	0			

¹Cp

²Tc

³Ss

L945360-04 Original Sample (OS) • Duplicate (DUP)

(OS) L945360-04 10/26/17 10:05 • (DUP) R3260921-3 10/26/17 10:05

Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
	%	%		%		%
Total Solids	78.3	78.6	1	0		5

⁴Cn

⁵Sr

Laboratory Control Sample (LCS)

(LCS) R3260921-2 10/26/17 10:05

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	%	%	%	%	
Total Solids	50.0	50.0	100	85-115	

⁶Qc

⁷Gl

⁸Al

⁹Sc



Method Blank (MB)

(MB) R3259493-2 10/21/17 22:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Isopropylbenzene	U		0.000243	0.00100

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3259493-2 10/21/17 22:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	99.6			80.0-120
(S) Dibromofluoromethane	101			74.0-131
(S) 4-Bromofluorobenzene	97.1			64.0-132

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Laboratory Control Sample (LCS)

(LCS) R3259493-1 10/21/17 21:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	0.125	0.138	110	11.0-160	
Acrylonitrile	0.125	0.129	103	61.0-143	
Benzene	0.0250	0.0246	98.6	71.0-124	
Bromobenzene	0.0250	0.0240	96.0	78.0-120	
Bromodichloromethane	0.0250	0.0252	101	75.0-120	



Laboratory Control Sample (LCS)

(LCS) R3259493-1 10/21/17 21:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Bromoform	0.0250	0.0290	116	65.0-133	
Bromomethane	0.0250	0.0262	105	26.0-160	
n-Butylbenzene	0.0250	0.0295	118	73.0-126	
sec-Butylbenzene	0.0250	0.0280	112	75.0-121	
tert-Butylbenzene	0.0250	0.0276	110	74.0-122	
Carbon tetrachloride	0.0250	0.0239	95.7	66.0-123	
Chlorobenzene	0.0250	0.0233	93.3	79.0-121	
Chlorodibromomethane	0.0250	0.0260	104	74.0-128	
Chloroethane	0.0250	0.0263	105	51.0-147	
Chloroform	0.0250	0.0252	101	73.0-123	
Chloromethane	0.0250	0.0243	97.1	51.0-138	
2-Chlorotoluene	0.0250	0.0252	101	72.0-124	
4-Chlorotoluene	0.0250	0.0255	102	78.0-120	
1,2-Dibromo-3-Chloropropane	0.0250	0.0242	96.7	65.0-126	
1,2-Dibromoethane	0.0250	0.0229	91.7	78.0-122	
Dibromomethane	0.0250	0.0243	97.0	79.0-120	
1,2-Dichlorobenzene	0.0250	0.0264	106	80.0-120	
1,3-Dichlorobenzene	0.0250	0.0258	103	72.0-123	
1,4-Dichlorobenzene	0.0250	0.0264	106	77.0-120	
Dichlorodifluoromethane	0.0250	0.0284	114	49.0-155	
1,1-Dichloroethane	0.0250	0.0259	104	70.0-128	
1,2-Dichloroethane	0.0250	0.0245	97.9	69.0-128	
1,1-Dichloroethene	0.0250	0.0238	95.3	63.0-131	
cis-1,2-Dichloroethene	0.0250	0.0251	100	74.0-123	
trans-1,2-Dichloroethene	0.0250	0.0241	96.4	72.0-122	
1,2-Dichloropropane	0.0250	0.0247	99.0	75.0-126	
1,1-Dichloropropene	0.0250	0.0256	102	72.0-130	
1,3-Dichloropropane	0.0250	0.0227	90.8	80.0-121	
cis-1,3-Dichloropropene	0.0250	0.0246	98.5	80.0-125	
trans-1,3-Dichloropropene	0.0250	0.0254	101	75.0-129	
2,2-Dichloropropane	0.0250	0.0229	91.5	60.0-129	
Di-isopropyl ether	0.0250	0.0257	103	62.0-133	
Ethylbenzene	0.0250	0.0237	94.9	77.0-120	
Hexachloro-1,3-butadiene	0.0250	0.0318	127	68.0-128	
Isopropylbenzene	0.0250	0.0269	107	75.0-120	
p-Isopropyltoluene	0.0250	0.0281	112	74.0-125	
2-Butanone (MEK)	0.125	0.144	115	37.0-159	
Methylene Chloride	0.0250	0.0226	90.2	67.0-123	
4-Methyl-2-pentanone (MIBK)	0.125	0.121	96.5	60.0-144	
Methyl tert-butyl ether	0.0250	0.0252	101	66.0-125	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Laboratory Control Sample (LCS)

(LCS) R3259493-1 10/21/17 21:23

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	<u>LCS Qualifier</u>
Naphthalene	0.0250	0.0269	108	64.0-125	
n-Propylbenzene	0.0250	0.0270	108	78.0-120	
Styrene	0.0250	0.0270	108	78.0-124	
1,1,1,2-Tetrachloroethane	0.0250	0.0247	98.9	74.0-124	
1,1,2,2-Tetrachloroethane	0.0250	0.0254	102	73.0-120	
Tetrachloroethene	0.0250	0.0229	91.6	70.0-127	
Toluene	0.0250	0.0232	92.9	77.0-120	
1,1,2-Trichlorotrifluoroethane	0.0250	0.0195	77.9	64.0-135	
1,2,3-Trichlorobenzene	0.0250	0.0271	108	68.0-126	
1,2,4-Trichlorobenzene	0.0250	0.0277	111	70.0-127	
1,1,1-Trichloroethane	0.0250	0.0238	95.4	69.0-125	
1,1,2-Trichloroethane	0.0250	0.0229	91.7	78.0-120	
Trichloroethene	0.0250	0.0233	93.0	79.0-120	
Trichlorofluoromethane	0.0250	0.0267	107	59.0-136	
1,2,3-Trichloropropane	0.0250	0.0263	105	73.0-124	
1,2,3-Trimethylbenzene	0.0250	0.0258	103	76.0-120	
1,2,4-Trimethylbenzene	0.0250	0.0270	108	75.0-120	
1,3,5-Trimethylbenzene	0.0250	0.0264	105	75.0-120	
Vinyl chloride	0.0250	0.0276	110	63.0-134	
Xylenes, Total	0.0750	0.0742	98.9	77.0-120	
(S) Toluene-d8			96.0	80.0-120	
(S) Dibromofluoromethane			101	74.0-131	
(S) 4-Bromofluorobenzene			96.0	64.0-132	

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

L945360-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L945360-05 10/22/17 05:14 • (MS) R3259493-3 10/22/17 06:38 • (MSD) R3259493-4 10/22/17 06:59

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Acetone	0.125	ND	1.87	2.10	59.9	67.1	25	10.0-160			11.3	36
Acrylonitrile	0.125	ND	3.16	3.32	101	106	25	14.0-160			4.90	33
Benzene	0.0250	ND	0.482	0.512	75.8	80.5	25	13.0-146			5.90	27
Bromobenzene	0.0250	ND	0.461	0.506	73.8	80.9	25	10.0-149			9.24	33
Bromodichloromethane	0.0250	ND	0.478	0.506	76.4	80.9	25	15.0-142			5.73	28
Bromoform	0.0250	ND	0.488	0.515	78.1	82.4	25	10.0-147			5.40	31
Bromomethane	0.0250	ND	0.442	0.478	70.7	76.5	25	10.0-160			7.89	32
n-Butylbenzene	0.0250	0.0265	0.607	0.652	92.9	100	25	10.0-154			7.12	37
sec-Butylbenzene	0.0250	0.0265	0.588	0.639	89.8	98.1	25	10.0-151			8.40	36
tert-Butylbenzene	0.0250	ND	0.564	0.615	89.4	97.5	25	10.0-152			8.61	35



L945360-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L945360-05 10/22/17 05:14 • (MS) R3259493-3 10/22/17 06:38 • (MSD) R3259493-4 10/22/17 06:59

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Carbon tetrachloride	0.0250	ND	0.416	0.466	66.5	74.5	25	13.0-140			11.4	30
Chlorobenzene	0.0250	ND	0.455	0.506	72.7	80.9	25	10.0-149			10.6	31
Chlorodibromomethane	0.0250	ND	0.478	0.530	76.5	84.8	25	12.0-147			10.2	29
Chloroethane	0.0250	ND	0.228	0.255	36.5	40.8	25	10.0-159			11.3	33
Chloroform	0.0250	ND	0.511	0.533	81.7	85.3	25	18.0-148			4.31	28
Chloromethane	0.0250	ND	0.377	0.407	60.4	65.2	25	10.0-146			7.70	29
2-Chlorotoluene	0.0250	ND	0.508	0.562	81.4	89.9	25	10.0-151			10.0	35
4-Chlorotoluene	0.0250	ND	0.492	0.542	78.7	86.8	25	10.0-150			9.81	35
1,2-Dibromo-3-Chloropropane	0.0250	ND	0.482	0.520	77.1	83.2	25	10.0-149			7.64	34
1,2-Dibromoethane	0.0250	ND	0.432	0.480	69.1	76.7	25	14.0-145			10.5	28
Dibromomethane	0.0250	ND	0.489	0.492	78.2	78.7	25	18.0-144			0.580	27
1,2-Dichlorobenzene	0.0250	ND	0.498	0.551	79.6	88.1	25	10.0-153			10.1	34
1,3-Dichlorobenzene	0.0250	ND	0.484	0.537	77.5	85.9	25	10.0-150			10.2	35
1,4-Dichlorobenzene	0.0250	ND	0.495	0.555	79.3	88.8	25	10.0-148			11.3	34
Dichlorodifluoromethane	0.0250	ND	0.415	0.502	66.4	80.4	25	10.0-160			19.0	30
1,1-Dichloroethane	0.0250	ND	0.514	0.540	82.2	86.4	25	19.0-148			4.89	28
1,2-Dichloroethane	0.0250	ND	0.475	0.520	76.0	83.1	25	17.0-147			8.96	27
1,1-Dichloroethene	0.0250	ND	0.458	0.530	73.3	84.9	25	10.0-150			14.7	31
cis-1,2-Dichloroethene	0.0250	ND	0.493	0.549	78.9	87.9	25	16.0-145			10.8	28
trans-1,2-Dichloroethene	0.0250	ND	0.464	0.493	74.3	79.0	25	11.0-142			6.14	29
1,2-Dichloropropane	0.0250	ND	0.475	0.519	76.0	83.1	25	17.0-148			8.99	28
1,1-Dichloropropene	0.0250	ND	0.486	0.524	77.7	83.8	25	10.0-150			7.48	30
1,3-Dichloropropane	0.0250	ND	0.435	0.486	69.6	77.8	25	16.0-148			11.1	27
cis-1,3-Dichloropropene	0.0250	ND	0.457	0.514	73.2	82.3	25	13.0-150			11.8	28
trans-1,3-Dichloropropene	0.0250	ND	0.448	0.524	71.7	83.8	25	10.0-152			15.6	29
2,2-Dichloropropane	0.0250	ND	0.403	0.467	64.5	74.8	25	16.0-143			14.8	30
Di-isopropyl ether	0.0250	ND	0.502	0.540	80.4	86.4	25	16.0-149			7.21	28
Ethylbenzene	0.0250	0.0353	0.502	0.551	74.7	82.4	25	10.0-147			9.21	31
Hexachloro-1,3-butadiene	0.0250	ND	0.599	0.665	95.8	106	25	10.0-154			10.4	40
Isopropylbenzene	0.0250	0.0267	0.547	0.589	83.3	90.0	25	10.0-147			7.41	33
p-Isopropyltoluene	0.0250	ND	0.590	0.634	92.4	99.5	25	10.0-156			7.32	37
2-Butanone (MEK)	0.125	ND	3.19	3.45	102	110	25	10.0-160			7.66	33
Methylene Chloride	0.0250	ND	0.456	0.484	73.0	77.4	25	16.0-139			5.87	29
4-Methyl-2-pentanone (MIBK)	0.125	ND	2.65	2.92	84.7	93.4	25	12.0-160			9.84	32
Methyl tert-butyl ether	0.0250	ND	0.503	0.526	80.5	84.2	25	21.0-145			4.47	29
Naphthalene	0.0250	ND	0.588	0.623	84.4	90.0	25	10.0-153			5.78	36
n-Propylbenzene	0.0250	0.0853	0.605	0.662	83.1	92.2	25	10.0-151			8.99	34
Styrene	0.0250	ND	0.545	0.575	87.2	92.0	25	10.0-155			5.38	34
1,1,1,2-Tetrachloroethane	0.0250	ND	0.456	0.525	72.9	83.9	25	10.0-147			14.0	30
1,1,2,2-Tetrachloroethane	0.0250	ND	0.436	0.466	69.8	74.5	25	10.0-155			6.51	31

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



L945360-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L945360-05 10/22/17 05:14 • (MS) R3259493-3 10/22/17 06:38 • (MSD) R3259493-4 10/22/17 06:59

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Tetrachloroethene	0.0250	ND	0.421	0.476	67.4	76.2	25	10.0-144			12.3	32
Toluene	0.0250	ND	0.452	0.520	68.5	79.4	25	10.0-144			14.0	28
1,1,2-Trichlorotrifluoroethane	0.0250	ND	0.433	0.475	69.3	76.1	25	10.0-153			9.34	33
1,2,3-Trichlorobenzene	0.0250	ND	0.556	0.595	88.9	95.2	25	10.0-153			6.83	40
1,2,4-Trichlorobenzene	0.0250	ND	0.561	0.599	89.7	95.8	25	10.0-156			6.53	40
1,1,1-Trichloroethane	0.0250	ND	0.442	0.470	70.7	75.2	25	18.0-145			6.21	29
1,1,2-Trichloroethane	0.0250	ND	0.436	0.488	69.8	78.0	25	12.0-151			11.1	28
Trichloroethene	0.0250	ND	0.485	0.522	77.6	83.5	25	11.0-148			7.33	29
Trichlorofluoromethane	0.0250	ND	0.351	0.362	56.2	57.9	25	10.0-157			3.05	34
1,2,3-Trichloropropane	0.0250	ND	0.494	0.550	79.0	88.0	25	10.0-154			10.8	32
1,2,3-Trimethylbenzene	0.0250	0.0372	0.580	0.641	86.9	96.7	25	10.0-150			10.1	33
1,2,4-Trimethylbenzene	0.0250	0.155	0.684	0.743	84.7	94.1	25	10.0-151			8.27	34
1,3,5-Trimethylbenzene	0.0250	0.0423	0.579	0.623	85.8	92.9	25	10.0-150			7.31	33
Vinyl chloride	0.0250	ND	0.383	0.440	61.3	70.3	25	10.0-150			13.8	29
Xylenes, Total	0.0750	0.111	1.52	1.71	75.4	85.3	25	10.0-150			11.6	31
(S) Toluene-d8					95.7	101		80.0-120				
(S) Dibromofluoromethane					102	100		74.0-131				
(S) 4-Bromofluorobenzene					96.7	98.9		64.0-132				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

OS: Non-target compounds too high to run at a lower dilution.



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier Description

The remainder of this page intentionally left blank, there are no qualifiers applied to this SDG.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.



State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

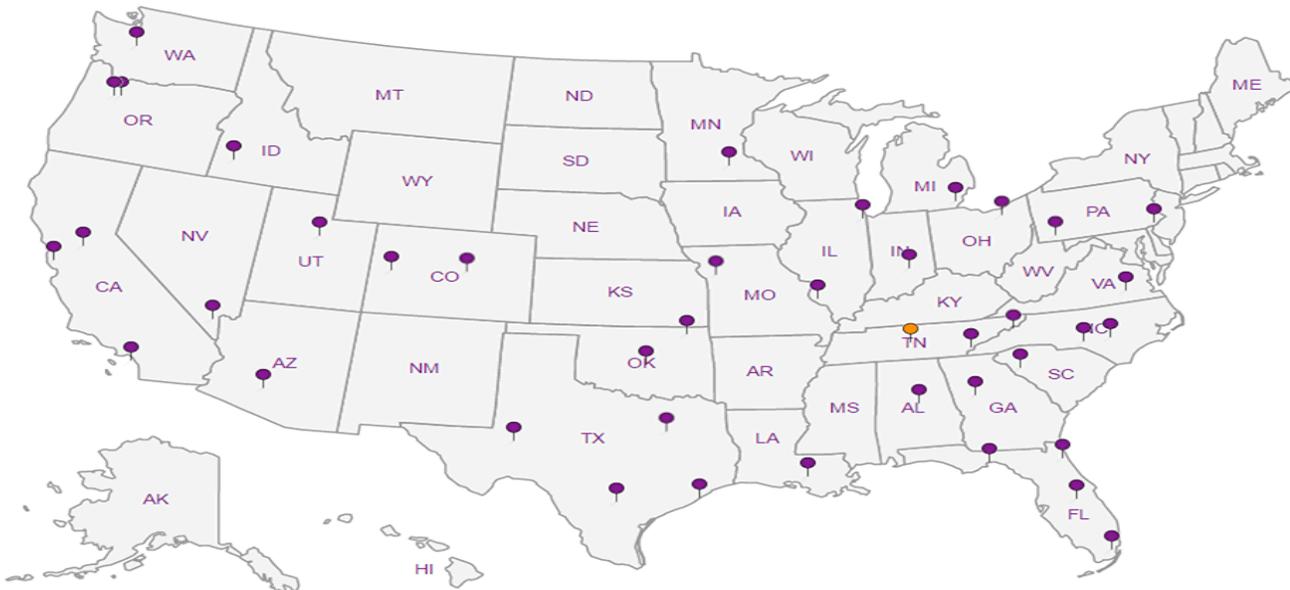
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



Genesis Project, Inc. - QT GA

32 N. Main Street
Suite 200
Rahmont NC 28012

Report to:
Matthew McDuffie

Project Description: **703R Norcross, GA**
QT 1082 Cornelius, NC

Phone: **704-461-8146**
Fax: **770-713-0666**

Collected by (print):
Mitch Guthrie

Collected by (signature):
Mitch Guthrie
Immediately
Packed on Ice N Y

Billing Information:

Attn: Accounts Payable
4705 S. 129th E. Ave.
Tulsa, OK 74134

Email To: **mmcduffie@genproject.com**

mguthrie@genproject.com

City/State
Collected:

Lab Project #
**QTGENSIS-QT1082-703R/
Former Pro Liner Service**

P.O. #

Quote #

Date Results Needed

P:es
Chk

Analysis / Container / Preservative

TS 40zClr-NoPres
V8260 40ml/NaHSO4/Syr/MeOH
VPHNC 40mlAmb/MeOH5ml/Syr
Total VOC's

Chain of Custody Page ___ of ___



LAB SCIENCE
a subsidiary of *PerkinElmer*

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# **945348**

G026

Acctnum: **QTGENSIS**

Template: **T127916**

Prelogin: **P618682**

TSR: **526 - Chris McCord**

PB: **09-13-17**

Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	TS 40zClr-NoPres	V8260 40ml/NaHSO4/Syr/MeOH	VPHNC 40mlAmb/MeOH5ml/Syr	Total VOC's	Remarks	Sample # (lab only)
MW-6	15'	G	SS	10-19-17	10:00am	5	X	X	X	X		01
MW-7	15'	G	SS	10-19-17	2:30pm	5	X	X	X	X		02
			SS			5	X	X	X			
			SS			5	X	X	X			
			SS			5	X	X	X			

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

*Standard Turn around
Total VOC's analysis*

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:

UPS FedEx Courier

Tracking # **747409305900**

Sample Receipt Checklist

COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VGA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by (Signature): *Mitch Guthrie*

Date: **10-19-17**

Time: **3:15pm**

Received by: (Signature)

Trip Blank Received: Yes / No
HCL / MeOH
TBR

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: **21°C** Bottles Received: **10**

if preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: **10-20-17** Time: **8:45**

Hold:

Condition
NCF 10

December 22, 2017

Genesis Project, Inc. - QT GA

Sample Delivery Group: L958833
Samples Received: 12/20/2017
Project Number:
Description: QT 703R
Site: 2185 BEAVER RUIN ROAD
Report To: Mitch Guthrie, PG
1258 Concord Road
Suite 200
Smyrna, GA 30080

Entire Report Reviewed By:



Jason Romer
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	2 Tc
Cn: Case Narrative	5	
Sr: Sample Results	6	3 Ss
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MW-2 L958833-02	8	4 Cn
MW-3 L958833-03	10	5 Sr
MW-4 L958833-04	12	
MW-5 L958833-05	14	6 Qc
MW-6 L958833-06	16	
MW-7 L958833-07	18	7 Gl
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SAMPLE SUMMARY



MW-1 L958833-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				CTW/JKL/WFM	12/19/17 15:15	12/20/17 09:00
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 11:40	12/21/17 11:40	JAH	

1 Cp

2 Tc

3 Ss

MW-2 L958833-02 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				CTW/JKL/WFM	12/19/17 15:05	12/20/17 09:00
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 11:57	12/21/17 11:57	JAH	

4 Cn

5 Sr

MW-3 L958833-03 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				CTW/JKL/WFM	12/19/17 14:40	12/20/17 09:00
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 12:14	12/21/17 12:14	JAH	

6 Qc

7 Gl

MW-4 L958833-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				CTW/JKL/WFM	12/19/17 12:55	12/20/17 09:00
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 12:30	12/21/17 12:30	JAH	

8 Al

9 Sc

MW-5 L958833-05 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				CTW/JKL/WFM	12/19/17 13:00	12/20/17 09:00
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 13:04	12/21/17 13:04	RAS	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	10	12/22/17 10:04	12/22/17 10:04	RAS	

MW-6 L958833-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				CTW/JKL/WFM	12/19/17 14:15	12/20/17 09:00
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 13:20	12/21/17 13:20	RAS	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/22/17 10:23	12/22/17 10:23	RAS	

MW-7 L958833-07 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				CTW/JKL/WFM	12/19/17 15:45	12/20/17 09:00
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 13:37	12/21/17 13:37	RAS	

MW-8 L958833-08 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				CTW/JKL/WFM	12/19/17 11:40	12/20/17 09:00
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 13:54	12/21/17 13:54	RAS	

SAMPLE SUMMARY



MW-9 L958833-09 GW

Collected by: CTW/JKL/WFM
 Collected date/time: 12/19/17 11:25
 Received date/time: 12/20/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 14:11	12/21/17 14:11	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	10	12/22/17 10:42	12/22/17 10:42	RAS

1
Cp

2
Tc

3
Ss

MW-10 L958833-10 GW

Collected by: CTW/JKL/WFM
 Collected date/time: 12/19/17 12:15
 Received date/time: 12/20/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/21/17 14:27	12/21/17 14:27	RAS
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1056053	1	12/22/17 11:02	12/22/17 11:02	RAS

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer
Technical Service Representative

- ¹Cp
- ²Tc
- ³Ss
- ⁴Cn
- ⁵Sr
- ⁶Qc
- ⁷Gl
- ⁸Al
- ⁹Sc



Collected date/time: 12/19/17 15:15

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 11:40	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 11:40	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 11:40	WG1056053
Benzene	ND		1.00	1	12/21/2017 11:40	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 11:40	WG1056053
Bromoform	4.42		1.00	1	12/21/2017 11:40	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 11:40	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 11:40	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 11:40	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 11:40	WG1056053
Chloroform	ND		5.00	1	12/21/2017 11:40	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 11:40	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 11:40	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 11:40	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 11:40	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 11:40	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 11:40	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 11:40	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 11:40	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 11:40	WG1056053
cis-1,2-Dichloroethene	ND		1.00	1	12/21/2017 11:40	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 11:40	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 11:40	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 11:40	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 11:40	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 11:40	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 11:40	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 11:40	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 11:40	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 11:40	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 11:40	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 11:40	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 11:40	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 11:40	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
Styrene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 11:40	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 11:40	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 11:40	WG1056053
Tetrachloroethene	18.8		1.00	1	12/21/2017 11:40	WG1056053
Toluene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 11:40	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 11:40	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 11:40	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 11:40	WG1056053
Trichloroethene	ND		1.00	1	12/21/2017 11:40	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 11:40	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 11:40	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 11:40	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 11:40	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 11:40	WG1056053
(S) Toluene-d8	108		80.0-120		12/21/2017 11:40	WG1056053
(S) Dibromofluoromethane	83.4		76.0-123		12/21/2017 11:40	WG1056053
(S) 4-Bromofluorobenzene	96.4		80.0-120		12/21/2017 11:40	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/19/17 15:05

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 11:57	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 11:57	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 11:57	WG1056053
Benzene	ND		1.00	1	12/21/2017 11:57	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 11:57	WG1056053
Bromoform	ND		1.00	1	12/21/2017 11:57	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 11:57	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 11:57	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 11:57	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 11:57	WG1056053
Chloroform	ND		5.00	1	12/21/2017 11:57	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 11:57	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 11:57	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 11:57	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 11:57	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 11:57	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 11:57	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 11:57	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 11:57	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 11:57	WG1056053
cis-1,2-Dichloroethene	ND		1.00	1	12/21/2017 11:57	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 11:57	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 11:57	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 11:57	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 11:57	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 11:57	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 11:57	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 11:57	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 11:57	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 11:57	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 11:57	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 11:57	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 11:57	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 11:57	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
Styrene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 11:57	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 11:57	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 11:57	WG1056053
Tetrachloroethene	66.5		1.00	1	12/21/2017 11:57	WG1056053
Toluene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 11:57	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 11:57	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 11:57	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 11:57	WG1056053
Trichloroethene	2.04		1.00	1	12/21/2017 11:57	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 11:57	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 11:57	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 11:57	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 11:57	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 11:57	WG1056053
(S) Toluene-d8	107		80.0-120		12/21/2017 11:57	WG1056053
(S) Dibromofluoromethane	83.7		76.0-123		12/21/2017 11:57	WG1056053
(S) 4-Bromofluorobenzene	94.4		80.0-120		12/21/2017 11:57	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/19/17 14:40

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 12:14	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 12:14	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 12:14	WG1056053
Benzene	ND		1.00	1	12/21/2017 12:14	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 12:14	WG1056053
Bromoform	ND		1.00	1	12/21/2017 12:14	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 12:14	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 12:14	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 12:14	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 12:14	WG1056053
Chloroform	ND		5.00	1	12/21/2017 12:14	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 12:14	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 12:14	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 12:14	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 12:14	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 12:14	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 12:14	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 12:14	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 12:14	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 12:14	WG1056053
cis-1,2-Dichloroethene	ND		1.00	1	12/21/2017 12:14	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 12:14	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 12:14	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 12:14	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 12:14	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 12:14	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 12:14	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 12:14	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 12:14	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 12:14	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 12:14	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 12:14	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 12:14	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 12:14	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
Styrene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 12:14	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 12:14	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 12:14	WG1056053
Tetrachloroethene	1.61		1.00	1	12/21/2017 12:14	WG1056053
Toluene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 12:14	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 12:14	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 12:14	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 12:14	WG1056053
Trichloroethene	ND		1.00	1	12/21/2017 12:14	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 12:14	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 12:14	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 12:14	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 12:14	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 12:14	WG1056053
(S) Toluene-d8	109		80.0-120		12/21/2017 12:14	WG1056053
(S) Dibromofluoromethane	80.7		76.0-123		12/21/2017 12:14	WG1056053
(S) 4-Bromofluorobenzene	96.9		80.0-120		12/21/2017 12:14	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/19/17 12:55

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 12:30	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 12:30	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 12:30	WG1056053
Benzene	ND		1.00	1	12/21/2017 12:30	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 12:30	WG1056053
Bromoform	ND		1.00	1	12/21/2017 12:30	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 12:30	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 12:30	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 12:30	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 12:30	WG1056053
Chloroform	ND		5.00	1	12/21/2017 12:30	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 12:30	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 12:30	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 12:30	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 12:30	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 12:30	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 12:30	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 12:30	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 12:30	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 12:30	WG1056053
cis-1,2-Dichloroethene	ND		1.00	1	12/21/2017 12:30	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 12:30	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 12:30	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 12:30	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 12:30	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 12:30	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 12:30	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 12:30	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 12:30	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 12:30	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 12:30	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 12:30	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 12:30	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 12:30	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
Styrene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 12:30	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 12:30	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 12:30	WG1056053
Tetrachloroethene	11.3		1.00	1	12/21/2017 12:30	WG1056053
Toluene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 12:30	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 12:30	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 12:30	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 12:30	WG1056053
Trichloroethene	ND		1.00	1	12/21/2017 12:30	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 12:30	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 12:30	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 12:30	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 12:30	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 12:30	WG1056053
(S) Toluene-d8	106		80.0-120		12/21/2017 12:30	WG1056053
(S) Dibromofluoromethane	83.2		76.0-123		12/21/2017 12:30	WG1056053
(S) 4-Bromofluorobenzene	95.9		80.0-120		12/21/2017 12:30	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/19/17 13:00

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 13:04	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 13:04	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 13:04	WG1056053
Benzene	ND		1.00	1	12/21/2017 13:04	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 13:04	WG1056053
Bromoform	ND		1.00	1	12/21/2017 13:04	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 13:04	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 13:04	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 13:04	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 13:04	WG1056053
Chloroform	ND		5.00	1	12/21/2017 13:04	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 13:04	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 13:04	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 13:04	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 13:04	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 13:04	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 13:04	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 13:04	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 13:04	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 13:04	WG1056053
cis-1,2-Dichloroethene	ND		1.00	1	12/21/2017 13:04	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 13:04	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 13:04	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 13:04	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 13:04	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 13:04	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 13:04	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 13:04	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 13:04	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 13:04	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 13:04	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 13:04	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 13:04	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 13:04	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
Styrene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 13:04	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 13:04	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 13:04	WG1056053
Tetrachloroethene	585		10.0	10	12/22/2017 10:04	WG1056053
Toluene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 13:04	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 13:04	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 13:04	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 13:04	WG1056053
Trichloroethene	2.18		1.00	1	12/21/2017 13:04	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 13:04	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 13:04	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 13:04	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 13:04	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 13:04	WG1056053
(S) Toluene-d8	108		80.0-120		12/22/2017 10:04	WG1056053
(S) Toluene-d8	110		80.0-120		12/21/2017 13:04	WG1056053
(S) Dibromofluoromethane	76.4		76.0-123		12/21/2017 13:04	WG1056053
(S) Dibromofluoromethane	99.5		76.0-123		12/22/2017 10:04	WG1056053
(S) 4-Bromofluorobenzene	95.1		80.0-120		12/21/2017 13:04	WG1056053
(S) 4-Bromofluorobenzene	102		80.0-120		12/22/2017 10:04	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/19/17 14:15

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 13:20	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 13:20	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 13:20	WG1056053
Benzene	ND		1.00	1	12/21/2017 13:20	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 13:20	WG1056053
Bromoform	ND		1.00	1	12/21/2017 13:20	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 13:20	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 13:20	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 13:20	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 13:20	WG1056053
Chloroform	ND		5.00	1	12/21/2017 13:20	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 13:20	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 13:20	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 13:20	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 13:20	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 13:20	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 13:20	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 13:20	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 13:20	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 13:20	WG1056053
cis-1,2-Dichloroethene	3.24		1.00	1	12/21/2017 13:20	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 13:20	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 13:20	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 13:20	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 13:20	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 13:20	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 13:20	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 13:20	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 13:20	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 13:20	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 13:20	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 13:20	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 13:20	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 13:20	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
Styrene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 13:20	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 13:20	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 13:20	WG1056053
Tetrachloroethene	28.7		1.00	1	12/22/2017 10:23	WG1056053
Toluene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 13:20	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 13:20	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 13:20	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 13:20	WG1056053
Trichloroethene	2.28		1.00	1	12/21/2017 13:20	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 13:20	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 13:20	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 13:20	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 13:20	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 13:20	WG1056053
(S) Toluene-d8	107		80.0-120		12/22/2017 10:23	WG1056053
(S) Toluene-d8	110		80.0-120		12/21/2017 13:20	WG1056053
(S) Dibromofluoromethane	79.4		76.0-123		12/21/2017 13:20	WG1056053
(S) Dibromofluoromethane	99.0		76.0-123		12/22/2017 10:23	WG1056053
(S) 4-Bromofluorobenzene	98.7		80.0-120		12/21/2017 13:20	WG1056053
(S) 4-Bromofluorobenzene	99.4		80.0-120		12/22/2017 10:23	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/19/17 15:45

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 13:37	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 13:37	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 13:37	WG1056053
Benzene	ND		1.00	1	12/21/2017 13:37	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 13:37	WG1056053
Bromoform	ND		1.00	1	12/21/2017 13:37	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 13:37	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 13:37	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 13:37	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 13:37	WG1056053
Chloroform	ND		5.00	1	12/21/2017 13:37	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 13:37	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 13:37	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 13:37	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 13:37	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 13:37	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 13:37	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 13:37	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 13:37	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 13:37	WG1056053
cis-1,2-Dichloroethene	ND		1.00	1	12/21/2017 13:37	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 13:37	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 13:37	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 13:37	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 13:37	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 13:37	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 13:37	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 13:37	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 13:37	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 13:37	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 13:37	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 13:37	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 13:37	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 13:37	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
Styrene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 13:37	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 13:37	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 13:37	WG1056053
Tetrachloroethene	ND		1.00	1	12/21/2017 13:37	WG1056053
Toluene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 13:37	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 13:37	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 13:37	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 13:37	WG1056053
Trichloroethene	ND		1.00	1	12/21/2017 13:37	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 13:37	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 13:37	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 13:37	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 13:37	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 13:37	WG1056053
(S) Toluene-d8	108		80.0-120		12/21/2017 13:37	WG1056053
(S) Dibromofluoromethane	83.7		76.0-123		12/21/2017 13:37	WG1056053
(S) 4-Bromofluorobenzene	94.9		80.0-120		12/21/2017 13:37	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/19/17 11:40

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 13:54	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 13:54	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 13:54	WG1056053
Benzene	ND		1.00	1	12/21/2017 13:54	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 13:54	WG1056053
Bromoform	ND		1.00	1	12/21/2017 13:54	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 13:54	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 13:54	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 13:54	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 13:54	WG1056053
Chloroform	ND		5.00	1	12/21/2017 13:54	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 13:54	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 13:54	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 13:54	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 13:54	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 13:54	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 13:54	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 13:54	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 13:54	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 13:54	WG1056053
cis-1,2-Dichloroethene	ND		1.00	1	12/21/2017 13:54	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 13:54	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 13:54	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 13:54	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 13:54	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 13:54	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 13:54	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 13:54	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 13:54	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 13:54	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 13:54	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 13:54	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 13:54	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 13:54	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
Styrene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 13:54	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 13:54	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 13:54	WG1056053
Tetrachloroethene	ND		1.00	1	12/21/2017 13:54	WG1056053
Toluene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 13:54	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 13:54	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 13:54	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 13:54	WG1056053
Trichloroethene	ND		1.00	1	12/21/2017 13:54	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 13:54	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 13:54	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 13:54	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 13:54	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 13:54	WG1056053
(S) Toluene-d8	109		80.0-120		12/21/2017 13:54	WG1056053
(S) Dibromofluoromethane	80.7		76.0-123		12/21/2017 13:54	WG1056053
(S) 4-Bromofluorobenzene	99.2		80.0-120		12/21/2017 13:54	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 14:11	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 14:11	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 14:11	WG1056053
Benzene	ND		1.00	1	12/21/2017 14:11	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 14:11	WG1056053
Bromoform	ND		1.00	1	12/21/2017 14:11	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 14:11	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 14:11	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 14:11	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 14:11	WG1056053
Chloroform	ND		5.00	1	12/21/2017 14:11	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 14:11	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 14:11	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 14:11	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 14:11	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 14:11	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 14:11	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 14:11	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 14:11	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 14:11	WG1056053
cis-1,2-Dichloroethene	ND		1.00	1	12/21/2017 14:11	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 14:11	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 14:11	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 14:11	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 14:11	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 14:11	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 14:11	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 14:11	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 14:11	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 14:11	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 14:11	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 14:11	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 14:11	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 14:11	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
Styrene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 14:11	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 14:11	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 14:11	WG1056053
Tetrachloroethene	268		10.0	10	12/22/2017 10:42	WG1056053
Toluene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 14:11	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 14:11	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 14:11	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 14:11	WG1056053
Trichloroethene	ND		1.00	1	12/21/2017 14:11	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 14:11	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 14:11	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 14:11	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 14:11	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 14:11	WG1056053
(S) Toluene-d8	106		80.0-120		12/22/2017 10:42	WG1056053
(S) Toluene-d8	108		80.0-120		12/21/2017 14:11	WG1056053
(S) Dibromofluoromethane	80.5		76.0-123		12/21/2017 14:11	WG1056053
(S) Dibromofluoromethane	97.6		76.0-123		12/22/2017 10:42	WG1056053
(S) 4-Bromofluorobenzene	99.2		80.0-120		12/21/2017 14:11	WG1056053
(S) 4-Bromofluorobenzene	101		80.0-120		12/22/2017 10:42	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/19/17 12:15

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Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	ug/l		ug/l		date / time	
Acetone	ND	<u>J3</u>	50.0	1	12/21/2017 14:27	WG1056053
Acrolein	ND	<u>J3 J4</u>	50.0	1	12/21/2017 14:27	WG1056053
Acrylonitrile	ND		10.0	1	12/21/2017 14:27	WG1056053
Benzene	ND		1.00	1	12/21/2017 14:27	WG1056053
Bromobenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
Bromodichloromethane	ND		1.00	1	12/21/2017 14:27	WG1056053
Bromoform	ND		1.00	1	12/21/2017 14:27	WG1056053
Bromomethane	ND		5.00	1	12/21/2017 14:27	WG1056053
n-Butylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
sec-Butylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
tert-Butylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
Carbon tetrachloride	ND		1.00	1	12/21/2017 14:27	WG1056053
Chlorobenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
Chlorodibromomethane	ND		1.00	1	12/21/2017 14:27	WG1056053
Chloroethane	ND		5.00	1	12/21/2017 14:27	WG1056053
Chloroform	ND		5.00	1	12/21/2017 14:27	WG1056053
Chloromethane	ND		2.50	1	12/21/2017 14:27	WG1056053
2-Chlorotoluene	ND		1.00	1	12/21/2017 14:27	WG1056053
4-Chlorotoluene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,2-Dibromo-3-Chloropropane	ND		5.00	1	12/21/2017 14:27	WG1056053
1,2-Dibromoethane	ND		1.00	1	12/21/2017 14:27	WG1056053
Dibromomethane	ND		1.00	1	12/21/2017 14:27	WG1056053
1,2-Dichlorobenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,3-Dichlorobenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,4-Dichlorobenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
Dichlorodifluoromethane	ND		5.00	1	12/21/2017 14:27	WG1056053
1,1-Dichloroethane	ND		1.00	1	12/21/2017 14:27	WG1056053
1,2-Dichloroethane	ND		1.00	1	12/21/2017 14:27	WG1056053
1,1-Dichloroethene	ND		1.00	1	12/21/2017 14:27	WG1056053
cis-1,2-Dichloroethene	1.60		1.00	1	12/21/2017 14:27	WG1056053
trans-1,2-Dichloroethene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,2-Dichloropropane	ND		1.00	1	12/21/2017 14:27	WG1056053
1,1-Dichloropropene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,3-Dichloropropane	ND		1.00	1	12/21/2017 14:27	WG1056053
cis-1,3-Dichloropropene	ND		1.00	1	12/21/2017 14:27	WG1056053
trans-1,3-Dichloropropene	ND		1.00	1	12/21/2017 14:27	WG1056053
2,2-Dichloropropane	ND		1.00	1	12/21/2017 14:27	WG1056053
Di-isopropyl ether	ND		1.00	1	12/21/2017 14:27	WG1056053
Ethylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
Hexachloro-1,3-butadiene	ND		1.00	1	12/21/2017 14:27	WG1056053
Isopropylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
p-Isopropyltoluene	ND		1.00	1	12/21/2017 14:27	WG1056053
2-Butanone (MEK)	ND	<u>J3</u>	10.0	1	12/21/2017 14:27	WG1056053
Methylene Chloride	ND		5.00	1	12/21/2017 14:27	WG1056053
4-Methyl-2-pentanone (MIBK)	ND		10.0	1	12/21/2017 14:27	WG1056053
Methyl tert-butyl ether	ND		1.00	1	12/21/2017 14:27	WG1056053
Naphthalene	ND	<u>J4</u>	5.00	1	12/21/2017 14:27	WG1056053
n-Propylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
Styrene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,1,1,2-Tetrachloroethane	ND		1.00	1	12/21/2017 14:27	WG1056053
1,1,2,2-Tetrachloroethane	ND		1.00	1	12/21/2017 14:27	WG1056053
1,1,2-Trichlorotrifluoroethane	ND		1.00	1	12/21/2017 14:27	WG1056053
Tetrachloroethene	8.43		1.00	1	12/22/2017 11:02	WG1056053
Toluene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,2,3-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 14:27	WG1056053
1,2,4-Trichlorobenzene	ND	<u>J4</u>	1.00	1	12/21/2017 14:27	WG1056053

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/19/17 12:15

L958833

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
1,1,1-Trichloroethane	ND		1.00	1	12/21/2017 14:27	WG1056053
1,1,2-Trichloroethane	ND		1.00	1	12/21/2017 14:27	WG1056053
Trichloroethene	ND		1.00	1	12/21/2017 14:27	WG1056053
Trichlorofluoromethane	ND		5.00	1	12/21/2017 14:27	WG1056053
1,2,3-Trichloropropane	ND		2.50	1	12/21/2017 14:27	WG1056053
1,2,4-Trimethylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,2,3-Trimethylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
1,3,5-Trimethylbenzene	ND		1.00	1	12/21/2017 14:27	WG1056053
Vinyl chloride	ND		1.00	1	12/21/2017 14:27	WG1056053
Xylenes, Total	ND		3.00	1	12/21/2017 14:27	WG1056053
(S) Toluene-d8	105		80.0-120		12/22/2017 11:02	WG1056053
(S) Toluene-d8	108		80.0-120		12/21/2017 14:27	WG1056053
(S) Dibromofluoromethane	83.2		76.0-123		12/21/2017 14:27	WG1056053
(S) Dibromofluoromethane	100		76.0-123		12/22/2017 11:02	WG1056053
(S) 4-Bromofluorobenzene	99.1		80.0-120		12/21/2017 14:27	WG1056053
(S) 4-Bromofluorobenzene	99.3		80.0-120		12/22/2017 11:02	WG1056053

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3274896-2 12/21/17 07:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		10.0	50.0
Acrolein	U		8.87	50.0
Acrylonitrile	U		1.87	10.0
Benzene	U		0.331	1.00
Bromobenzene	U		0.352	1.00
Bromodichloromethane	U		0.380	1.00
Bromoform	U		0.469	1.00
Bromomethane	U		0.866	5.00
n-Butylbenzene	U		0.361	1.00
sec-Butylbenzene	U		0.365	1.00
tert-Butylbenzene	U		0.399	1.00
Carbon tetrachloride	U		0.379	1.00
Chlorobenzene	U		0.348	1.00
Chlorodibromomethane	U		0.327	1.00
Chloroethane	U		0.453	5.00
Chloroform	U		0.324	5.00
Chloromethane	U		0.276	2.50
2-Chlorotoluene	U		0.375	1.00
4-Chlorotoluene	U		0.351	1.00
1,2-Dibromo-3-Chloropropane	U		1.33	5.00
1,2-Dibromoethane	U		0.381	1.00
Dibromomethane	U		0.346	1.00
1,2-Dichlorobenzene	U		0.349	1.00
1,3-Dichlorobenzene	U		0.220	1.00
1,4-Dichlorobenzene	U		0.274	1.00
Dichlorodifluoromethane	U		0.551	5.00
1,1-Dichloroethane	U		0.259	1.00
1,2-Dichloroethane	U		0.361	1.00
1,1-Dichloroethene	U		0.398	1.00
cis-1,2-Dichloroethene	U		0.260	1.00
trans-1,2-Dichloroethene	U		0.396	1.00
1,2-Dichloropropane	U		0.306	1.00
1,1-Dichloropropene	U		0.352	1.00
1,3-Dichloropropane	U		0.366	1.00
cis-1,3-Dichloropropene	U		0.418	1.00
trans-1,3-Dichloropropene	U		0.419	1.00
2,2-Dichloropropane	U		0.321	1.00
Di-isopropyl ether	U		0.320	1.00
Ethylbenzene	U		0.384	1.00
Hexachloro-1,3-butadiene	U		0.256	1.00

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3274896-2 12/21/17 07:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Isopropylbenzene	U		0.326	1.00
p-Isopropyltoluene	U		0.350	1.00
2-Butanone (MEK)	U		3.93	10.0
Methylene Chloride	U		1.00	5.00
4-Methyl-2-pentanone (MIBK)	U		2.14	10.0
Methyl tert-butyl ether	U		0.367	1.00
Naphthalene	U		1.00	5.00
1,1,2,2-Tetrachloroethane	U		0.130	1.00
n-Propylbenzene	U		0.349	1.00
Tetrachloroethene	U		0.372	1.00
Styrene	U		0.307	1.00
1,1,1,2-Tetrachloroethane	U		0.385	1.00
Toluene	U		0.412	1.00
1,1,1-Trichloroethane	U		0.319	1.00
1,1,2-Trichloroethane	U		0.383	1.00
1,1,2-Trichlorotrifluoroethane	U		0.303	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
Trichloroethene	U		0.398	1.00
1,2,4-Trichlorobenzene	U		0.355	1.00
Trichlorofluoromethane	U		1.20	5.00
1,2,3-Trichloropropane	U		0.807	2.50
1,2,3-Trimethylbenzene	U		0.321	1.00
1,2,4-Trimethylbenzene	U		0.373	1.00
Vinyl chloride	U		0.259	1.00
1,3,5-Trimethylbenzene	U		0.387	1.00
Xylenes, Total	U		1.06	3.00
(S) Toluene-d8	108			80.0-120
(S) Dibromofluoromethane	82.0			76.0-123
(S) 4-Bromofluorobenzene	98.6			80.0-120

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3274896-1 12/21/17 07:16 • (LCSD) R3274896-3 12/21/17 09:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acetone	125	166	111	132	88.6	10.0-160		J3	39.7	23
Acrolein	125	1140	2550	910	2040	10.0-160	E J4	E J3 J4	76.7	20
Acrylonitrile	125	133	110	107	88.2	60.0-142			19.1	20
Benzene	25.0	19.1	19.0	76.4	76.1	69.0-123			0.408	20



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3274896-1 12/21/17 07:16 • (LCSD) R3274896-3 12/21/17 09:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD %	RPD Limits %
Bromobenzene	25.0	22.6	21.8	90.3	87.3	79.0-120			3.44	20
Bromodichloromethane	25.0	22.0	21.7	87.8	86.8	76.0-120			1.17	20
Bromoform	25.0	27.1	25.1	108	100	67.0-132			7.66	20
Bromomethane	25.0	21.8	19.7	87.2	78.9	18.0-160			9.96	20
n-Butylbenzene	25.0	19.2	20.4	76.8	81.6	72.0-126			6.13	20
sec-Butylbenzene	25.0	22.0	21.6	87.9	86.5	74.0-121			1.65	20
tert-Butylbenzene	25.0	23.2	22.1	92.7	88.3	75.0-122			4.94	20
Carbon tetrachloride	25.0	18.7	18.4	74.8	73.5	63.0-122			1.70	20
Chlorobenzene	25.0	24.3	25.2	97.2	101	79.0-121			3.82	20
Chlorodibromomethane	25.0	25.1	24.8	100	99.2	75.0-125			1.20	20
Chloroethane	25.0	21.6	22.0	86.4	87.9	47.0-152			1.72	20
Chloroform	25.0	19.3	18.5	77.3	74.0	72.0-121			4.35	20
Chloromethane	25.0	18.8	18.4	75.2	73.5	48.0-139			2.26	20
2-Chlorotoluene	25.0	23.1	23.2	92.5	92.7	74.0-122			0.216	20
4-Chlorotoluene	25.0	23.3	22.8	93.3	91.0	79.0-120			2.46	20
1,2-Dibromo-3-Chloropropane	25.0	23.6	23.7	94.3	94.8	64.0-127			0.592	20
1,2-Dibromoethane	25.0	25.3	24.9	101	99.7	77.0-123			1.35	20
1,2-Dichlorobenzene	25.0	22.6	23.9	90.2	95.7	80.0-120			5.83	20
Dibromomethane	25.0	22.4	21.5	89.8	86.2	78.0-120			4.08	20
1,3-Dichlorobenzene	25.0	23.0	23.6	92.0	94.3	72.0-123			2.46	20
1,4-Dichlorobenzene	25.0	22.8	22.9	91.2	91.6	77.0-120			0.428	20
Dichlorodifluoromethane	25.0	16.4	17.9	65.4	71.7	49.0-155			9.14	20
1,1-Dichloroethane	25.0	20.6	20.2	82.5	80.9	70.0-126			1.97	20
1,2-Dichloroethane	25.0	19.2	18.5	76.7	74.1	67.0-126			3.54	20
1,1-Dichloroethene	25.0	20.5	20.6	82.0	82.4	64.0-129			0.513	20
cis-1,2-Dichloroethene	25.0	19.5	19.2	78.0	76.7	73.0-120			1.65	20
trans-1,2-Dichloroethene	25.0	20.5	20.2	81.8	80.8	71.0-121			1.23	20
1,2-Dichloropropane	25.0	25.4	25.2	102	101	75.0-125			0.951	20
1,1-Dichloropropene	25.0	19.5	19.7	78.1	78.7	71.0-129			0.701	20
1,3-Dichloropropane	25.0	24.7	24.9	98.8	99.6	80.0-121			0.837	20
cis-1,3-Dichloropropene	25.0	23.5	24.2	94.0	96.9	79.0-123			3.07	20
trans-1,3-Dichloropropene	25.0	23.4	24.3	93.6	97.3	74.0-127			3.93	20
2,2-Dichloropropane	25.0	18.7	22.0	74.7	88.0	60.0-125			16.3	20
Di-isopropyl ether	25.0	19.1	18.6	76.4	74.3	59.0-133			2.72	20
Ethylbenzene	25.0	23.7	24.6	94.9	98.4	77.0-120			3.61	20
Hexachloro-1,3-butadiene	25.0	20.3	16.8	81.3	67.4	64.0-131			18.8	20
Isopropylbenzene	25.0	23.4	22.7	93.7	91.0	75.0-120			2.94	20
p-Isopropyltoluene	25.0	21.3	21.6	85.2	86.5	74.0-126			1.58	20
2-Butanone (MEK)	125	115	90.8	92.0	72.6	37.0-158		<u>J3</u>	23.5	20
Methylene Chloride	25.0	18.8	17.9	75.2	71.6	66.0-121			4.93	20

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3274896-1 12/21/17 07:16 • (LCSD) R3274896-3 12/21/17 09:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	125	121	112	96.9	89.4	59.0-143			7.98	20
Methyl tert-butyl ether	25.0	20.6	19.5	82.2	78.1	64.0-123			5.16	20
Naphthalene	25.0	16.2	14.3	64.7	57.1	62.0-128		J4	12.5	20
n-Propylbenzene	25.0	22.9	22.1	91.5	88.6	79.0-120			3.27	20
Styrene	25.0	24.0	22.9	95.8	91.6	78.0-124			4.54	20
1,1,1,2-Tetrachloroethane	25.0	25.9	26.6	103	106	75.0-122			2.64	20
1,1,2,2-Tetrachloroethane	25.0	22.1	22.6	88.4	90.4	71.0-122			2.26	20
Tetrachloroethene	25.0	25.1	25.9	100	104	70.0-127			3.16	20
Toluene	25.0	23.0	23.6	92.0	94.3	77.0-120			2.54	20
1,1,2-Trichlorotrifluoroethane	25.0	19.2	19.8	76.8	79.1	61.0-136			2.99	20
1,2,3-Trichlorobenzene	25.0	13.2	14.0	52.8	56.0	61.0-133	J4	J4	5.87	20
1,1,1-Trichloroethane	25.0	19.7	19.6	78.6	78.4	68.0-122			0.372	20
1,2,4-Trichlorobenzene	25.0	16.5	16.8	65.8	67.1	69.0-129	J4	J4	1.87	20
1,1,2-Trichloroethane	25.0	24.7	24.3	98.7	97.4	78.0-120			1.38	20
Trichloroethene	25.0	25.4	23.1	101	92.6	78.0-120			9.13	20
Trichlorofluoromethane	25.0	19.1	19.4	76.2	77.5	56.0-137			1.63	20
1,2,3-Trichloropropane	25.0	25.6	23.1	102	92.2	72.0-124			10.3	20
1,2,3-Trimethylbenzene	25.0	21.4	22.1	85.5	88.4	75.0-120			3.26	20
1,2,4-Trimethylbenzene	25.0	21.5	21.6	85.9	86.4	75.0-120			0.582	20
1,3,5-Trimethylbenzene	25.0	23.4	23.0	93.5	92.0	75.0-120			1.66	20
Vinyl chloride	25.0	20.2	20.6	80.8	82.3	64.0-133			1.88	20
Xylenes, Total	75.0	71.4	74.4	95.2	99.2	77.0-120			4.12	20
(S) Toluene-d8				107	109	80.0-120				
(S) Dibromofluoromethane				81.5	79.3	76.0-123				
(S) 4-Bromofluorobenzene				99.1	94.9	80.0-120				

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

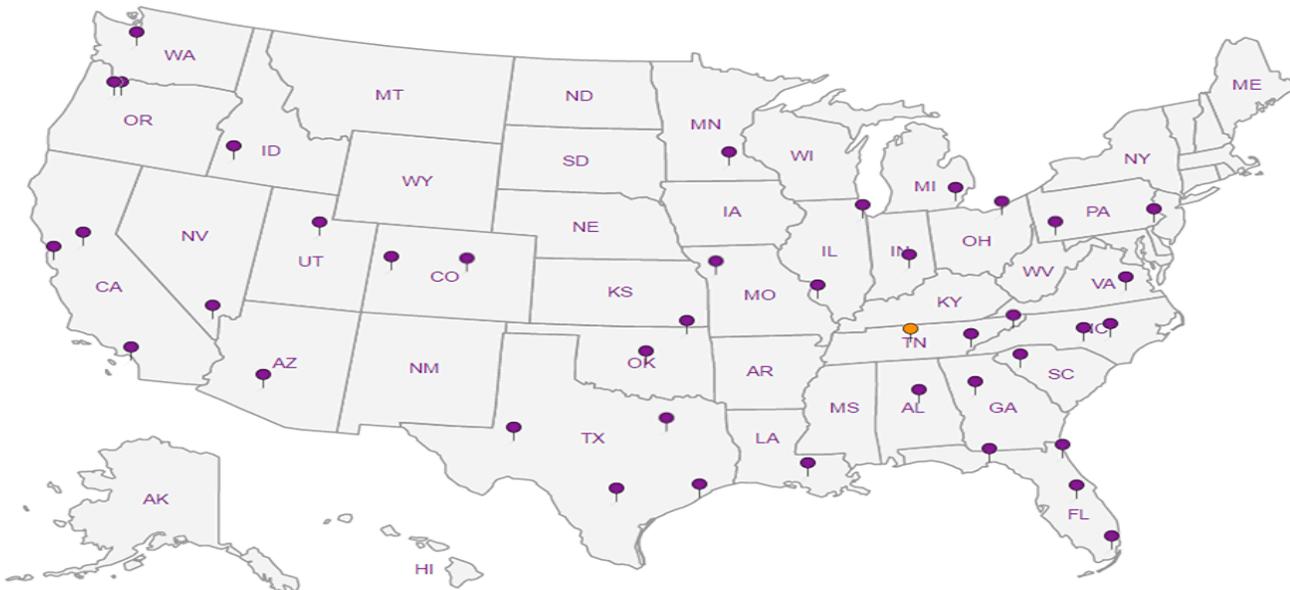
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1
Cp

2
Tc

3
Ss

4
Cn

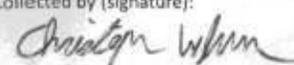
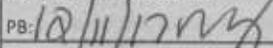
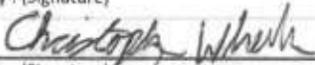
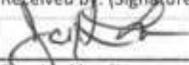
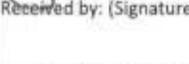
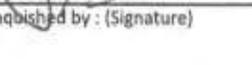
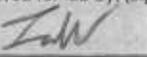
5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Genesis Project, Inc. - QT GA		Billing Information:		Pres Chk		Analysis / Container / Preservative						Chain of Custody Page 1 of 1			
1258 Concord Road Suite 200 Smarna GA 30080		Attn: Accounts Payable 4705 S. 129th E. Ave. Tulsa, OK 74134										 ESC A B S C I E N C E S a subsidiary of 			
Report to: Mitch Guthrie, PG		Email To: mguthrie@genproject.com										12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Phone: 800-767-5859 Fax: 615-758-5859 			
Project Description: QT 703R		City/State Collected: NORCOSS, GA										L# 958837			
Phone: 770-713-0666		Client Project #		Lab Project #								Tab A018			
Fax:				QTGENSIS-QT 703R								Acctnum: QTGENSIS			
Collected by (print): CTW/JKL/WFA		Site/Facility ID #		P.O. #								Template: T118950			
Collected by (signature): 		Rush? (Lab MUST Be Notified)		Quote #								Prelogin: P631248			
Immediately Packed on Ice N <input type="checkbox"/> Y <input checked="" type="checkbox"/>		<input type="checkbox"/> Same Day <input type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Date Results Needed								TSR: 526 - Chris McCord			
				Standard								PB: 			
Sample ID		Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs							Shipped Via: FedEX Ground	
MW-1		grab	GW	NA	12-19-17	1615	3							Remarks	
MW-2			GW			1505	3							Sample # (lab only)	
MW-3			GW			1440	3							-01	
MW-4			GW			1255	3							-02	
MW-5			GW			1300	3							-03	
MW-6			GW			1415	3							-04	
MW-7			GW			1545	3							-05	
MW-8			GW			1140	3							-06	
MW-9			GW			1125	3							-07	
MW-10		grab	GW	NA	12-19-17	1215	3							-08	
* Matrix:		Remarks:		pH _____ Temp _____										Sample Receipt Checklist	
SS - Soil AIR - Air F - Filter				Flow _____ Other _____										COC Seal Present/Intact: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
GW - Groundwater B - Bioassay														COC Signed/Accurate: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
WW - WasteWater														Bottles arrive intact: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
DW - Drinking Water														Correct bottles used: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
OT - Other														Sufficient volume sent: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N	
Samples returned via:		Tracking #												If Applicable	
<input type="checkbox"/> UPS <input checked="" type="checkbox"/> FedEx <input type="checkbox"/> Courier		6711 0340 1596												VOA Zero HeadSpace: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N	
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Trip Blank Received: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				Preservation Correct/Checked: <input type="checkbox"/> Y <input checked="" type="checkbox"/> N			
		12-19-17		1628				1							
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		Temp: °C		Bottles Received:		If preservation required by Login: Date/Time			
		12/19/2017		16:29				2.4 ^{ms} 50		30					
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature)		Date:		Time:		Hold:			
								12/20/17		0900		Condition: NCF 100			

APPENDIX V
Milestone Schedule
Monthly Service Hours

Milestone Schedule
 Voluntary Remediation Program
 Former Professional Cleaners Proposed QuikTrip Store No. 703R
 Norcross, Georgia

Item	Months From Project Start												
	1	2	3	4	5	6	7	8	9	10	11	12	
Task 4.1: Re-installation of monitor wells													
Task 4.2: Well sampling, hydro-geologic testing and groundwater modeling													
Task 4.3: Development and Approval of Unified Environmental Covenant													
Task 4.4: Preparation and submittal of VRP-CSR Reports													

Milestone Schedule
 Voluntary Remediation Program
 Former Professional Cleaners Proposed QuikTrip Store No. 703R
 Norcross, Georgia

Item	Months From Project Start											
	13	14	15	16	17	18	19	20	21	22	23	24
Task 4.1: Re-installation of monitor wells												
Task 4.2: Well sampling, hydro-geologic testing and groundwater modeling												
Task 4.3: Development and Approval of Unified Environmental Covenant												
Task 4.4: Preparation and submittal of VRP-CSR Reports												

Milestone Schedule
 Voluntary Remediation Program
 Former Professional Cleaners Proposed QuikTrip Store No. 703R
 Norcross, Georgia

Item	Months From Project Start												
	25	26	27	28	29	30	31	32	33	34	35	36	
Task 4.1: Re-installation of monitor wells													
Task 4.2: Well sampling, hydro-geologic testing and groundwater modeling													
Task 4.3: Development and Approval of Unified Environmental Covenant													
Task 4.4: Preparation and submittal of VRP-CSR Reports													

Monthly Service Hours Detail

Month	Task	Hours
June 2017	MW Installation	22.0
	Soil & Groundwater Sampling	25.0
	PM & Consulting	16.0
	Report Prep. and Review	20.0
	Total	83.0
July 2017	Admin	1.0
	PM & Consulting	5.5
	Total	6.5
August 2017	Meetings-Consulting	3.0
	Site Evaluation	1.0
	Total	4.0
September 2017	Admin	0.5
	PM & Consulting	4.5
	Total	5.0
October 2017	MW Installation	16.0
	PM & Consulting	13.0
	Total	29.0
November 2017	PM & Consulting	1.0
	Total	1.0
December 2017	PM & Consulting	7.5
	Total	7.5
	GRAND TOTAL	136.0