

50975

RECEIVED

ARCADIS | Design & Consultancy
for natural and
built assets

MAR 24 2022

SITE ASSESSMENT,
REMEDIATION, &
REVITALIZATION

CD Scanned
PM Copy

Mr. Tim Hornosky
State Remediation Section
SC Department of Health & Environmental Control
2600 Bull Street
Columbia, SC 29201-1708

Arcadis U.S., Inc.
1450 Greene Street
Suite 220
Augusta
Georgia 30901-5201
Tel 706 828 4421
Fax 706 828 4722
www.arcadis.com

Subject:
Second Semiannual 2021 Groundwater Report
Brenntag Southeast, Charleston, South Carolina

ENVIRONMENT

Date:
23 March 2022

Dear Tim Hornosky:

Contact:
Edward Hirshenson

Brenntag Southeast, Inc. has authorized ARCADIS U.S., Inc. to forward the enclosed two copies of the Second Semiannual 2021 Groundwater Report, and an electronic pdf, for the Brenntag Southeast facility in Charleston, South Carolina.

Phone:
706.828.4421

Please call me at (706) 828-4421 if you have any questions.

Email:
Edward.hirshenson@arcadis.com

Sincerely,

Arcadis U.S., Inc.

Our ref:
30084216

Edward Hirshenson
Senior Scientist

Copies:

Mr. Bill Krecker/SCDHEC Water Pollution Enforcement (without report)
Mr. Shawn Wiram/North America/Brenntag (with report)

85

50975

RECEIVED



MAR 24 2022

SITE ASSESSMENT,
REMEDATION, &
REVITALIZATION

CD Scanned
PM Copy)

BRENNTAG SOUTHEAST, INC.

SECOND SEMI-ANNUAL 2021 GROUNDWATER MONITORING REPORT

4200 AZALEA DRIVE
CHARLESTON, SOUTH CAROLINA

23 March 2022

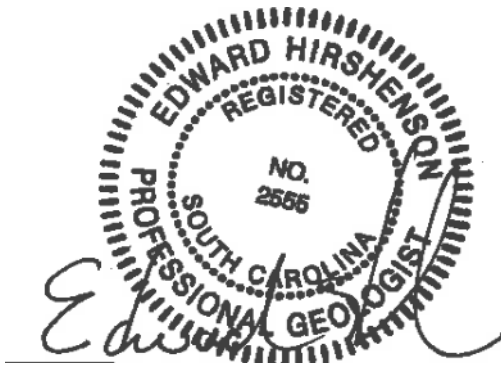
SECOND SEMI- ANNUAL 2021 GROUNDWATER MONITORING REPORT

Brenntag Southeast, Inc.
4200 Azalea Drive
Charleston, South Carolina

Prepared for:
Brenntag Southeast

Prepared by:
Arcadis U.S., Inc.
1450 Greene Street
Suite 220
Augusta
Georgia 30901-5201
Tel 706 828 4421
Fax 706 828 4722

Our Ref.:
30084216
Date:
23 March 2022



Edward Hirshenson, P.G. #2555
Senior Scientist

CONTENTS

INTRODUCTION.....	1
SECOND SEMI-ANNUAL 2021 GROUNDWATER MONITORING	1
FIELD ACTIVITIES	1
EHC®Injection Activities.....	1
Results of EHC® Injections	2
Post Biogeochemical Sampling at EHC Injection Site.....	2
SECOND SEMI-ANNUAL 2021 GROUNDWATER RESULTS	2
Groundwater Flow	3
Groundwater Quality Results.....	3
Area #1	3
Area #2	5
Area #3	5
Surface Water	6
CONCLUSIONS AND RECOMMENDATIONS.....	6

FIGURES

1	Site Layout
2	Potentiometric Surface of the Shallow Aquifer Measured December 15, 2021
3	Trichloroethene Concentrations (ug/L) of the Shallow Aquifer Measured December 15, 2021
4	Cis-1,2-Dichloroethene Concentrations (ug/L) of the Shallow Aquifer Measured December 15, 2021
5	Vinyl Chloride Concentrations (ug/L) of the Shallow Aquifer Measured December 15, 2021
6	Chlorobenzene Concentrations (ug/L) of the Shallow Aquifer Measured December 15, 2021
7	Total Volatile Organic Compounds (ug/L) of the Shallow Aquifer Measured December 15, 2021
8	TCE and Degradation Product Trends at Monitor Well MW-7
9	TCE and Degradation Product Trends at Monitor Well MW-13

TABLES

- 1 Groundwater Sampling Plan
- 2 Groundwater Elevations
- 3 Summary of Measured Field Parameters
- 4 Summary of Groundwater Analyses
- 5 Summary of Surface Water Analyses

APPENDICES

- A Hydrographs
- B Groundwater Sampling Field Logs
- C Analytical Laboratory Reports for Groundwater
- D Isoconcentration Graphs
- E Distance vs Concentration Graphs

INTRODUCTION

ARCADIS was retained by Brenntag Southeast, Inc. (Brenntag Southeast) to conduct the second semi-annual 2021 sampling event for the Brenntag Southeast facility in Charleston, South Carolina. Brenntag Southeast monitors groundwater and surface water quality at the facility on a semi-annual basis in accordance with a consent agreement with the South Carolina Department of Health and Environmental Control (SCDHEC). The current network of monitoring wells for the Brenntag Southeast facility includes MW-1, MW-2R, MW-5, MW-6, MW-7, MW-8, MW-13, MW-14, MW-15, MW-20, and MW-21 were installed to monitor groundwater impacts, from chlorinated solvents and a mixture of petroleum and solvents, in two areas, respectively; Area #1, located at the Former Solvent Storage Area and Area #2, located at the Former Above Ground Storage Tank Area, as shown on Figure 1. A newly discovered groundwater impact is located at the former unloading/loading railroad tracks and will be designated as Area #3 also shown in Figure 1.

Brenntag and Burris Environmental Services agreed for the second semiannual 2021 sampling event to collect groundwater levels and groundwater quality samples during the same sampling period and exchange groundwater level data and laboratory results. Groundwater levels and analytical data are collected by Burris Environmental Services from monitor wells MW-4, MW-9, MW-10, MW-11, and MW-12, located on the adjacent William M. Bird & Co., Inc. property and are shown on Figure 1 and other figures in this report. No discussion is made about the groundwater/analytical data from monitor wells located on the adjacent property within this report. Groundwater quality from those wells is reported to SCDHEC under a separate consent agreement with Burris Environmental Services.

SECOND SEMI-ANNUAL 2021 GROUNDWATER MONITORING

FIELD ACTIVITIES

EHC[®] Injection Activities

Area #1 is located in the central portion of the facility and is impacted with CVOCs, primarily cis-1,2-dichloroethene and vinyl chloride. In a letter dated August 30, 2018, SCDHEC recommended a pilot test for active remedial measures in the vicinity of monitoring wells MW-7 and MW-13. Additional soil and groundwater investigations were conducted in April/May 2019 (Arcadis 2019) and April 2020 (Arcadis 2020a) to better refine the proposed injection area. A Remedial Action Work Plan (RAWP) detailing proposed remedial activities was subsequently submitted to SCDEHC on December 31, 2020 (Arcadis 2020b). Following approval of the RAWP, a UIC permit was prepared and submitted on May 6, 2021; the authorizations to construct and operate injection wells were received from SCDEHC on May 19, 2021.

An injection of low valence iron and organic carbon substrate was recommended and accepted. EHC[®] is a long-lasting reagent which is composed of approximately 40 percent by weight (% w/w) zero valent iron (ZVI) and 60% w/w organic carbon. Following injection, this reagent supports treatment via two primary mechanisms: 1) direct contact between the ZVI particles and CVOCs facilitates abiotic solvent destruction; and 2) organic carbon dissolution and fermentation yields dissolved hydrogen, which

supports biotic reductive dechlorination. The low mobility of the EHC[®] reagent combined with the slow-release nature of the carbon and ZVI materials will provide effective, sustained treatment to eliminate CVOCs at the Site.

From July 26 to August 5, 2021, a total of 21,560 gallons of approximately 20% w/w EHC[®] slurry (representing 34,350 pounds of EHC[®]) was injected into 35 direct-push technology (DPT) injection points. Injections at each DPT injection point were conducted at up to three vertical intervals using the “top-down” approach, with injection beginning at the shallowest interval and progressing downward. Water for the injection slurry was obtained from an on-Site potable water source. Following injection, pressure in the rods was allowed to dissipate, and all boreholes were properly abandoned and completed to match the surrounding surface.

Results of EHC[®] Injections

Results of the EHC[®] injection report was submitted to the SCDHEC on September 2, 2021 (Injection Construction Completion Report).

Post Biogeochemical Sampling at EHC Injection Site

Upon completion of the EHC[®] injections, post biogeochemical groundwater samples were collected during the second semiannual groundwater event 2021. Biogeochemical parameters were collected from four monitor wells and one surface water location MW-7, MW-13, MW-20, MW-21, and SW-1. Biogeochemical parameters were collected in the same manner as described below. Samples from monitoring wells MW-1, MW-7, MW-13, MW-20, and MW-21 were analyzed for the following biogeochemical parameters: TOC by USEPA Method 9060A; sulfate by USEPA Method 300; sulfide by Standard Method 4500-S2; and dissolved gases (methane, ethane, ethene, and acetylene) by RSK-175. Post biogeochemical groundwater samples will be collected for four quarters in 2022 and results will be discussed in the second semiannual groundwater report 2022.

SECOND SEMI-ANNUAL 2021 GROUNDWATER RESULTS

ARCADIS sampled Brenntag Southeast monitoring wells MW-1, MW-2R, MW-5, MW-6, MW-7, MW-13, MW-14, MW-15, and surface water locations SW-1, SW-2, and SW-3 at the Brenntag Southeast facility on December 15, 2021 (the second semiannual 2021 sampling event). Groundwater sampling was completed in accordance with standard ARCADIS sampling protocol. Sampling began by measuring the groundwater elevation of each well. Monitoring wells were sampled using low flow sampling protocols while water quality indicators (pH, temperature, and conductivity) were measured to verify that representative groundwater samples were collected. Groundwater and surface water sampling locations from the from second semiannual 2021 sampling event are shown on Figure 1 and listed on Table 1.

Second semi-annual 2021 groundwater elevations are summarized in Table 2. Hydrographs, illustrating water level fluctuations at the monitoring wells, are included as Appendix A. Groundwater elevation data from the sampling event were used to construct a potentiometric map provided as Figure 2. The direction of groundwater flow at the facility is west towards Brickyard Creek. The Cooper Marl underlies the shallow aquifer system and is an effective regional confining unit inhibiting the deeper migration of groundwater.

Second Semi-Annual 2021 Groundwater Monitoring Report

Field measurements of pH and conductivity are listed in Table 3. The second semiannual 2021 field measurements are consistent with previously reported water quality measurements. The second semiannual 2021 sampling event from monitor well MW-6 indicated a pH at 6.29. Historical pH measurements for MW-6 have been relatively high. Field sampling forms from the second semi-annual 2021 sampling event are included as Appendix B.

Accutest Laboratories in Orlando, Florida (SCDHEC certification # 96038001) analyzed the second semiannual 2021 groundwater samples using EPA method SW-846 8260B. Analytical results are summarized in Table 4. The laboratory report is included as Appendix C.

Groundwater Flow

Water-level measurements were collected from all monitoring wells in December 2021, prior to groundwater sampling and are presented in Table 2. A potentiometric map is included as Figure 2. Water-level data indicate that the general direction of groundwater flow is west toward Brickyard Creek with an average velocity of 2.53 feet/day (926 feet/year). Groundwater velocity was calculated by determining the hydraulic gradient between upgradient well (MW-2R) and downgradient well (MW-6). Hydraulic conductivities were calculated from rising head tests performed by General Engineering Labs in 1991 from monitoring wells MW-1, MW-2, MW-3, and MW-4 with an average hydraulic conductivity of 5.4×10^{-3} cm/sec (1.77×10^{-4} ft/sec or 15.29 ft/day). An effective porosity of 20% was assumed for the site. Groundwater flow was calculated from MW-2R (10.87) and MW-6 (4.89) with a distance of approximately 180 feet. The hydraulic gradient is calculated to be 0.033 ft/ft.

Water elevation at MW-13 was recorded at 1.18 feet mean sea level (ft msl) and MW-15 was recorded at 4.65 ft msl. It appears that groundwater, in the vicinity of MW-15, located west of Brickyard Creek, discharges to the creek, flowing in an east-southeast direction. Groundwater flow at the facility is flowing to the west.

Groundwater Quality Results

Second semi-annual 2021 analyses are summarized in Table 4, with previous groundwater analyses. The “J” qualifier reported at other monitoring wells indicates that the result was between the Reporting Limit and Method Detection Limit and is, therefore, an estimated value. Hydrocarbon constituents and less commonly detected organic compounds at the Brenntag Southeast facility are listed as “others”. Definitions of the organic compound abbreviations are listed at the end of the table.

The distribution of dissolved individual volatile organic compounds (VOCs) in groundwater, including trichloroethene (TCE), cis-1, 2-dichloroethene (cis-1,2-DCE), vinyl chloride, and chlorobenzene, as well as total VOCs, are included as Figures 3 through 7, respectively. Graphs of individual VOC trends are included as Appendix D. Surface water analyses are summarized in Table 5.

Area #1

Area #1 groundwater is impacted with chlorinated solvents downgradient of the Former Solvent Storage Area (see Figure 1). Monitor wells MW-7 and MW-13 were installed downgradient of Area #1 to monitor impacts to groundwater from the release of chlorinated solvents. Dissolved VOCs in groundwater

Second Semi-Annual 2021 Groundwater Monitoring Report

downgradient of the source at Area #1 have shown an overall decreasing trend since discontinuation of the air sparging/soil vapor extraction (AS/SVE) system on September 20, 2001 but have increased from June 2007 to October 2010. Decreases were noted for TCE, cis-1,2-DCE, 1,1-DCE, and vinyl chloride for the second semi-annual 2021 sampling event in monitor wells MW-7 and MW-13. Decreases in VOCs are due to the EHC injections conducted in July-August 2021. Graphs showing VOC concentrations in wells MW-7 and MW-13 are shown as Figures 8 and 9, respectively.

Second semi-annual 2021 groundwater analyses from monitoring well MW-7 was below detection limits for TCE (<1 ug/L), cis-1,2- DCE (5.8 ug/L), trans-1,2-DCE (<1 ug/L), 1,1-DCA (9.5 ug/l), chlorobenzene (30.6 ug/L), chloroethane (59.5 ug/L), 1,2-DCB (6.3 ug/L), 1,4-DCB (0.9 J ug/L), and vinyl chloride (525 ug/L). The second semi-annual 2021 analyses are lower compared to previous VOC analyses at this well (Table 5). The EHC injections has significantly decreased total VOC concentrations at MW-7 from 47,471 ug/L to 859 ug/L which represents a 98% reduction.

Second semi-annual groundwater analyses from monitoring well MW-13 detected 1,1-DCE (0.4 ug/L), cis-1,2-DCE (67 ug/L), trans-1,2-DCE (1.1 ug/L), 1,1-DCA (6.2 ug/L), CB (25.5 ug/L), chloroethane (38.4 ug/L), 1,2-DCB (4.1 ug/L), 1,3-DCB (0.2 J ug/L), 1,4-DCB (1 ug/l), and vinyl chloride (172 ug/L) for the December 2021 sampling event. As indicated above, the EHC injections has significantly decreased total VOCs at MW-13 from 20,358 ug/L to 2,881 which represents an 86% reduction.

Volatile Organic Compounds (VOCs)

- Monitoring well MW-1 detected cis-1,2-DCE (5.1 ug/L), 1,2-DCB (4.3 ug/L), 1,4-DCB (0.31 J ug/L), and vinyl chloride (11.4 ug/L) for the December 2021 sampling event;
- Monitoring well MW-6 located downgradient of Solvent Tank Farm detected no VOCs for the December 2021 sampling event;
- Monitoring well MW-8 located side gradient of Solvent Tank Farm detected TCE (2 ug/L), cis-1,2-DCE (174 E ug/L), 1,1-DCE (3 ug/L), 1,1-DCA (1 J ug/L), chlorobenzene (6.7 ug/L), 1,2-DCB (8.6 ug/L), 1,3-DCB (0.7 J ug/L), 1,4-DCB (2.9 ug/L), vinyl chloride (89.9 ug/L), acetone (11 J ug/L), benzene (1.1 ug/L), ethylbenzene (12 ug/L), toluene (99.6 ug/L), xylenes (155 ug/L), and MTBE (2.5 ug/L) for the December 2021;
- Monitoring well MW-15 located west of Brickyard Creek detected no VOC for the December 2021 sampling event;
- Monitoring well MW-20 upgradient of monitor well MW-7 detected cis-1,2-DCE (8.3 ug/L), 1,1-DCA (9.6 ug/L), chlorobenzene (93.6 ug/L), 1,2-DCB (28.7 ug/L), 1,3-DCB (2.5 ug/L), 1,4-DCB (14.3 ug/L), chloroethane (15.3 ug/L), VC (67.4 ug/L), benzene (11.8 ug/L), MCH (0.65 ug/L), toluene (1.3 ug/L), and xylenes (1.1 J ug/L) for the December 2021 sampling event;
- Monitoring well MW-21 side gradient of monitor MW-7 detected cis-1,2-DCE (974 ug/L), 1,1-DCE (4.3 ug/L), trans-1,2-DCE (4.1 ug/L), 1,1-DCA (9 ug/L), CB (342 ug/L), chloroethane (18.2 ug/L), 1,2-DCB (3.7 ug/L), 1,3-DCB (5.4 ug/L), 1,4-DCB (19.9 ug/L), VC (324 ug/L), acetone (30 ug/L), benzene (32 ug/L), MEK (58.6 ug/L), CHX (0.41 J ug/L), toluene (2.5 ug/L), and xylenes (0.83 J ug/L) for the December 2021 sampling event.

Area #2

Area #2 groundwater is impacted by a mix of petroleum products and solvents from a former above ground storage tank area as shown on Figure 1. Monitoring well MW-14 was installed directly beneath the former tanks in 2003 to monitor groundwater at the Area #2 source. Remedial activities consisted of removing the above ground storage tank and surface soils in the vicinity of monitor well MW-14. AFVR events have also been conducted at monitor well MW-14. To date, six AFVR events have occurred (2018 thru 2020). Second semi-annual 2021 groundwater analyses from MW-14 detected cis-1,2-DCE (3,750 ug/L), 1,2-dichlorobenzene (423 ug/L), benzene (420 J ug/L), ethylbenzene (5,770 ug/L), toluene (72,900 ug/L), and xylenes (67,200 ug/L). Groundwater analyses from MW-14 for the December 2021 indicate a decrease in concentration for total volatile organic compounds. Although a thin layer of light non-aqueous phase liquid (LNAPL) has intermittently been detected in this well, no LNAPL was detected in MW-14 during this sampling event.

Volatile Organic Compounds (VOCs) and Hydrocarbon Discussion

- Monitoring well MW-2R, located upgradient of the Area #1 and #2, detected TCE (1.0J ug/L) and cis-1,2-DCE (0.6J ug/L);
- Monitoring well MW-5, located downgradient of the Bird Facility detected chlorobenzene (0.27 J ug/L);
- Monitoring well MW-6 located downgradient of Solvent Tank Farm detected no VOCs for the second semi-annual 2021 December sampling event.

As stated above for Area #2, chlorinated solvents and hydrocarbon degradation products in groundwater indicate that anaerobic biodegradation is reducing the VOCs in the vicinity of monitoring well MW-14. Distance and concentration plots were constructed to show the relationship of chlorinated solvents and BTEX over time to distance and is include in Appendix E. The plot shows chlorinated solvents and BTEX at the upgradient monitor well (MW-2R), to the source (MW-14), and towards downgradient monitor wells MW-4 and MW-5. Concentrations from the June 2019, December 2019, December 2020, and December 2021 sampling events indicate downgradient monitor wells have low concentrations or no detections of chlorinated solvents and BTEX. This trend indicates ongoing natural bio-attenuation, which is effectively reducing the mass and controlling the migration of dissolved constituents in shallow groundwater.

Area #3

Area #3 is located at the former unloading/loading area adjacent to old railroad tracks located north of the Brenntag office as shown in Figure 1. During a comprehensive soil/groundwater investigation in the vicinity of monitor well MW-14 if free-phase hydrocarbon were present in soils, the investigation was extended to the south and east of monitor well MW-14 to determine the lateral extent. Several borings were conducted in the vicinity of the old railroad tracks and results of the investigation were included in the Second Semi-Annual 2020 Groundwater Monitoring Report (March 2021) and Brenntag recommended to conduct additional borings in the vicinity of the former unloading/loading railroad track area. The SCDHEC approved the additional borings in a letter (Hornosky to Wiram) on May 14, 2021. Ten borings were conducted from July 28 thru 30, 2021 at the former unloading/loading area. The investigations indicated that a VOC source existed and extends towards the Brenntag office.

Second Semi-Annual 2021 Groundwater Monitoring Report

The SCDHEC has recommended a Remedial Work Plan (RWP) in a letter dated September 20, 2021 (Hornosky to Wiram). To date the RWP is being generated.

Surface Water

All constituents were non-detected in all three surface water samples for the December 2021 sampling event.

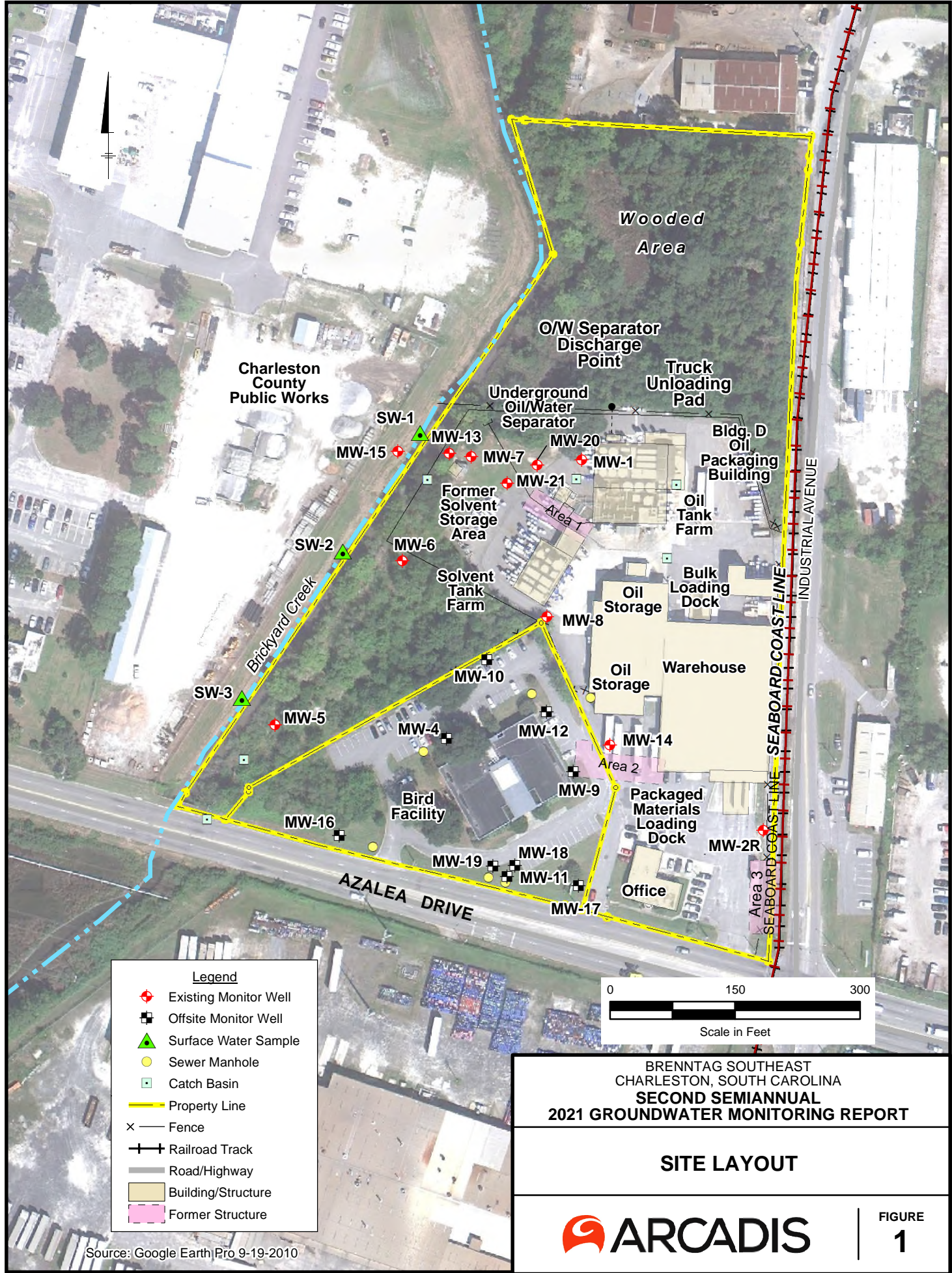
CONCLUSIONS AND RECOMMENDATIONS

The results of the second semi-annual 2021 groundwater analyses suggest that dissolved VOCs are being remediated during the EHC injection in the vicinity of monitor wells MW-7 and MW-13 prior to discharge to surface water. VOCs have decreased significantly to over 90% reduction. The attenuation of VOCs for Area #2 suggests that biodegradation processes are removing the VOCs from the groundwater prior to discharging to Brickyard Creek and downgradient well MW-5.

ARCADIS will conduct first semi-annual 2022 groundwater sampling from monitoring wells MW-1, MW-2R, MW-5, MW-6, MW-7, MW-8, MW-13, MW-14, MW-15, MW-20, MW-21 and surface-water locations SW-1, SW-2, and SW-3.

FIGURES





Legend

- ◆ Existing Monitor Well
- ⊕ Offsite Monitor Well
- ▲ Surface Water Sample
- Sewer Manhole
- Catch Basin
- Property Line
- x Fence
- + + Railroad Track
- Road/Highway
- Building/Structure
- Former Structure

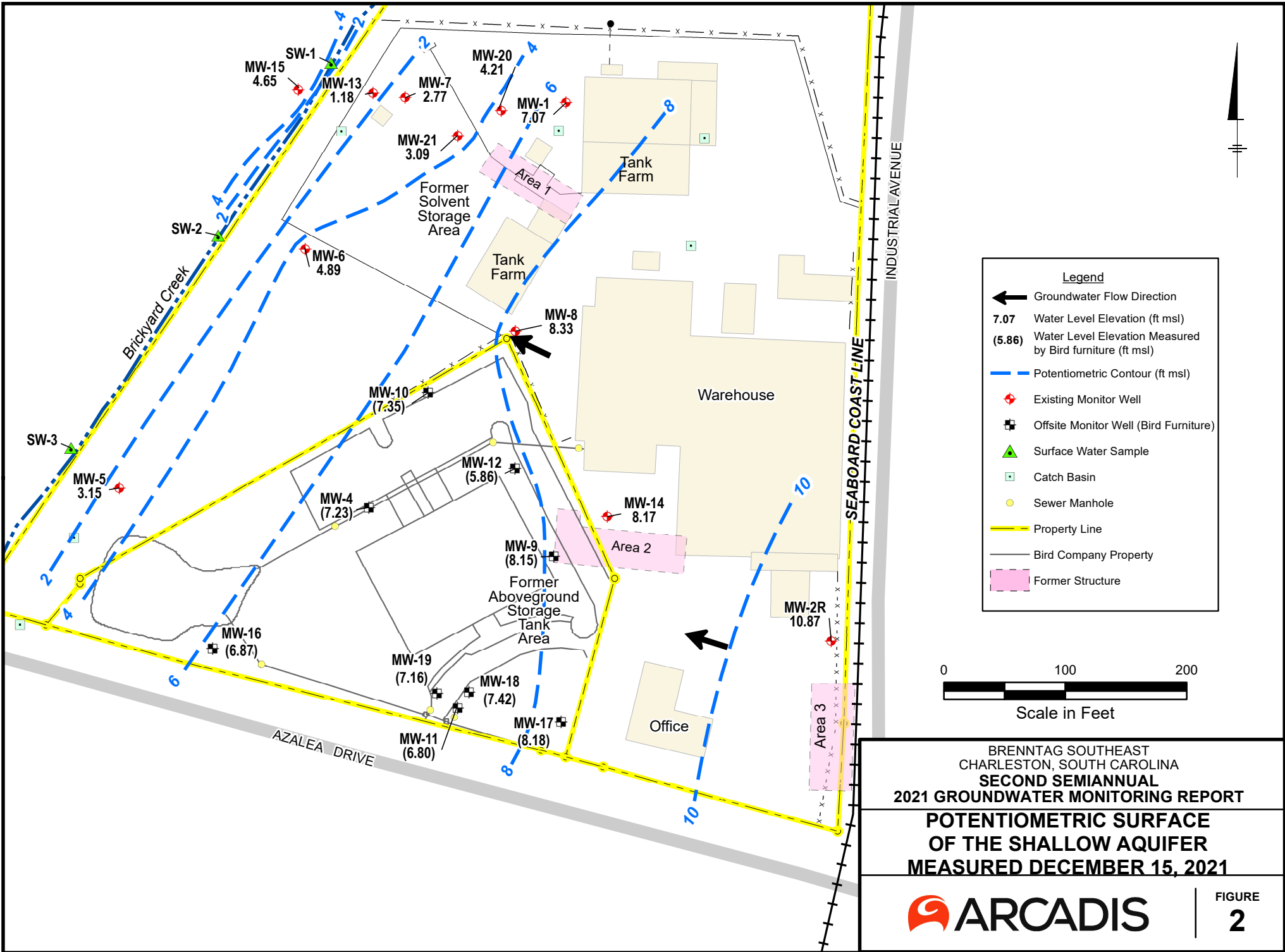


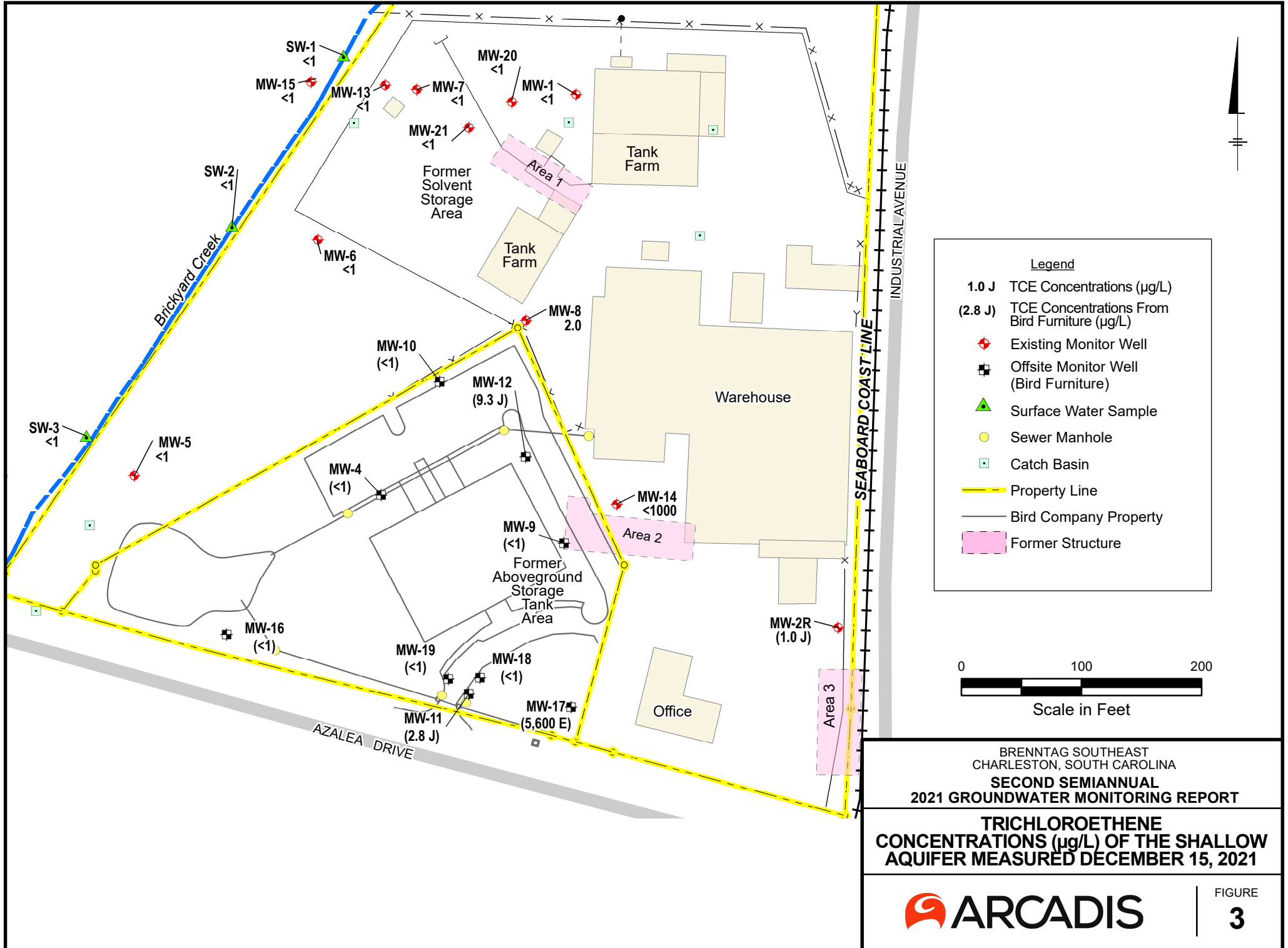
BRENTAG SOUTHEAST
 CHARLESTON, SOUTH CAROLINA
**SECOND SEMIANNUAL
 2021 GROUNDWATER MONITORING REPORT**

SITE LAYOUT



Source: Google Earth | Pro 9-19-2010





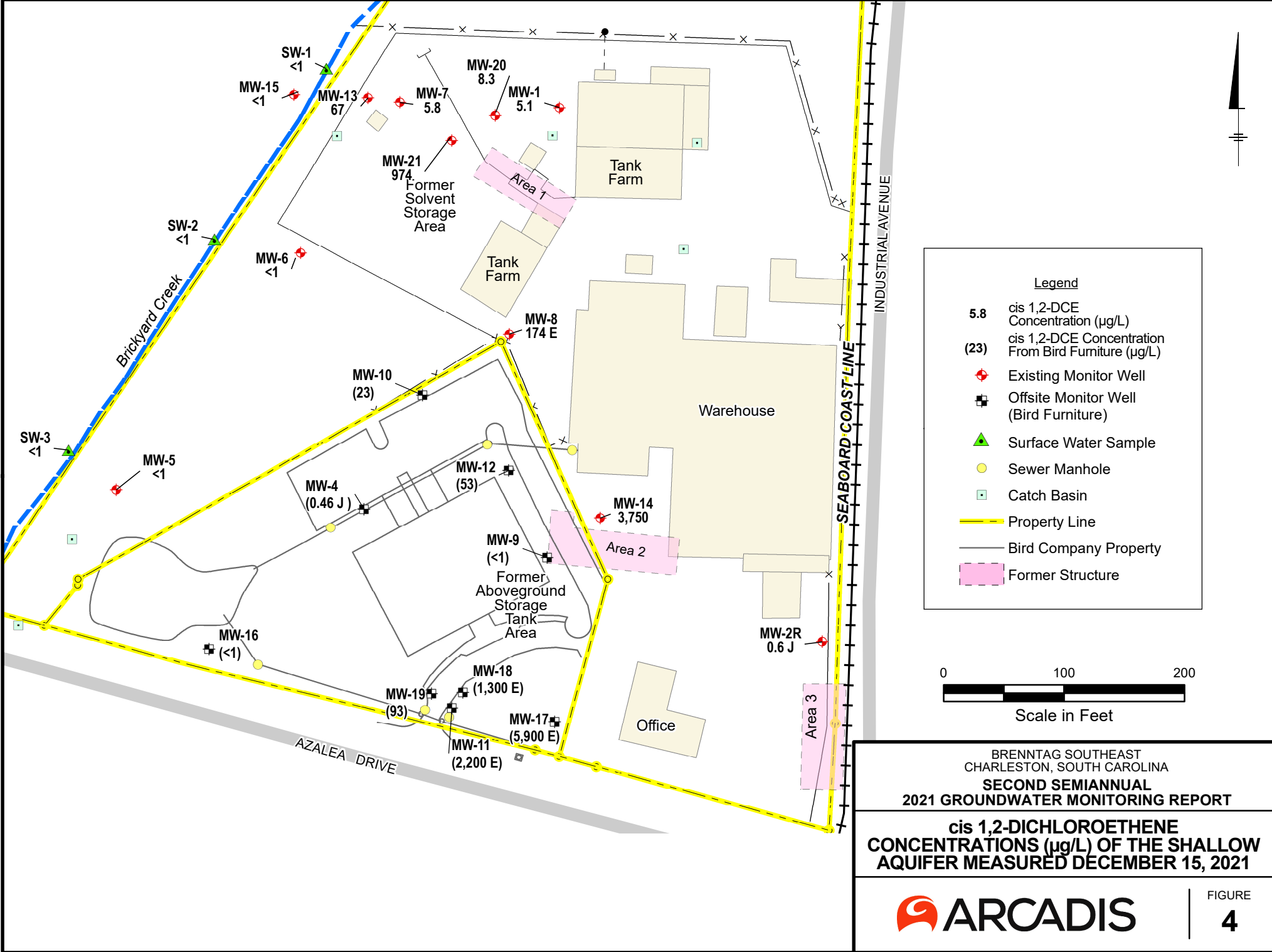
SW-1 <1
 MW-15 <1
 MW-13 <1
 MW-7 <1
 MW-20 <1
 MW-1 <1
 MW-21 <1
 Former Solvent Storage Area
 Area 1
 Tank Farm
 Tank Farm
 Warehouse
 MW-6 <1
 MW-8 2.0
 MW-10 (<1)
 MW-12 (9.3 J)
 MW-4 (<1)
 MW-9 (<1)
 Former Aboveground Storage Tank Area
 MW-14 <1000
 Area 2
 MW-2R (1.0 J)
 Office
 MW-16 (<1)
 MW-19 (<1)
 MW-18 (<1)
 MW-17 (5,600 E)
 MW-11 (2.8 J)
 MW-17 (5,600 E)

Brickyard Creek

SEABOARD COAST LINE

INDUSTRIAL AVENUE

AZALEA DRIVE



SW-1 <1

MW-15 <1

MW-13 67

MW-7 5.8

MW-20 8.3

MW-1 5.1

MW-21 974

Former Solvent Storage Area

Area 1

Tank Farm

Tank Farm

Warehouse

MW-6 <1

MW-8 174 E

MW-10 (23)

MW-12 (53)

MW-4 (0.46 J)

MW-14 3,750

Area 2

MW-9 (<1)

Former Aboveground Storage Tank Area

MW-2R 0.6 J

MW-16 (<1)

MW-18 (1,300 E)

MW-19 (93)

MW-17 (5,900 E)

MW-11 (2,200 E)

Office

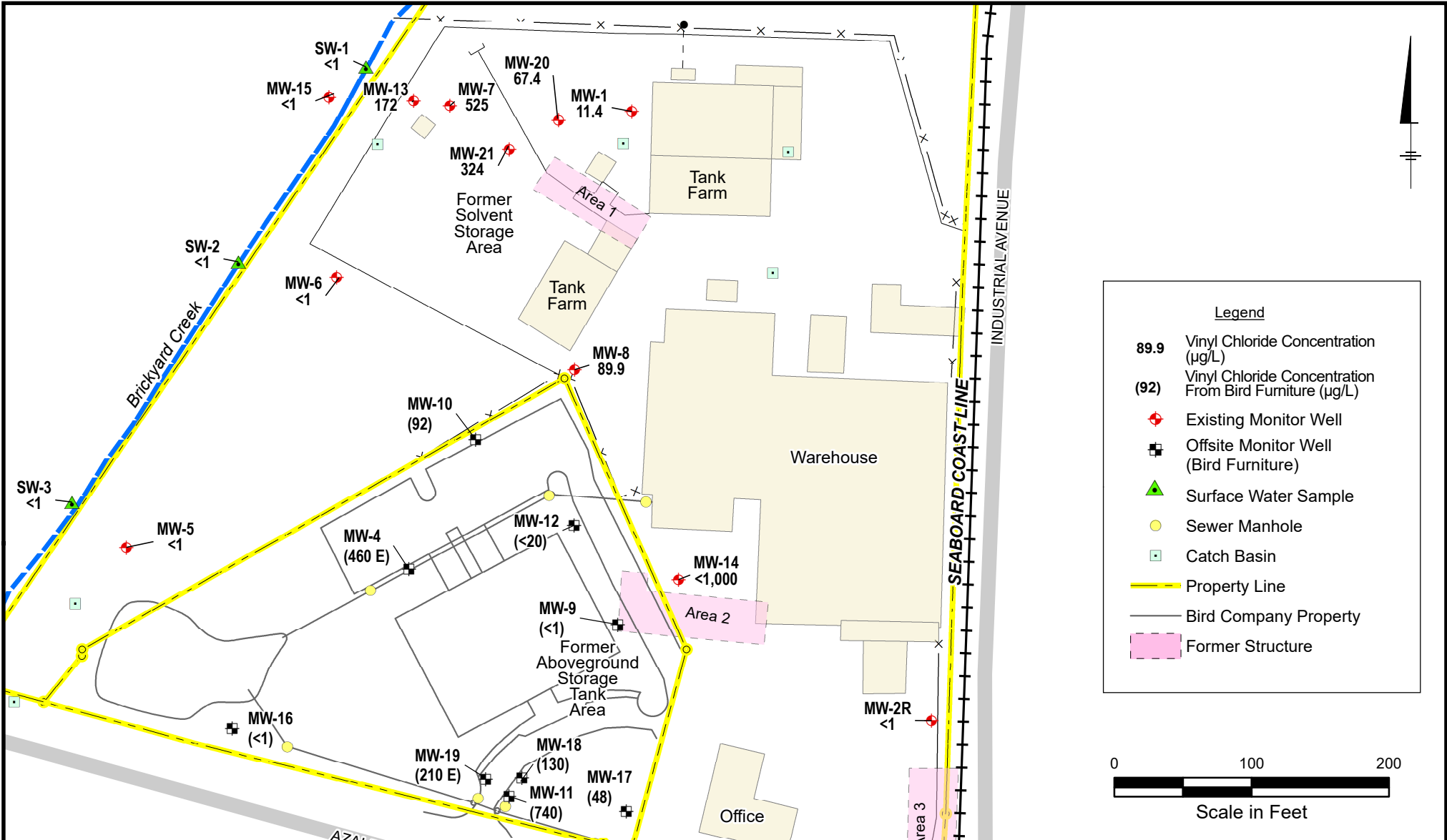
Area 3

Brickyard Creek

AZALEA DRIVE

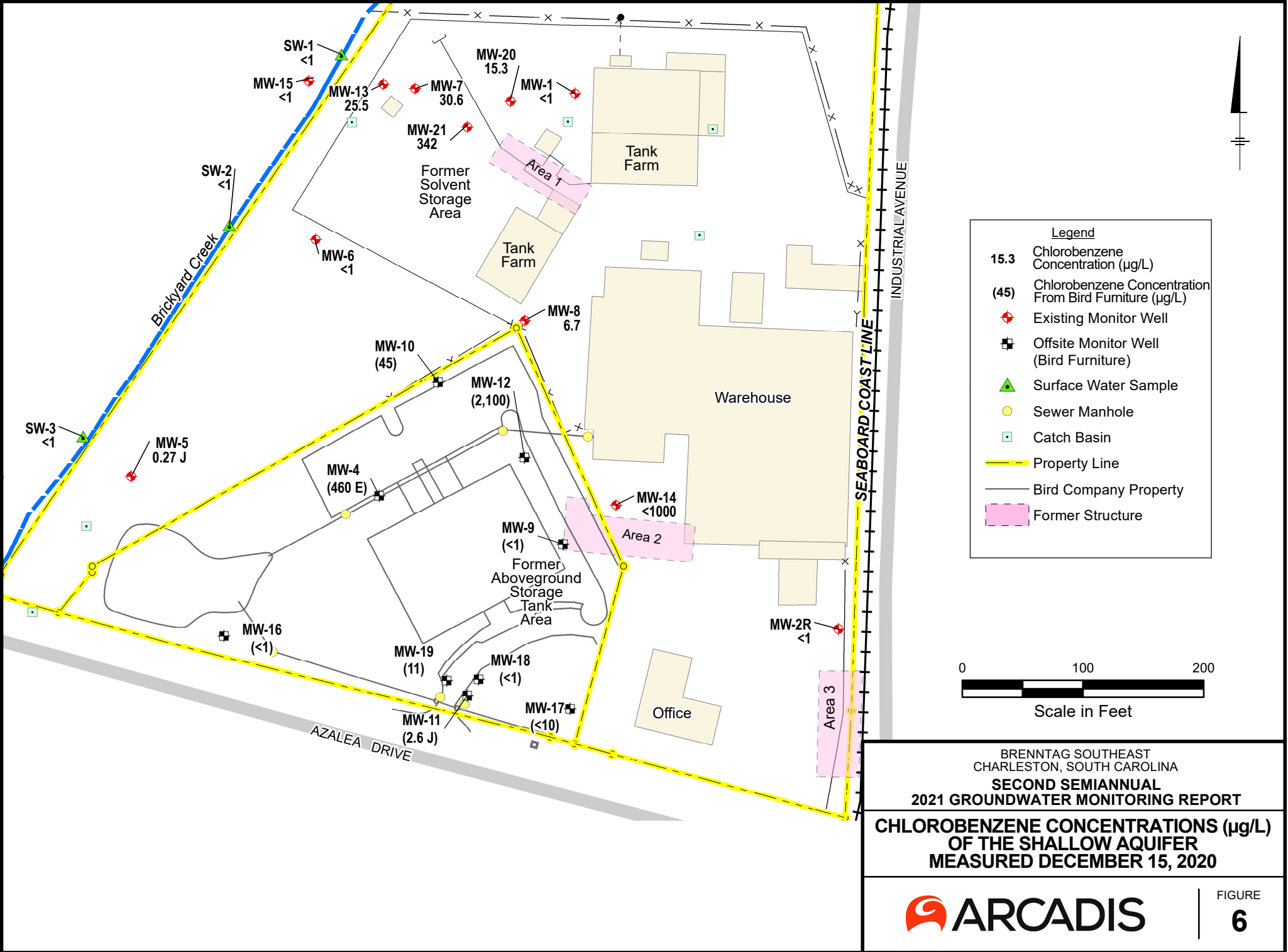
INDUSTRIAL AVENUE

SEABOARD COAST LINE

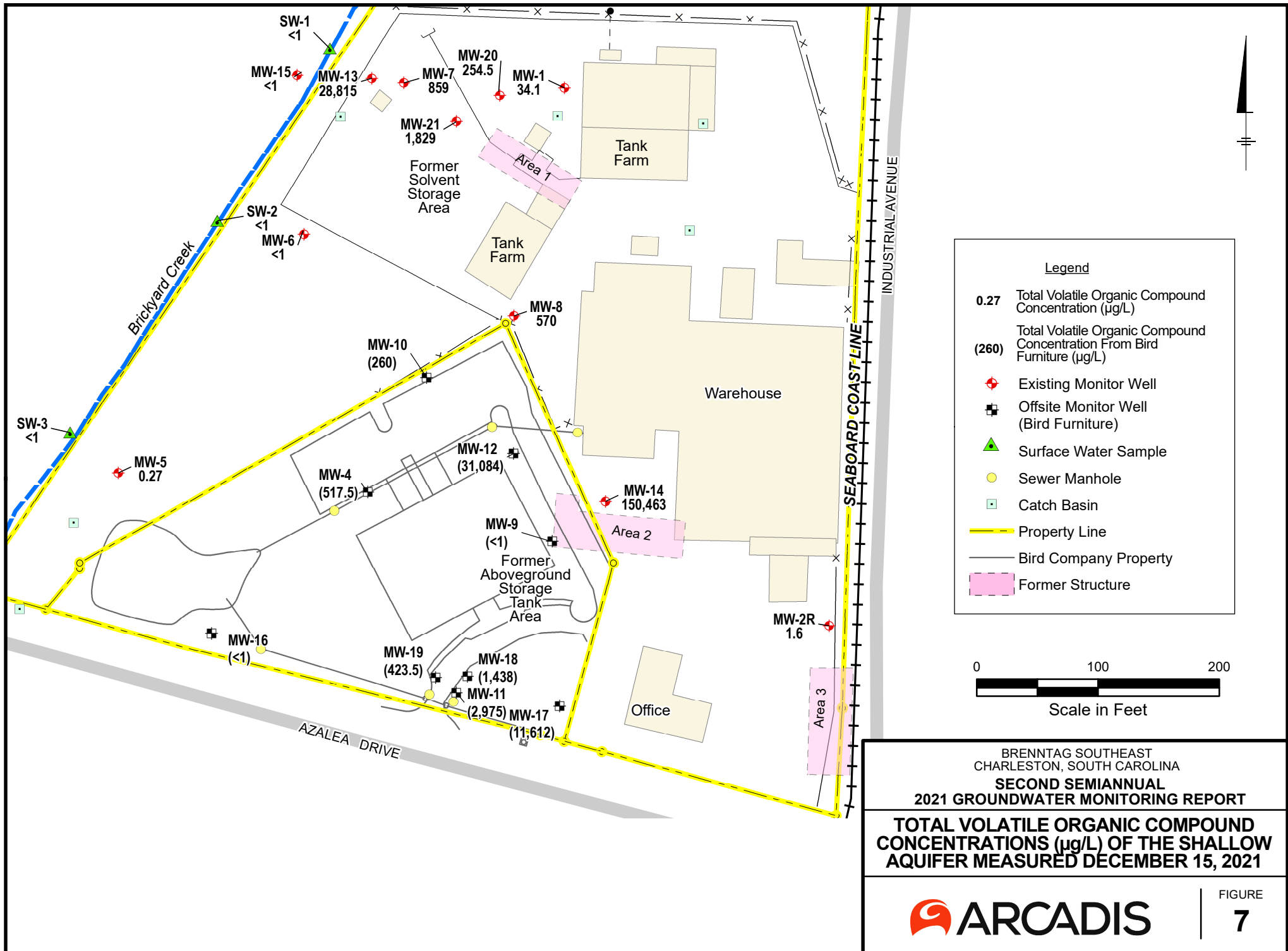


BRENNTAG SOUTHEAST
 CHARLESTON, SOUTH CAROLINA
**SECOND SEMI ANNUAL
 2021 GROUNDWATER MONITORING REPORT**

**VINYL CHLORIDE
 CONCENTRATIONS (µg/L) OF THE SHALLOW
 AQUIFER MEASURED DECEMBER 15, 2021**



BRENTAG SOUTHEAST
 CHARLESTON, SOUTH CAROLINA
**SECOND SEMIANNUAL
 2021 GROUNDWATER MONITORING REPORT**
**CHLOROBENZENE CONCENTRATIONS ($\mu\text{g/L}$)
 OF THE SHALLOW AQUIFER
 MEASURED DECEMBER 15, 2020**



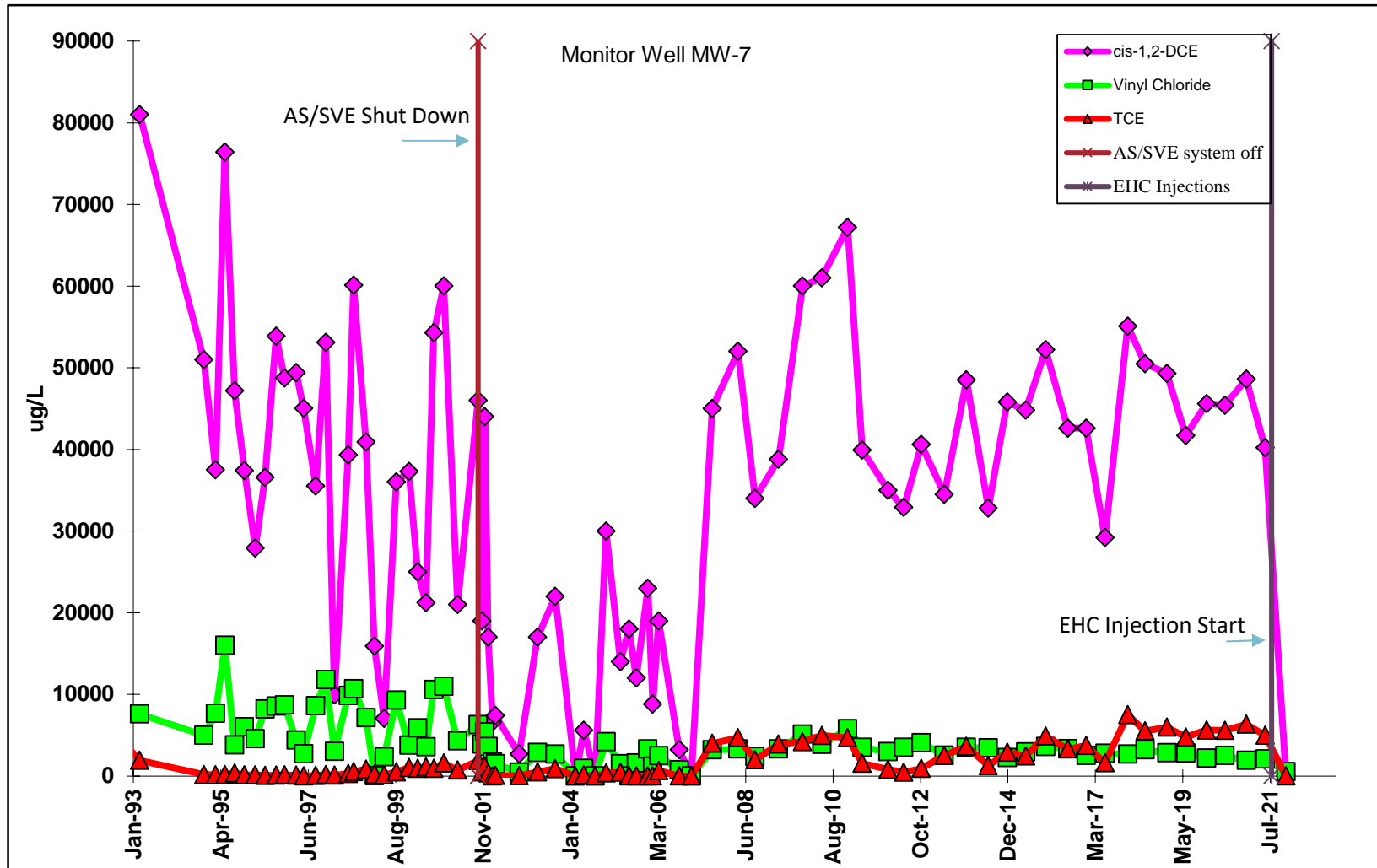


Figure 8. TCE and Degradation Product Trends at Monitor Well MW-7

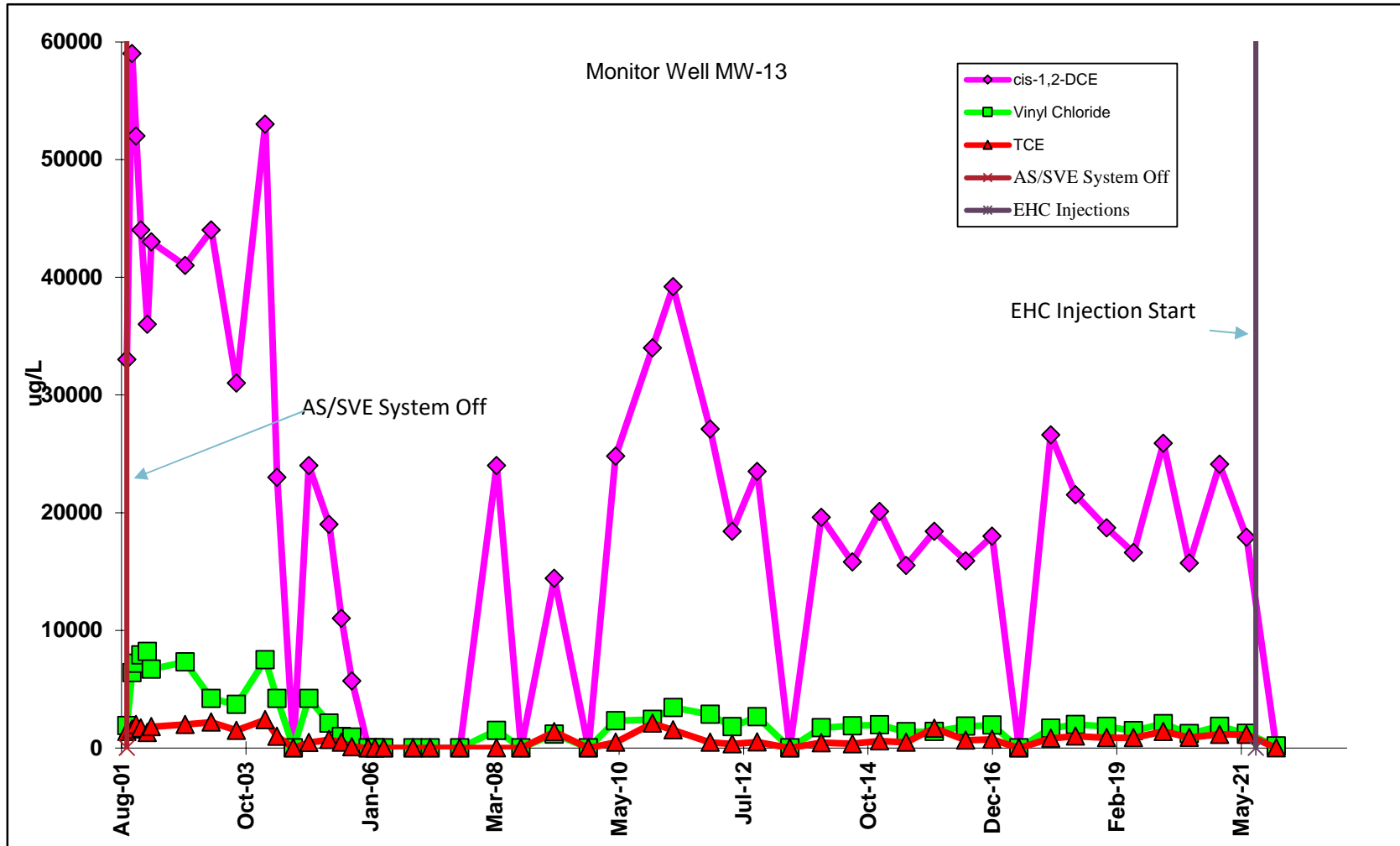


Figure 9. TCE and Degradation Product Trends at Monitor Well MW-13

TABLES



Table 1
Second Semiannual 2021 Groundwater Sampling Plan
Brenntag Southeast
Charleston, South Carolina



Design & Consultancy
for natural and
built assets

Sample Location	Purgeables Method 8260	Indicators ¹
MW-1	X	X
MW-2R	X	X
MW-5	X	X
MW-6	X	X
MW-7	X	X
MW-8	X	X
MW-13	X	X
MW-14	X	X
MW-15	X	X
MW-20	X	X
MW-21	X	X
SW-1	X	X
SW-2	X	X
SW-3	X	X

¹ Indicators are temperature, specific conductance, and pH.

SW-1, SW-2 & SW-3 are surface water sampling locations in Brickyard Creek
Monitor Well MW-15 installed in May 2012

Table 2
Groundwater Elevations
Brenntag Southeast
Charleston, South Carolina
(revised 12/19/2021)

Monitor Well ID	Top of Casing (ft msl)	Date								
		8/15/1991 (ft msl)	3/29/1993 (ft msl)	7/15/1993 (ft msl)	11/7/1994 (ft msl)	12/2/1994 (ft msl)	12/8/1994 (ft msl)	12/15/1994 (ft msl)	12/20/1994 (ft msl)	1/19/1995 (ft msl)
MW-1	11.74	8.5	9.24	7.78	8.45	8.23	8.66	8.49	8.42	9.06
MW-2R	16.5	12.08	---	---	11.38	---	---	---	---	---
MW-3	9.41	8.56	8.89	7.71	8.08	---	---	---	---	---
MW-5	12.01	0.22	0.26	-0.11	0.83	---	---	---	---	---
MW-6	10.62	5.31	6.58	5.15	5.86	6.17	6.38	6.32	6.24	6.65
MW-7	9.09	3.73	3.81	2.99	3.7	3.82	3.71	3.71	3.95	4.02
MW-8	15.16	---	10.53	8.99	9.68	9.32	9.74	9.66	9.61	10.21
MW-13	6.96	---	---	---	---	---	---	---	---	---
MW-14	15.17	---	---	---	---	---	---	---	---	---

Monitor Well ID	Top of Casing (ft msl)	Date								
		2/22/1995 (ft msl)	5/17/1995 (ft msl)	8/15/1995 (ft msl)	11/13/1995 (ft msl)	2/20/1996 (ft msl)	5/20/1996 (ft msl)	8/30/1996 (ft msl)	11/14/1996 (ft msl)	2/28/1997 (ft msl)
MW-1	11.74	8.67	7.54	7.99	8.43	7.58	7.49	8.09	7.55	8.04
MW-2R	16.5	11.89	10.69	11.1	11.48	10.83	10.79	11.19	10.85	11.17
MW-3	9.41	9.35	7.48	8.1	8.46	7.75	7.57	8.09	7.54	8.06
MW-5	12.01	0.96	0.55	---	1	0.45	0.93	1.41	1.71	1.08
MW-6	10.62	6.44	5.17	5.41	6.3	6.01	5.27	5.76	5.51	6.07
MW-7	9.09	3.7	3.33	3.4	---	3.27	3.2	3.68	3.47	3.58
MW-8	15.16	10.01	8.58	9.21	9.62	9.56	8.59	9.02	8.67	9.01
MW-13	6.96	---	---	---	---	---	---	---	---	---
MW-14	15.17	---	---	---	---	---	---	---	---	---

(ft msl) feet above mean sea level

Table 2
Groundwater Elevations
Brenntag Southeast
Charleston, South Carolina
(revised 12/19/2021)

Monitor Well ID	Top of Casing (ft msl)	Date								
		5/8/1997 (ft msl)	8/26/1997 (ft msl)	11/26/1997 (ft msl)	2/14/1998 (ft msl)	6/19/1998 (ft msl)	8/8/1998 (ft msl)	11/30/1998 (ft msl)	2/15/1999 (ft msl)	5/14/1999 (ft msl)
MW-1	11.74	8.26	7.7	8.18	8.38	7.51	7.48	6.95	7.89	7.83
MW-2R	16.50	11.48	---	11.39	---	10.81	---	10.28	---	11.05
MW-3	9.41	8.38	---	8.09	---	---	---	---	---	---
MW-5	12.01	1.91	---	1.75	---	0.36	---	0.39	---	1.91
MW-6	10.62	6.2	5.31	6.08	6.06	5.02	5.1	4.8	5.94	5.41
MW-7	9.09	3.87	3.33	3.57	3.78	3.21	3.56	2.91	3.71	3.59
MW-8	15.16	9.26	8.86	9.35	9.86	8.5	8.34	7.96	9.1	8.44
MW-13	6.96	---	---	---	---	---	---	---	---	---
MW-14	15.17	---	---	---	---	---	---	---	---	---

Monitor Well ID	Top of Casing (ft msl)	Date								
		9/3/1999 (ft msl)	12/27/1999 (ft msl)	3/16/2000 (ft msl)	5/31/2000 (ft msl)	8/11/2000 (ft msl)	11/10/2000 (ft msl)	3/16/2001 (ft msl)	9/20/2001 (ft msl)	2/25/2002 (ft msl)
MW-1	11.74	7.04	7.87	7.70	6.52	7.71	6.81	8.12	7.52	7.31
MW-2R	16.50	---	11.00	11.01	10.07	---	10.32	11.55	11.19	11.03
MW-3	9.41	---	---	---	---	---	---	---	---	---
MW-5	12.01	---	1.62	1.33	1.34	1.15	1.32	1.45	1.23	1.3
MW-6	10.62	4.99	5.94	5.69	4.43	5.79	4.79	6.37	5.46	5.76
MW-7	9.09	3.77	3.56	3.47	3.44	3.67	3.33	3.8	3.88	3.45
MW-8	15.16	7.85	8.75	8.72	7.68	8.38	7.91	8.65	8.45	8.22
MW-13	6.96	---	---	---	---	---	---	---	2.37	1.66
MW-14	15.17	---	---	---	---	---	---	---	---	---

(ft msl) feet above mean sea level

Table 2
Groundwater Elevations
Brenntag Southeast
Charleston, South Carolina
(revised 12/19/2021)

Monitor Well ID	Top of Casing (ft msl)	Date								
		9/30/2002 (ft msl)	03/17/03 (ft msl)	08/26/03 (ft msl)	02/27/04 (ft msl)	05/13/04 (ft msl)	08/26/04 (ft msl)	04/13/05 (ft msl)	07/01/05 (ft msl)	09/06/05 (ft msl)
MW-1	11.74	8.03	8.40	7.94	6.96	7.62	7.64	8.13	7.65	7.63
MW-2R	16.50	11.72	12.11	11.32	8.54	10.97	11.51	11.48	11.38	11.05
MW-3	9.41	---	---	---	---	---	---	---	---	---
MW-5	12.01	1.68	2.19	1.22	0.92	1.16	1.36	1.92	1.82	2.20
MW-6	10.62	6.35	6.59	6.24	5.33	5.40	6.04	6.26	6.16	5.35
MW-7	9.09	3.76	4.01	5.53	2.83	3.20	3.61	3.79	3.82	3.80
MW-8	15.16	8.03	8.51	8.92	7.98	8.80	9.31	9.41	9.79	8.65
MW-13	6.96	2.06	2.34	2.19	-0.55	1.53	1.97	2.09	2.25	2.24
MW-14	15.17	---	---	---	7.97	8.87	8.82	9.40	9.30	8.92

Monitor Well ID	Top of Casing (ft msl)	Date								
		12/20/05 (ft msl)	02/02/06 (ft msl)	03/30/06 (ft msl)	10/04/06 (ft msl)	1/23/2007 (ft msl)	8/1/2007 (ft msl)	3/24/2008 (ft msl)	8/27/2008 (ft msl)	3/30/2009 (ft msl)
MW-1	11.74	7.87	7.71	7.67	8.70	8.40	7.70	7.59	7.67	4.09
MW-2R	16.50	11.40	11.12	11.04	10.87	10.69	11.39	11.15	11.77	11.21
MW-3	9.41	---	---	---	---	---	---	---	---	---
MW-5	12.01	2.20	2.09	2.23	2.28	2.81	2.56	1.97	3.02	9.64
MW-6	10.62	3.24	5.96	5.47	5.08	6.41	6.04	5.94	6.36	4.73
MW-7	9.09	3.87	3.70	3.75	3.76	4.14	4.09	3.76	4.11	5.44
MW-8	15.16	9.01	9.03	8.93	9.53	9.59	8.22	8.89	9.55	6.55
MW-13	6.96	2.62	2.47	2.33	1.87	2.93	2.84	2.04	2.85	4.75
MW-14	15.17	9.29	8.75	8.74	9.13	9.47	8.47*	8.97**	---	6.58

(ft msl) feet above mean sea level

Table 2
Groundwater Elevations
Brenntag Southeast
Charleston, South Carolina
(revised 12/19/2021)

Monitor Well ID	Top of Casing (ft msl)	Date								
		11/5/2009 (ft msl)	04/30/10 (ft msl)	12/22/10 (ft msl)	05/04/11 (ft msl)	12/28/11 (ft msl)	05/18/12 (ft msl)	10/26/12 (ft msl)	05/24/13 (ft msl)	12/12/13 (ft msl)
MW-1	11.74	6.91	7.31	6.96	7.29	6.63	7.14	6.74	7.89	7.30
MW-2R	16.50	10.71	10.99	10.76	10.81	10.43	10.71	---	---	---
MW-2R	16.20	---	---	---	---	---	---	10.05	11.17	10.68
MW-3	9.41	---	---	---	---	---	---	---	---	---
MW-5	12.01	3.86	2.97	2.10	1.77	2.86	3.12	3.76	4.28	3.37
MW-6	10.62	5.16	5.16	5.48	5.14	5.41	4.82	4.28	4.79	5.84
MW-7	9.09	3.81	3.58	3.54	3.49	3.57	3.84	3.71	4.16	3.81
MW-8	15.16	7.95	8.88	7.75	8.38	7.61	7.86	7.74	9.07	8.12
MW-13	6.96	2.14	1.93	1.96	1.76	1.97	2.26	2.10	2.69	2.21
MW-14	15.17	7.97	9.00	7.77	8.38	6.87	7.15	---	---	---
MW-14	14.92	---	---	---	---	---	---	7.22	8.98	8.11
MW-15	9.03	---	---	---	---	---	4.65	3.66	4.70	4.07

(ft msl) feet above mean sea level

Table 2
Groundwater Elevations
Brenntag Southeast
Charleston, South Carolina
(revised 12/19/2021)

Monitor Well ID	Top of Casing (ft msl)	Date								
		6/30/2014 (ft msl)	12/22/14 (ft msl)	06/10/15 (ft msl)	12/08/15 (ft msl)	06/28/16 (ft msl)	12/14/16 (ft msl)	06/05/17 (ft msl)	12/26/17 (ft msl)	06/04/18 (ft msl)
MW-1	11.74	6.89	7.29	7.89	7.78	7.20	7.52	7.41	7.49	8.20
MW-2R	16.50	---	---	---	---	---	---	---	---	---
MW-2R ***	16.20	10.50	10.73	11.55	11.63	11.06	11.19	11.43	11.12	12.05
MW-3	9.41	---	---	---	---	---	---	---	---	---
MW-5	12.01	3.79	4.86	3.86	4.22	3.88	4.75	3.84	2.61	3.31
MW-6	10.62	4.24	5.78	6.22	6.16	4.58	5.07	4.73	4.49	3.64
MW-7	9.09	3.65	3.97	3.97	4.28	3.65	4.24	3.89	3.43	3.92
MW-8	15.16	8.01	8.68	8.66	9.19	8.38	8.58	7.26	8.81	9.37
MW-13	6.96	1.99	1.93	2.31	2.30	1.91	2.48	1.78	1.50	2.22
MW-14	15.17	---	---	---	---	---	---	---	---	---
MW-14 ***	14.92	8.08	8.27	8.79	9.49	8.77	8.84	8.33	8.57	9.07
MW-15	9.03	5.01	4.19	6.29	4.63	4.87	6.06	5.29	3.55	6.48

(ft msl) feet above mean sea level

Table 2
Groundwater Elevations
Brenntag Southeast
Charleston, South Carolina
(revised 12/19/2021)

Monitor Well ID	Top of Casing (ft msl)	Date						
		12/21/2018 (ft msl)	6/12/2019 (ft msl)	12/20/2019 (ft msl)	6/4/2020 (ft msl)	12/16/2020 (ft msl)	6/7/2021 (ft msl)	12/15/2021 (ft msl)
MW-1	11.74	9.02	8.19	7.68	8.44	7.46	7.13	7.07
MW-2R	16.50	---	---	---	---	---	---	---
MW-2R ***	16.20	11.87	11.57	11.29	11.55	10.40	10.76	10.87
MW-3	9.41	---	---	---	---	---	---	---
MW-5	12.01	4.57	4.21	2.82	3.64	3.61	3.16	3.15
MW-6	10.62	4.59	4.31	3.91	4.48	4.14	3.75	4.89
MW-7	9.09	4.81	4.31	3.64	4.29	4.04	3.70	2.77
MW-8	15.16	10.79	10.32	8.93	9.91	8.82	(8.77)	8.33
MW-13	6.96	2.86	2.40	1.83	2.21	2.52	1.81	1.18
MW-14	15.17	---	---	---	---	---	---	---
MW-14 ***	14.92	10.32	10.10	8.68	9.67	8.77	8.09	8.17
MW-15	9.03	6.04	8.15	5.47	5.80	4.89	4.58	4.65
MW-20 ****	12.55	---	---	---	---	---	3.17	4.21
MW-21 ****	11.05	---	---	---	---	---	2.90	3.09

(ft msl) feet above mean sea level

**Approximately 0.01 feet of product was observed on March 24, 2008. Groundwater elevation calculated by: [Top of Casing Elevation - Depth to Water] + [free product thickness x 0.8581]

MW-15 was installed on May 16, 2012

*** MW-2R and MW-14 were resurveyed on October 24, 2012

**** MW-20 and MW-21 surveyed on 5/18/2021

(8.77) MW-8 was measured on 6/22/2021

\\arcadis-us.com\officedata\Augusta-GA\Project\Brenntag Southeast\SC000204.0021 Services for 2021\Reports\Annual\Tables\table 2-waterlevels 2nd 2021.xlsx]Table 2

Table 3
Summary of Measured Field Parameters
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Field Parameter pH										
Monitor ID	Date									
Well	2/6/91	8/15/91	3/29/93	7/15/93	11/7/94	12/2/94	12/15/94	12/20/94	1/19/95	2/22/95
MW-1	6.6	6.3	6.2		5.7					6.2
MW-2R		10.4			9.9					
MW-3	6.8	6.5	6.1							
MW-5		7.1	7.0							
MW-6		11.9	11.6		9.2					
MW-7		6.8			6.1					7.1
MW-8										6.2
MW-13										
MW-14										

Field Parameter pH										
Monitor ID	Date									
Well	5/17/95	8/15/95	11/13/95	2/20/96	5/20/96	8/30/96	11/14/96	2/28/97	5/8/97	8/26/97
MW-1	5.6	5.8	6.1	6.0	6.2	6.2	6.2	5.9	6.6	5.4
MW-2R	11.6		11.5		12.0		12.4		11.2	
MW-3	5.1		6.4		6.1		6.2		6.1	
MW-5	6.6		7.1		6.8		6.9		6.7	
MW-6										
MW-7	6.8	7.0	7.1	6.8	6.9	7.0	6.6	6.7	7.3	7.5
MW-8	7.5	6.8	6.6	7.6	7.6	7.3	7.2	7.2	7.8	7.5
MW-13										
MW-14										

Table 3
Summary of Measured Field Parameters
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Field Parameter pH										
Monitor ID	Date									
Well	11/26/97	2/14/98	6/19/98	8/8/98	11/30/98	2/15/99	5/14/99	9/3/99	12/27/99	3/16/00
MW-1	6.3	6.7	6.4	5.7	5.9	6.2	6.0	5.9	6.3	6.0
MW-2R	10.8		10.3		10.6		10.4		10.8	
MW-3	6.0									
MW-5	6.7		7.0		6.8		6.7		6.8	
MW-6									12.2	11.7
MW-7	6.7	7.0	7.2	7.1	7.0	6.9	6.9	6.7	6.7	6.7
MW-8	6.6	6.3	6.9	7.3	7.6	7.1	7.3	7.1	7.5	7.3
MW-13										
MW-14										

Field Parameter pH										
Monitor ID	Date									
Well	5/31/00	8/11/00	11/10/00	3/16/01	9/20/01	2/25/02	9/30/02	3/17/03	8/26/03	2/27/04
MW-1	6.1	6.0	6.1	7.1	6.5	6.4	5.8	6.1	9.8	6.9
MW-2R	9.7		9.8	9.7	9.9	10.1	9.7	10.58	11.99	12.86
MW-3										
MW-5	6.4		6.6	6.8	7.7	6.9	7	7.31	11.56	7.72
MW-6	11.2	11.5	11.9	8.7	10.1	9.7	10.4	9.81	14.03	8.78
MW-7	6.6	6.7		6.8	7.5	7	7.1	7.19	11.36	7.84
MW-8	7.1	7.5	7.2	6.7	7.4	6.6	6.2	5.54	9.26	7.85
MW-13					7.5	6.9	6.9	7.18	10.34	7.76
MW-14										7.43

Table 3
Summary of Measured Field Parameters
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Field Parameter pH										
Monitor ID	Date									
Well	5/13/04	8/26/04	12/2/04	4/13/05	7/1/05	9/6/05	12/20/05	2/2/06	3/30/06	10/4/06
MW-1	6.42	6.2	5.92	6.71	6.69	6.65	6.70	6.75	6.36	5.97
MW-2R		10.07		10.05		9.85		10.11	10.21	9.86
MW-3										
MW-5		6.79		6.95		6.79		7.22	7.56	6.63
MW-6		10.08		9.96		9.57		9.73	9.24	9.20
MW-7	7.05	6.93	6.35	6.92	6.99	6.98	7.04	7.15	6.61	6.54
MW-8		6.31		6.39		6.47		7.19	6.42	6.29
MW-13	6.80	6.73	6.37	6.72	6.72	6.59	7.1	7.22	7.12	7.02
MW-14		7.02		6.79		6.81		6.98	6.62	6.43

Field Parameter pH										
Monitor ID	Date									
Well	1/23/07	8/1/07	3/24/08	8/27/08	3/30/09	11/5/09	4/30/10	12/22/10	5/4/11	12/28/11
MW-1	6.02	6.73	7.38	6.54	7.27	6.7	7.26	7.0	6.89	7.2
MW-2R	9.06	9.60	10.56	9.75	10.56	10.03	11.36	7.7	10.30	7.25
MW-3										
MW-5	6.68	6.81	7.86	6.85	7.01	6.96	7.60	7.21	6.84	7.03
MW-6	9.30	11.59	10.9	9.23	8.06	10.1	10.51	7.49	11.20	12.31
MW-7	6.62	7.11	7.47	6.73	7.43	6.92	7.24	7.05	6.81	7.2
MW-8	6.26	6.59	7.2	6.38	6.75	6.14	6.79	6.54	6.14	6.72
MW-13	7.26	6.87	7.4	7.18	7.45	7.09	7.37	7.03	6.84	7.17
MW-14	6.47	NA	NA	NA	7.20	6.81	7.15	6.95	5.75	6.99

Table 3
Summary of Measured Field Parameters
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Field Parameter pH										
Monitor ID Well	Date									
	5/18/12	10/26/12	5/24/13	12/12/13	6/30/14	12/22/14	6/10/15	12/8/15	6/28/16	12/14/16
MW-1	6.96	6.4	6.22	6.65	6.38	6.50	6.45	6.8	7.24	6.48
MW-2R	10.47	8.71	10.23	7.19	10.19	8.73	7.91	9.89	10.13	6.85
MW-3										
MW-5	7.01	6.99	6.97	7.53	6.78	6.95	6.67	6.87	7.36	6.63
MW-6	12.81	8.74	8.7	12.28	11.4	11.76	10.4	6.87	12.6	6.40
MW-7	7.14	6.72	6.75	6.91	7.54	6.55	6.79	6.92	7.21	6.74
MW-8	5.90	6.43	6.08	6.03	6.11	5.42	6.1	6.3	6.12	6.13
MW-13	7.06	6.85	6.59	6.92	6.93	6.68	6.9	6.89	7.31	6.68
MW-14	6.92	6.90	6.68	6.89	6.63	6.62	6.72	6.92	7.17	6.68
MW-15	7.17	6.88	6.39	6.35	6.44	5.92	6.65	6.52	7.25	6.46

Field Parameter pH										
Monitor ID Well	Date									
	6/5/17	12/26/17	6/4/18	12/21/18	6/12/19	12/20/19	6/4/20	12/16/20	6/7/21	12/15/21
MW-1	5.98	6.11	5.99	6.85	6.07	6.91	6.8	7.15	7.37	6.57
MW-2R	7.4	6.79	8.97	9.79	10.00	6.96	9.01	7.25	7.94	8.1
MW-3										
MW-5	7.57	6.74	6.66	7.27	6.11	6.94	7.01	6.86	6.36	6.59
MW-6	7.54	7.54	7.50	8.13	7.61	6.72	8.34	10.24	7.37	6.29
MW-7	6.72	6.79	6.41	6.98	7.00	6.88	6.84	7.14	7.30	6.29
MW-8	5.75	6.53	5.38	6.53	5.53	6.36	6.41	6.51	6.07	5.51
MW-13	7.19	7.82	6.52	7.14	6.27	6.91	7.02	7.26	7.27	6.22
MW-14	7.36	6.58	6.31	7.19	6.70	7.01	6.85	6.94	7.03	6.02
MW-15	7.54	6.66	6.45	6.93	6.44	6.82	6.71	7.24	6.66	6.49
MW-20									7.02	6.12
MW-21									7.10	6.06

Table 3
Summary of Measured Field Parameters
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Field Parameter Specific Conductance (µmhos/cm)										
Monitor ID	Date									
Well	2/6/91	8/15/91	3/29/93	7/15/93	11/7/94	12/2/94	12/15/94	12/20/94	1/19/95	2/22/95
MW-1	2044	1610	2140		2680					3080
MW-2R		1410			3400					
MW-3	1669	21800	880							
MW-5		324	2720							
MW-6		268	1850		1560					
MW-7		225			2860					4210
MW-8			3980							2770
MW-13										
MW-14										

Field Parameter Specific Conductance (µmhos/cm)										
Monitor ID	Date									
Well	5/17/95	8/15/95	11/13/95	2/20/96	5/20/96	8/30/96	11/14/96	2/28/97	5/8/97	8/26/97
MW-1	5580	1440	1032	1600	735	976	1250	798	392	958
MW-2R	4390		2940		3070		2920		1750	
MW-3	1630		1171	719			1297		977	
MW-5	16100		3900		6030		12370		6970	
MW-6										
MW-7	4010	>20000	3200	2900	2610	2760	2460	4120	3320	4040
MW-8	4600	2360	2480	2730	2430	2510	2500	2790	2830	2610
MW-13										
MW-14										

µmhos/cm = micromhos/centimeter

Table 3
Summary of Measured Field Parameters
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Field Parameter Specific Conductance (µmhos/cm)										
Monitor ID	Date									
Well	11/26/97	2/14/98	6/19/98	8/8/98	11/30/98	2/15/99	5/14/99	9/3/99	12/27/99	3/16/00
MW-1	769	465	1062	1052	1264	5070	1123	1486	1259	1065
MW-2R	2080		1621		1356		1325		1953	
MW-3	1085									
MW-5	4040		5450		7160		8600		8690	
MW-6									2720	2440
MW-7	3540	3530	2850	2490	2330	2700	2610	2220	2790	2460
MW-8	2640	1810	2330	2560	2060	1832	1990	1790	2440	1937
MW-13										
MW-14										

Field Parameter Specific Conductance (µmhos/cm)										
Monitor ID	Date									
Well	5/31/00	8/11/00	11/10/00	3/16/01	9/20/01	2/25/02	9/30/02	3/17/03	8/26/03	2/27/04
MW-1	2650	981	1797	220	634	1780	130	122	870	1632
MW-2R	1186		867	762	770	519	99	185	1080	1411
MW-3										
MW-5	14850		10260	9450	775	1560	1370	297	5010	5693
MW-6	2570	2380	2610	892	1343	1060	90	102	1310	1107
MW-7	2200	1915	2060	2520	2975	2940	245	265	2630	2872
MW-8	1806	1897	1904	187	357	198	260	16	491	122
MW-13					2800	2340	211	199	2160	1968
MW-14										1130

µmhos/cm = micromhos/centimeter

Table 3
Summary of Measured Field Parameters
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Field Parameter Specific Conductance ($\mu\text{mhos/cm}$)										
Monitor ID	Date									
Well	5/13/04	8/26/04	12/2/04	4/13/05	7/1/05	9/6/05	12/20/05	2/2/06	3/30/06	10/4/06
MW-1	1477	2783	1530	2590	50	3450	1470	2210	1820	770
MW-2R		815		1075		1071		1020	1350	1300
MW-3										
MW-5		1326		3720		3470		8100	6930	13730
MW-6		943		766		647		790	880	960
MW-7	1974	2578	2300	1930	40	1750	2080	2230	2330	2300
MW-8		454		229		326		1130	560	960
MW-13	1536	2333	2600	1357	1420	1296	790	1100	1170	1190
MW-14		1790		1354		1401		1900	1810	1250

Field Parameter Specific Conductance ($\mu\text{mhos/cm}$)										
Monitor ID	Date									
Well	1/23/07	8/1/07	3/24/08	8/27/08	3/30/09	11/5/09	4/30/10	12/22/10	5/4/11	12/28/11
MW-1	840	903	3000	3200	1120	2050	1080	2630	2160	3190
MW-2R	1220	754	1500	663	860	756	1950	609	1590	440
MW-3										
MW-5	8760	15500	6100	15700	1140	23700	10300	19300	12100	30000
MW-6	970	2550	910	950	1050	669	712	20200	1230	1940
MW-7	2570	2280	1900	2470	2120	1870	2060	1690	2090	2400
MW-8	140	415	1000	459	434	271	770	573	385	741
MW-13	930	1940	1800	880	2380	1960	2080	1670	2200	7.17
MW-14	1230	NA	NA	NA	1360	1980	1960	1770	2050	1.77

$\mu\text{mhos/cm}$ = micromhos/centimeter

Table 3
Summary of Measured Field Parameters
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Field Parameter Specific Conductance (µmhos/cm)										
Monitor ID	Date									
	Well	5/18/12	10/26/12	5/24/13	12/12/13	6/30/14	12/22/14	6/10/15	12/8/15	6/28/16
MW-1	1500	6	701	479	605	331	291	979	513	6.48
MW-2R	951	557	1310	10	1430	898	562	1190	692	489
MW-3										
MW-5	28100	18800	18000	21000	20500	13900	11000	5890	13400	9350
MW-6	3210	1160	1020	2550	1890	2260	556	5660	2130	9370
MW-7	2120	2080	1840	1990	2	1970	1990	2300	1800	1880
MW-8	94	383	1	159	371	252	300	1060	398	515
MW-13	6150	1840	688	1760	2400	1840	1610	1870	1880	2070
MW-14	1650	2240	1460	2030	1790	2200	2020	1690	1860	2140
MW-15	565	812	434	470	685	1080	1030	978	750	783

Field Parameter Specific Conductance (µmhos/cm)										
Monitor ID	Date									
	Well	6/5/17	12/26/17	6/4/18	12/21/18	6/12/19	12/20/19	6/4/20	12/16/20	6/7/21
MW-1	307	300	588	790	611	1310	331	1850	570	383
MW-2R	335	388	561	822	295	509	620	521	1030	562
MW-3										
MW-5	15900	13600	6500	2770	405	21700	4540	13500	8050	12000
MW-6	15600	1410	282	549	384	667	828	708	848	3740
MW-7	1950	2109	1390	1770	1249	1900	1910	2130	1550	3610
MW-8	236	291	260	412	280	479	497	686	603	582
MW-13	15000	1350	1370	1680	1280	1080	1770	1870	1550	4220
MW-14	1970	1980	1100	1710	1120	1170	1120	1190	1040	1140
MW-15	199	668	561		262	249	527	342	462	501
MW-20									872	728
MW-21									954	1210

µmhos/cm = micromhos/centimeter

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L	
MW-1	2/6/91	64.0		87.0	<20	98.0	316.0	54.0	<20	<20	<20	<20	<20	638.00	B(233), T(68)	
	8/15/91	121.0		127.0	<20	165.0	286.0	53.0	<20	<20	32.0	<20	<20	971.00	B(525), T(40)	
	3/30/93	20.0	1390.0	16.0	<5	61.0	7.0	<5	<5	46.0	3.0	<5	<5	94.00	B(47), T(6)	
	11/7/94	7.0	16.0	1.0	24.0	36.0	11.0	2.0	<1	0.016	<1	<1	<1	20.00		
	2/22/95	6.0	12.0	<1	24.0	20.0	10.0	3.0	<1	16.0	<1	<1	<1	26.00		
	5/18/95	7.0	16.0	<5	32.0	60.0	6.0	<5	<5	37.0	<5	<5	<5	52.00	B(3), T(120), X(6)	
	8/15/95	3.0	7.0	2.0	6.0	33.0	6.0	2.0	<1	20.0	<1	<1	<1	16.00		
	11/13/95	<5	7.0	<5	<5	13.0	<5	<5	<5	11.0	<5	<5	<5	<0.010	T(18)	
	2/20/96	<1	86.0	4.0	6.0	24.0	6.0	2.0	<1	13.0	<1	<1	<1	<1	B(6), T(67), X(3)	
	5/20/96	<1	38.0	<1	<1	11.0	<1	<1	<1	5.0	<1	<1	<1	14.00	B(1), T(7)	
	8/30/96	<1	18.0	3.0	<1	24.0	3.0	<1	<1	9.0	<1	<1	<1	36.00		
	11/14/96	<1	99.0	5.0	5.0	27.0	6.0	2.0	<1	5.0	<1	<1	<1	67.00	B(8), T(43), X(1)	
	2/28/97	<1	20.0	<1	<1	10.0	2.0	<1	<1	<1	<1	<1	<1	14.00		
	5/8/97	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
	8/26/97	<1	12.0	9.0	2.0	34.0	2.0	<1	<1	9.0	<1	<1	<1	245.00		
	11/26/97	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<5	<1	
	2/14/98	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<2	
	6/19/98	<5	9.0	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	15.00	
	8/8/98	<5	14.0	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	19.00	
	11/30/98	<5	129.0	<5	<5	15.0	<5	<5	<5	<5	<10	<5	<5	<5	135.00	B(9)
	2/15/99	<5	<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	<5	<5	<2	
	5/15/99	<5	15.0	<5	<5	9.0	<5	<5	<5	<5	<5	<5	<5	<5	18.00	
	9/3/99	<5	66.0	<5	<5	12.0	<5	<5	<5	<5	<5	<5	<5	<5	190.00	T(6)
	12/27/99	<2	37.0	<2	<2	5.0	<2	<2	<2	<2	<2	<2	<2	<2	27.00	
	3/16/00	<1	37.0	<1	1.0	11.0	1.0	<1	<1	<1	<1	<1	<1	<1	64.00	B(5), T(2)
	5/31/00	9.0	650.0	13.0	<1	37.0	<1	<1	<1	<1	<1	<1	<1	<1	B(33), T(18), X(4.6)	
	8/11/00	9.0	32.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	B(3)	
	11/10/00	2.0	210.0	<2	<2	21.0	<2	<2	<2	<10	<5	<10	<10	<10	350.00	B(15), T(9)
	3/16/01	<2	<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<10	
	9/20/01	<2	7.0	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	8.00	
	10/24/01	<2	7.0	<2	<2	<2	3.0	<2	<2	<10	<5	<10	<10	<10	13.00	
	11/19/01	3.0	420.0	6.0	<2	22.0	<2	<2	<2	<10	<5	<10	<10	<10	580.00	B(23) T(6)
	12/20/01	<2	6.0	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	12.00	
	1/30/02	<2	5.0	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	9.00	
	2/25/02	<2	11.0	<2	<2	3.0	<2	<2	<2	<10	<5	<10	<10	<10	14.00	
	9/30/02	<2	<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	4.00	
	3/17/03	<2	<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	2.00	
	8/26/03	<2	2.0	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	6.00	
	2/27/04	<2	<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	5.00	
	5/13/04	<2	3.0	<2	<2	3.0	<2	<2	<2	<10	<5	<10	<10	<10	14.00	
8/26/04	<2	40.0	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	240.00	B(9), T(3)	
12/3/04	<1	2.0	<1	<1	2.0	<1	<1	<1	<1	<1	<10	<10	<10	22.00	B(1.3)	
4/13/05	<1	4.0	<1	<1	3.0	<1	<1	<1	<1	<1	<1	<1	<1	31.00	B(2.7), 2-CHT(2.5), T(1), X(2)	
7/1/05	<2	170.0	<2	<2	6.0	2.0	<2	<2	<2	<2	<2	<2	<2	220.00	B(6.3), T(3.8)	
9/6/05	<1	69.0	<1	<1	7.0	<1	<1	<1	<1	4.0	2.0	<1	<1	260.00	B(7.5), 2-CHT(4.1), EB(1.1), T(3.2), X(4.6)	
12/20/05	<1	42.0	<1	<1	4.0	<1	<1	<1	<1	<1	<1	<1	<1	100.00	2-CHT(1.6), T(1.3), X(2.1)	
2/2/06	<1	2.8	1.2	<1	<1	<1	5.9	<1	<1	<1	<1	<1	<1	<1	EB (3.2), N (32), 1,2,4-TMB (1.1), X (8.8)	
3/30/06	<5	13.0	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	33.00	B(1.2)	
10/4/06	<1	27.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	6.00		
1/23/07	<1	15.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.50		
8/1/07	<1	1.4	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	4.50		
3/24/08	2.0	26.0	<1	<1	<1	<1	120.0	<1	<1	<1	<1	<1	<1	21.00	2-CHT(1.1), T(5.5)	
8/27/08	6.0	280.0	3.0	<1	4.0	110.0	<1	<1	<1	<1	<1	<1	<1	36.00	B(1), 2-CHT(1.1), T(1.4)	
3/30/09	2.0	119.0	<1	<1	<1	<1	42.0	<1	<1	<1	<1	<1	<1	9.00	1,2-DCE(127)	
11/5/09	4.0	J 232.0	<5	<5	2.2	J 65.0	<5	<5	1.3	J <10	<5	<5	<5	18.20		
4/30/10	1.0	82.0	0.5	J <1	0.7	J 32.0	<1	<1	2.1	J <2	0.3	J <1	<1	5.60	T(0.53 J)	

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L	
MW-1 (cont'd)	12/22/10	7.0	391.0	2.1	<1	4.0	99.0	<1	2.3	<2	1.7	<1	<1	28.00	B(0.88), EB(0.47J), T(1.7), X(2.3J)	
	5/4/11	<1	1.6	<1	<1	0.4	<1	<1	<1	<2	0.9	J	<1	5.80	B(0.4J), X(1.4J)	
	12/28/11	<1	0.9	<1	<1	0.0	<1	<1	<1	<2	1.3	<1	0.30000	5.40	B(0.54J)	
	5/18/12	9.7	425.0	3.4	<1	4.2	23.0	<1	3.9	<2	1.4	<1	<1	400.00	B(0.99), EB(0.48), T(2.2), X(0.83)	
	10/26/12	6.0	435.0	2.4	J	<5	3.4	J	39.0	<5	1.7	J	<5	37.50	T (1.8J),	
	5/24/13	1.0	114.0	0.7	J	<2	0.9	J	8.0	<2	<2	<2	<2	6.60		
	12/12/13	<1	94.0	<1	<1	0.8	J	3.0	<1	<1	<2	0.3	J	<1	3.80	
	6/30/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	0.35		
	12/22/14	<1	0.9	J	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	6/10/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	12/8/15	<1	0.5	J	<1	<1	<1	<1	<1	<2	0.5	J	<1	<1	0.96	J
	6/28/16	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	12/14/16	<1	0.4	J	<1	<1	<1	<1	<1	<2	1.5	J	<1	<1	0.49	J
	6/5/17	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	12/28/17	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	6/4/18	<1	22.0	J	<1	<1	0.6	J	<1	<1	0.3	J	<2	3.0	45.10	B(2.2), MCH(0.69J), T(2.2), X(3.1)
	12/21/18	<1	3.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	10.40	B(0.73)
	6/12/19	<1	3.0	<1	<1	<1	<1	<1	<1	<2	0.6	J	<1	<1	5.90	
	12/20/19	<1	5.6	<1	<1	<1	0.39	J	<1	<1	<1	<2	<1	<1	20.10	B(1.8), MCH(0.83)
	6/4/20	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
12/16/20	<1	15.1	<1	<1	<1	0.7	J	<1	<1	0.45	J	<2	7.7	39.20	B(4.1) MCH(1.5)	
6/7/21	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1			
12/15/21	<1	5.1	<1	<1	<1	<1	<1	<1	<2	4.3	<1	0.31	J	11.40	Ac(11.6), B(1.4)	
MW-2R	8/15/91	<10		<10	<10	<10	192.0	<10	<10	<10	<10	<10	<10	<10	EB(119), X(381)	
	11/7/94	<5	33.0	32.0	<5	<5	553.0	<5	<5	<10	<5	<5	<5	3.000	EB(31), X(99)	
	5/18/95	<5	35.0	32.0	<5	<5	477.0	<5	<5	<10	<5	<5	<5	<10	EB(39), X(122)	
	11/13/95	<5	28.0	22.0	<5	<5	412.0	<5	<5	<10	<5	<5	<5	<10	EB(57), X(196)	
	5/20/96	<10	22.0	30.0	<10	<10	390.0	<10	<10	<10	<10	<10	<10	<10	EB(11), X(44)	
	11/14/96	<1	22.0	23.0	<1	<1	295.0	<1	<1	<1	<1	<1	<1	2.000	EB(5), X(20)	
	5/8/97	<1	21.0	22.0	<1	<1	192.0	<1	<1	<1	<1	<1	<1	2.000	EB(35), X(98)	
	11/26/97	<5	20.0	12.0	<5	<5	124.0	<5	<5	<10	<5	<5	<5	<10	EB(42), X(126)	
	6/19/98	<5	16.0	19.0	<5	<5	121.0	<5	<5	<5	<5	<5	<5	<2	EB(8), X(37)	
	11/30/98	<5	16.0	20.0	<5	<5	188.0	<5	<5	<10	<5	<5	<5	<2	EB(18), X(74)	
	5/15/99	<5	9.0	11.0	<5	<5	109.0	<5	<5	<5	<5	<5	<5	<2	P-IP(24), N(63), (15)	
	12/27/99	<2	11.0	13.0	<2	<2	102.0	<2	<2	<2	<2	<2	<2	<2	EB(3.7), X(14)	
	5/31/00	<1	7.0	7.0	<1	<1	41.0	<1	<1	<1	<1	<1	<1	<1	P-IP(16), N(39)	
	11/10/00	<2	4.0	3.0	<2	<2	20.0	<2	<10	<5	<10	<10	<10	<10	EB(2), P-IP(16), N(26)	
	3/16/01	<2	3.0	2.0	<2	<2	20.0	<2	<10	<5	<10	<10	<10	<10	N(24), X(5)	
	9/20/01	<2	3.0	3.0	<2	<2	17.0	<2	<10	<5	<10	<10	<10	<2	EB(4), P-IP(21), N(32)	
	2/25/02	<2	4.0	3.0	<2	<2	25.0	<2	<10	<5	<10	<10	<10	<2	P-IP(23), N(25), X(9)	
	9/30/02	<2	4.0	3.0	<2	<2	21.0	<2	<10	<5	<10	<10	<10	<2	EB(6), P-IP(43), N(53)	
	3/17/03	<2	6.0	5.0	<2	<2	30.0	<2	<10	<5	<10	<10	<10	<2	P-IP(27), X(17)	
	8/26/03	<2	3.0	2.0	<2	<2	16.0	<2	<10	<5	<10	<10	<10	<2	P-IP(39), N(38), X(6)	
	2/27/04	<2	4.0	2.0	<2	<2	16.0	<2	<10	<5	<10	<10	<10	<2		
	8/26/04	<2	6.0	2.0	<2	<2	12.0	<2	<10	<5	<10	<10	<10	<2	EB(3.2), N(31), P-IP(22), X(7.9)	
	4/13/05	<1	3.0	1.0	<1	<1	9.0	<1	<1	<1	<1	<1	<1	<1	EB(39), IP(1), P-IP(9.7), N(1.9)	
	9/6/05	<1	3.0	<1	<1	<1	10.0	<1	<1	<1	<1	8.0	<1	2.000	T(170), 1,2,4-TMB(3), 1,3,5-TMB(1.4)	
	2/2/06	<1	2.6	1.2	<1	<1	6.0	<1	<1	<1	<1	<1	<1	<1	EB(6.4), P-CY(22), N(29)	
	3/30/06	<5	<5	<5	<5	<5	8.5	<5	<5	<5	<5	<5	<5	0.450	EB(7.1), P-IP(12), N(20), 1,2,4-TMB(1.2), X(14)	
	10/4/06	<1	3.0	1.8	<1	<1	6.2	<1	<1	<1	<1	<1	<1	<1		
1/23/07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	EB(13), P-IP(6.6), N(14), 1,2,4-TMB, X(24)		
8/1/07	<1	1.7	<1	<1	<1	3.3	<1	<1	<1	<1	<1	<1	<1	EB(30), P-IP(11), N(27),		
3/24/08	<1	4.9	2.4	<1	<1	7.1	<1	<1	<1	<1	<1	<1	<1	1,2,4-TMB(1.8), X(68)		
8/27/08	<1	13.0	<1	<1	<1	7.1	<1	<1	<1	<1	<1	<1	<1	EB(5.5), P-IP(2.3), N(8.1), X(13)		
3/30/09	<1	3.2	1.6	<1	<1	3.9	<1	<1	<1	<1	<1	<1	<1	1,2-DCE(4.8), EB(3.7), P-IP(8.5), N(22.3), X(13)		
11/5/09	<1	2.9	1.3	<1	<1	2.7	<1	<1	<2	0.3	J	<1	<1	EB(0.59 J), IPB(0.24 J), T(0.46 J), X(2.3 J)		
4/30/10	0.7	J	22.7	4.6	<1	<1	16.6	<1	<1	<2	1.7	<1	<1	3.8000	B(0.27 J), CS ₂ (0.85 J), EB(54.2), IPB (3.1), T(0.32 J),	
12/22/10	<1	16.3	<1	<1	<1	<1	5.9	<1	0.4	J	<2	<1	<1	1.3000	EB(0.32J)	

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L
MW-2R (cont'd)	5/4/11	<1	5.2	2.6	<1	<1	4.0	<1	0.8	J <2	0.4	J <1	<1	1.1000	EB(2.9), X(9)
	12/28/11	0.8	J 52.2	0.4	J <1	0.4	J 8.6	<1	0.6	J <2	0.3	J <1	<1	3.7000	EB(0.32J), T(0.21J), X(0.78J)
	5/18/12	<1	6.0	1.4	<1	<1	2.5	<1	1.4	<200	0.3	J <1	<1	<1	EB(3.9), IPB(0.29J), X(12.9)
	10/26/12	<1	3.5	0.5	J <1	<1	1.4	<1	0.5	J <1	<1	<1	<1	<1	EB(0.49J), T(0.53J), X(1.4J)
	5/24/13	<1	8.7	2.3	<1	<1	4.9	<1	<1	<2	0.5	J <1	<1	0.9	EB(23.4), IPB (1.4), X (34.3)
	12/12/13	<1	8.0	<1	<1	<1	1.9	<1	<1	<2	<1	<1	<1	<1	
	6/30/14	<1	6.1	2.7	<1	<1	3.2	<1	<1	<2	0.5	J <1	<1	0.9	J EB(4.4), IPB(0.26J), X(7.1)
	12/22/14	<1	2.7	0.8	J <1	<1	1.6	<1	<1	<2	<1	<1	<1	<1	EB(3.3), X(4)
	6/10/15	<1	2.5	1.0	J <1	<1	1.8	<1	<1	<2	0.2	J <1	<1	<1	EB(3.4), IPB(0.22J), X(9)
	12/8/15	<1	2.1	1.0	<1	<1	1.9	<1	<1	<2	<1	<1	<1	<1	EB(7.6), IPB (0.26J), X(9.1)
	6/28/16	<1	2.2	0.9	J <1	<1	1.4	<1	<1	<2	<1	<1	<1	<1	EB(0.8J), T(0.29J), X(1.6J)
	12/14/16	<1	1.0	J <1	<1	<1	1.0	J <1	<1	<2	<1	<1	<1	<1	
	6/5/17	<1	0.7	J 0.3	J <1	<1	0.9	J <1	<1	<2	<1	<1	<1	<1	
	12/26/17	<1	0.7	J <1	<1	<1	0.9	J <1	<1	<2	<1	<1	<1	<1	EB(0.41J), X(0.93 J)
	6/4/18	1.0	2.2	<1	<1	<1	1.9	<1	<1	<2	<1	<1	<1	<1	EB(17.6),IPB(1), X(49.8)
	12/21/18	<1	1.1	0.4	J <1	<1	1.1	<1	<1	<1	<1	<1	<1	<1	EB(1.6), X(2.5)
	6/12/19	<1	1.3	0.3	J <1	<1	1.0	<1	<1	<1	<1	<1	<1	<1	EB(0.49J), X (1.1 J)
	12/20/19	<1	29.6	<1	<1	<1	6.0	<1	<1	<2	<1	<1	<1	0.73	J EB(0.58J)
	6/4/20	<1	1.8	0.7	J <1	<1	1.2	<1	<1	<2	<1	<1	<1	<1	EB(0.50J), MB(0.68J), X (1.1J)
	12/16/20	<1	0.7	J <1	<1	<1	0.8	J <1	<1	<2	<1	<1	<1	<1	
6/7/21	<1	0.9	J <1	<1	<1	0.7	J <1	<1	<2	<1	<1	<1	<1		
12/15/21	<1	0.6	J <1	<1	<1	1.0	J <1	<1	<2	<1	<1	<1	<1		
MW-3	2/6/91	22.0		<10	<10	17.0	29.0	<10	51.0	<10	13.0	<10	48.0	58.0	B(52), T(64)
	8/15/91	70.0		10.0	25.0	25.0	45.0	10.0	85.0	<10	80.0	<10	20.0	85.0	B(15), EB(15), T(15)
	3/30/93	14.0	0.081	5.0	10.0	12.0	25.0	<5	60.0	<10	34.0	3.0	13.0	20.0	B(42), EB(5), T(11), X(20)
	5/18/95	7.0	0.063	40.0	4.0	8.0	19.0	<5	74.0	<10	31.0	<5	17.0	27.0	B(38), EB(2), T(2)
	11/13/95	<5	0.020	<5	<5	4.0	5.0	<5	57.0	<10	29.0	<5	14.0	18.0	B(29)
	5/20/96	3.0	0.023	3.0	<1	4.0	9.0	<1	40.0	<1	20.0	2.0	10.0	13.0	B(19), EB(2), T(2), X(4)
	11/14/96	3.0	0.038	3.0	<1	5.0	7.0	<1	59.0	<1	20.0	10.0	2.0	15.0	B(25)
	5/8/97	4.0	0.051	<1	<1	<1	8.0	<1	40.0	<1	15.0	2.0	8.0	17.0	B(18)
	11/26/97	<5	0.023	<5	<5	<5	<5	<5	63.0	<10	14.0	<5	11.0	14.0	B(28)
	MW-5	8/15/91	<2		2.0	<2	<2	<2	<2	51.0	<2	19.0	<2	4.0	89.0
3/30/93		<5	96.0	2.0	<5	<5	<5	<5	3.0	<10	4.0	<5	<5	79.0	B(2)
5/18/95		<5	3.0	<5	<5	<5	<5	<5	7.0	<10	3.0	<5	<5	5.0	
11/13/95		<5	<5	<5	<5	<5	<5	<5	8.0	<10	<5	<5	<5	<10	
5/20/96		<1	<1	<1	<1	<1	<1	<1	21.0	<1	10.0	<1	2.0	39.0	B(1)
11/14/96		<1	<1	<1	<1	<1	<1	2.0	426.0	2.0	271.0	15.0	62.0	62.0	B(17), EB(4), T(4), X(14)
5/8/97		<1	<1	<1	<1	<1	<1	<1	2.0	<1	<1	<1	<1	<1	
11/26/97		<5	<5	<5	<5	<5	<5	<5	<5	<10	<5	16.0	<5	<10	
6/19/98		<5	<5	<5	<5	<5	<5	<5	13.0	<10	<5	<5	<5	<2	
11/30/98		<5	<5	<5	<5	<5	<5	<5	11.0	<10	<5	<5	<5	<2	
5/15/99		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<2	
12/27/99		<2	11.0	<2	<2	<2	<2	<2	3.0	<2	<2	<2	<2	<2	
5/31/00		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
11/10/00		<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<10	
3/16/01		<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<10	
9/20/01		<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2	
2/25/02		<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2	
9/30/02		<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2	
3/17/03		<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2	
8/26/03		<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2	
2/27/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2		
8/26/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2		
4/13/05	<1	<1	<1	<1	<1	<1	<1	3.0	<1	<1	<1	<1	<1		
9/6/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	CM(1.6)	
2/2/06	<1	<1	<1	<1	<1	<1	<1	1.7	<1	<1	<1	<1	<1		
3/30/06	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5		
10/4/06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L	
MW-5 (cont'd)	1/23/07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
	8/1/07	<1	<1	<1	<1	<1	<1	<1	1.0	<1	<1	<1	<1	<1		
	3/24/08	<1	<1	<1	<1	<1	<1	<1	1.3	<1	<1	<1	<1	<1		
	8/27/08	<1	20.0	<1	<1	<1	7.4	<1	1.3	<1	<1	<1	<1	1.1		
	3/30/09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
	11/5/09	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	4/30/10	<1	8.9	<1	<1	<1	5.7	<1	0.7	J	<2	<1	<1	<1	0.61	J
	12/22/10	1.2	70.6	0.4	J	<1	0.7	J	20.4	<1	<2	0.4	<1	<1	3.6	
	5/4/11	<1	<1	<1	<1	<1	<1	<1	6.4	<2	<1	<1	<1	<1	<1	
	12/28/11	2.2	118.0	0.9	J	<1	1	18.9	<1	1.7	<2	0.3	J	<1	8.9	
	5/18/12	<1	2.3	<1	<1	<1	1.1	0.3	<1	2.8	<2	<1	<1	<1	<1	
	10/26/12	<1	8.5	<1	<1	<1	<1	0.5	J	<1	<2	<1	<1	<1	<1	
	5/24/13	<1	7.8	<1	<1	<1	<1	1.2	<1	<1	<2	<1	<1	<1	<1	
	12/12/13	<1	38.4	0.4	J	<1	<1	2.8	<1	8.7	<2	<1	<1	<1	0.65	J
	6/30/14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	
	12/22/14	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	
	6/10/15	<1	<1	<1	<1	<1	<1	<1	<1	0.2	J	<2	<1	<1	<1	
	12/8/15	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	
	6/28/16	<1	3.0	<1	<1	<1	<1	0.4	J	<1	<2	<1	<1	<1	<1	
	12/14/16	<1	15.8	<1	<1	<1	<1	3.4	<1	0.3	J	<2	<1	<1	0.75	J
	6/5/17	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	
	12/26/17	0.7	J	4.8	0.3	J	<1	<1	10.9	1	<2	<1	<1	<1	2.3	
	6/4/18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	
	12/21/18	<1	3.4	<1	<1	<1	<1	0.4	J	<1	<1	<1	<1	<1	<1	
	6/12/19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	
	12/20/19	0.44	J	64.2	<1	<1	<1	7.4	<1	0.23	<2	<1	<1	<1	2.3	
6/4/20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
12/16/20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
6/7/21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
12/15/21	<1	<1	<1	<1	<1	<1	<1	<1	0.27	J	<2	<1	<1	<1		
MW-6	8/15/91	<2		<2	<2	<2	<2	<2	45.0	<2	<2	<2	<2	47.0	B(23), EB(3), T(4)	
	3/30/93	<5	44.0	<2	<2	<5	<5	<5	63.0	<10	<2	<5	<5	27.0	B(32), EB(3), T(4), X(3)	
	11/7/94	<1	151.0	<5	<5	<1	<1	<1	119.0	<2	<1	<1	<1	17.0		
	12/27/99	<2	25.0	<1	<1	<2	<2	<2	103.0	<2	<2	<2	<2	23.0	B(41), EB(2.9), P-IP(2), T(5)	
	3/16/00	<1	20.0	<1	<1	<1	<1	<1	72.0	<1	<2	<1	<1	19.0	1,2,4-TMB(6), X(3) B(26), EB(1), P-IP(2) MC(3), T(3), X(2)	
	5/31/00	<1	42.0	<1	<1	<1	<1	<1	71.0	<1	<1	<1	<1	<1		
	8/11/00	<1	23.0	<1	<1	<1	<1	<1	87.0	<1	<1	<1	<1	<1	B(29), EB(1.7), T(3.5) X(5.7)	
	11/10/00	<2	18.0	<2	<2	<2	<2	<2	77.0	<5	<10	<10	<10	27.0	B(33), EB(2), T(4)	
	3/16/01	<2	3.0	<2	<2	<2	<2	<2	34.0	<5	<10	<10	<10	<10		
	9/20/01	<2	4.0	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	3.0	B(7)	
	10/24/01	<2	13.0	<2	<2	<2	<2	<2	80.0	<5	<10	<10	<10	9.0	B(29), EB(2), T(4)	
	11/19/01	<2	14.0	<2	<2	<2	<2	<2	65.0	<5	<10	<10	<10	8.0	B(29), EB(2), T(5)	
	12/20/01	<2	8.0	<2	<2	<2	<2	<2	65.0	<5	<10	<10	<10	5.0	B(21), T(3)	
	1/30/02	<2	4.0	<2	<2	<2	<2	<2	37.0	<5	<10	<10	<10	3.0	B(11)	
	2/25/02	<2	5.0	<2	<2	<2	<2	<2	44.0	<5	<10	<10	<10	3.0	B(12)	
	9/30/02	<2	8.0	<2	<2	<2	<2	<2	55.0	<5	<10	<10	<10	5.0	B(20), T(2)	
	3/17/03	<2	8.0	<2	<2	<2	<2	<2	58.0	<5	<10	<10	<10	4.0	B(17), T(3)	
	8/26/03	<2	9.0	<2	<2	<2	<2	<2	83.0	<5	<10	<10	<10	4.0	B(26), T(4), EB(2)	
	2/27/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2		
	8/26/04	<2	4.0	<2	<2	<2	<2	<2	36.0	<5	<10	<10	<10	3.0	B(12)	
4/13/05	<1	4.0	<1	<1	<1	<1	<1	56.0	<1	1.0	<1	<1	3.0	B(16), EB(1.6), T(2.5), X(2.7)		
9/6/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
2/2/06	<1	1.8	<1	<1	<1	<1	<1	38.0	<1	1.0	<1	<1	<1			
3/30/06	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5			
10/4/06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L				
MW-6 (cont'd)	1/23/07	<1	<1	<1	<1	<1	<1	<1	2.3	<1	<1	<1	<1	<1					
	8/1/07	<1	3.3	<1	<1	<1	<1	<1	79.0	<1	1.6	<1	<1	2.5	B(29), EB(1.9), P-IP(1.1), T(1), X(3.5)				
	3/24/08	<1	1.8	<1	<1	<1	<1	<1	47.0	<1	<1	<1	<1	<1	B(1.5), T(1.4)				
	8/27/08	<1	15.0	<1	<1	<1	6.0	<1	<1	<1	<1	<1	<1	<1	T(1.5)				
	3/30/09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	N(5.5)				
	11/5/09	<1	0.7	J	<1	<1	<1	<1	<1	19.6	<2	0.6	J	<1	<1	Ac(12.4 J), B(5.8), EB(0.72 J), T(1.7), X(1.9 J)			
	4/30/10	3.0	J	679.0	<10	<10	4.6	J	156.0	<10	30.7	<20	<10	<10	14.1	B(12.8)			
	12/22/10	1.0		77.0	<1	<1	0.7	J	22.0	<1	4.8	<2	0.3	J	<1	5.0	T(3.8J)		
	5/4/11	<1		0.7	J	<1	<1	<1	<1	12.2	<2	<1	<1	<1	0.5	J	Ac(14.8 J), B(3.2), T(0.39J)		
	12/28/11	8.0		489.0	3.1000	<1	4.2		76.0	<1	45.4	<2	1.4	<1	0.4	J	35.8	Ac(11.4J), B(9.6), EB(0.57)	
																		T(2.1), X(1.3J)	
	5/18/12	<1		14.5	<1	<1	<1	4.0	J	<1	92.3	<2	1.2	<1	0.8	J	2.9	B(24.3), EB(1.7), T(2.5), X(02.8J)	
	10/26/12	<1		22.6	<1	<1	<1	0.5	J	<1	73.5	<2	0.7	J	<1	0.6	J	2.6	Ac(15.8J), B(18.5), CS2(0.76J)
																			EB(1.2), T(1.9J), X(2.2J)
	5/24/13	<1		6.9	<1	<1	<1	1.0	<1	<1	<1	<2	<1	<1	<1	<1	<1		
	12/12/13	0.4	J	41.1	<1	<1	0.4	J	3.0	<1	83.3	<2	1.2	<1	0.7	J	1.8	Ac(19.7J), B(13), CS ₂ (0.55 J), EB(1.1), T(1.4), X(1.5 J)	
	6/30/14	<1		0.9	J	<1	<1	<1	<1	27.4	<2	<1	<1	<1	<1	<1	<1		
	12/22/14	<1		0.8	J	<1	<1	<1	<1	53.6	<2	0.6	J	<1	0.4	J	<1		
	6/10/15	<1		0.4	J	<1	<1	<1	<1	20.1	<2	0.3	J	<1	<1	<1	<1		
																			Ac(24.8J), B(8.9), EB(0.46J), T(0.81J)
	12/8/15	<1		<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1		
	6/28/16	<1		3.7	<1	<1	<1	0.3	J	<1	2.1	<2	<1	<1	<1	<1	<1		
	12/14/16	0.3	J	19.9	<1	<1	<1	4.0	<1	0.3	J	<2	<1	<1	<1	<1	<1		
6/5/17	<1		<1	<1	<1	<1	4.0	<1	<1	<2	<1	<1	<1	<1	<1	<1			
12/26/17	15.0		25.1	79.3	<1	155.0	919.0	<1	31.8	<2	4.0	<1	<1	0.8	J	1870.0	B(23.4), EB(0.48J), T(11), X(1.6J)		
1/19/18	<1		<1	<1	<1	<1	<1	<1	4.5	<2	<1	<1	<1	<1	<1	<1			
6/4/18	<1		<1	<1	<1	<1	<1	<1	1.1	<2	<1	<1	<1	<1	<1	<1			
12/21/18	<1		24.4	<1	<1	<1	<1	<1	0.4	J	<1	<1	<1	<1	12.0	<1			
6/12/19	0.4	J	29.6	<1	<1	<1	15.0	<1	1.9	<2	<1	<1	<1	<1	1.0	<1			
12/20/19	<1		<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1			
6/4/20	<1		<1	<1	<1	<1	<1	<1	6.3	<2	<1	<1	<1	<1	<1	<1			
12/16/20	<1		<1	<1	<1	<1	<1	<1	8.1	<2	<1	<1	<1	<1	<1	<1			
6/7/21	<1		<1	<1	<1	<1	<1	<1	10.6	<2	<1	<1	<1	<1	<1	<1			
12/15/21	<1		<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1			
																		B(0.53J)	
																		B(1.6), MB(1.4), T(0.34J)	
																		Ac(37.7), B(0.63J), T(0.44J)	
																		Ac(73.1), B(1), 2 But(6.3),	
MW-7	8/15/91	1550.0		<100	<100	3300.0	10500.0	<100	<100	<100	<100	<100	<100	1500.0					
	3/30/93	673.0	81000.0	194.0	<100	3080.0	1910.0	32.0	35.0	<200	<100	<100	<100	7610.0	B(41), EB(96), T(805), X(52)				
	11/7/94	527.0	51000.0	109.0	<100	2220.0	184.0	<1	<100	<200	<100	<100	<100	4990.0					
	2/22/95	254.0	37500.0	72.0	<50	1890.0	155.0	<50	<50	<100	<50	<50	<50	7680.0					
	5/18/95	471.0	76400.0	115.0	<50	3530.0	176.0	<50	34.0	<100	<50	<50	<50	16000.0	B(69), EB(30), T(577), X(13)				
	8/15/95	375.0	47200.0	143.0	<100	1340.0	383.0	<100	<100	<200	<100	<100	<100	3800.0					
	11/13/95	261.0	37400.0	64.0	<50	1300.0	144.0	<50	<50	<100	<50	<50	<50	6010.0	T(244)				
	2/20/96	160.0	27900.0	52.0	<1	1240.0	140.0	<1	24.0	<1	3.0	<1	<1	4570.0	B(26), EB(26), T(210), (X(14)				
	5/20/96	345.0	36560.0	96.0	<1	1720.0	90.0	<1	23.0	<1	5.0	<1	<1	8200.0	B(25), EB(23), T(330), X(13)				
	8/30/96	511.0	53870.0	93.0	<1	1885.0	112.0	4762.0	<1	<1	<1	<1	<1	8560.0					
	11/14/96	274.0	48745.0	80.0	<50	1615.0	130.0	<50	<50	<50	<50	<50	<50	8700.0	T(294)				
	2/28/97	453.0	49400.0	67.0	<1	2500.0	110.0	<1	8.0	<1	<1	<1	<1	4420.0					
	5/8/97	77.0	45030.0	21.0	<1	358.0	7.0	<1	6.0	<1	<1	<1	<1	2731.0	B(7), EB(4), T(55)				
	8/26/97	233.0	35500.0	62.0	4.0	1310.0	73.0	<1	25.0	7.0	4.0	<1	<1	8610.0					
	11/26/97	191.0	53100.0	110.0	7.0	1560.0	162.0	<5	22.0	<10	<5	<5	<5	11800.0	B(20), EB(12), T(228)				
	2/14/98	98.0	9938.0	134.0	<5	392.0	91.0	2.0	8.0	<5	<5	<5	<5	3000.0					
	6/19/98	521.0	39300.0	157.0	<5	2180.0	299.0	<5	17.0	<10	<5	<5	<5	9870.0	B(17), EB(14), T(183)				
	8/8/98	295.0	60100.0	121.0	<5	1510.0	524.0	<5	30.0	<10	<5	<5	<5	10700.0					
	11/30/98	289.0	40900.0	170.0	<5	995.0	846.0	<5	30.0	<10	<5	<5	<5	7150.0	B(25), EB(23), T(128)				
	2/15/99	110.0	15900.0	32.0	<5	349.0	245.0	<5	7.0	<10	<5	<5	<5	54.0	B(6), T(69)				
	5/15/99	39.0	7040.0	23.0	<5	254.0	145.0	<5	<5	7.0	<5	<5	<5	2350.0	T(43), X(16)				
	9/3/99	<5	36000.0	510.0	<5	1100.0	520.0	<5	29.0	39.0	<5	<5	<5	9300.0	B(25), EB(24), T(250), X(17)				
	12/27/99	235.0	37300.0	107.0	<2	1000.0	1030.0	<2	20.0	<2	5.0	<2	<2	3760.0	B(18), CS ₂ (7), T(0.153) CM(37), EB(14), X(5)				
3/16/00	677.0	25000.0	<1	3.0	1130.0	919.0	<1	26.0	19.0	3.0	<1	<1	<1	5880.0	B(24), EB(17), T(151) X(6)				

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L
MW-7 (cont'd)	5/31/00	297.0	21230.0	132.0	3.0	1170.0	1140.0	<1	18.0	<1	<1	<1	<1	3590.0	EB(14.2), T(135), X(8.5)
	8/11/00	<1	54300.0	435.0	<1	617.0	925.0	<1	<1	<1	<1	<1	<1	10600.0	B(22.5), EB(18), T(0.130) X(9)
	11/10/00	410.0	60000.0	130.0	<100	1100.0	1600.0	<100	<500	<250	<500	<500	<500	11000.0	T(160)
	3/16/01	<2	21000.0	<200	<200	580.0	720.0	<200	<1000	<500	<1000	<1000	<1000	4300.0	
	9/20/01	360.0	46000.0	<200	<200	1100.0	1900.0	<200	<1000	<500	<1000	<1000	<1000	6300.0	
	10/24/01	<4	19000.0	<400	<400	410.0	500.0	<400	<2000	<1000	<2000	<2000	<2000	3900.0	
	11/19/01	<4	44000.0	1800.0	<400	870.0	1200.0	<400	<2000	<1000	<2000	<2000	<2000	5400.0	
	12/20/01	140.0	17000.0	180.0	<100	440.0	370.0	<100	<500	<250	<500	<500	<500	3600.0	
	1/30/02	51.0	6600.0	47.0	<40	150.0	<40	<40	<200	<0.100	<200	<200	<200	1700.0	
	2/25/02	<50	7400.0	<50	<50	180.0	68.0	<50	<250	<50	<250	<250	<250	1500.0	
	9/30/02	<20	2700.0	<20	<20	59.0	53.0	<20	<0.100	<50	<100	<100	<100	460.0	
	3/17/03	120.0	17000.0	48.0	40.0	380.0	500.0	<40	200.0	100.0	200.0	200.0	200.0	2900.0	T(57)
	8/26/03	400.0	22000.0	<400	<400	450.0	910.0	<400	<2000	<1000	<2000	<2000	<2000	2700.0	
	2/27/04	<2	15.0	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	13.0	
	5/13/04	44.0	5600.0	38.0	<2	140.0	150.0	<2	<0.010	<5	<10	<10	<10	920.0	T(18), B(4)
	8/26/04	<2	67.0	<2	<2	5.0	<2	<2	<0.010	<5	<10	<10	<10	22.0	
	12/3/04	200.0	30000.0	210.0	<2	520.0	380.0	<200	<200	<200	<10	<10	<10	4200.0	
	4/13/05	<200	14000.0	<200	<2	270.0	470.0	<200	<200	<200	<200	<200	<200	1500.0	
	7/1/05	94.0	18000.0	140.0	<20	240.0	50.0	<20	<20	<20	<20	<20	<20	<20	
	9/6/05	74.0	12000.0	71.0	<50	200.0	<50	<50	<50	<50	<50	<50	<50	1600.0	
	12/20/05	<200	23000.0	<200	<200	380.0	<2	<200	<200	<200	<200	<200	<200	3300.0	
	2/2/06	<100	8800.0	<100	<100	140.0	<100	<100	<100	<100	<100	<100	<100	1200.0	
	3/30/06	<500	19000.0	<500	<500	<500	680.0	<500	<500	<500	<500	<500	<500	2500.0	T(30 J), MC(55 JB)
	10/4/06	<25	3200.0	<25	<25	73.0	<25	<25	<25	<25	<25	<25	<25	770.0	
	1/23/07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	8/1/07	240.0	45000.0	140.0	<25	560.0	4000.0	<25	29.0	<25	<25	<25	<25	3200.0	B(49), EB(200), T(3300), X(1400), 1,1,1-TCA(37)
	3/24/08	<5	52000.0	<5	<5	660.0	4700.0	<5	<5	<5	<5	<5	<5	3300.0	
	8/27/08	280.0	34000.0	<250	<250	440.0	2000.0	<250	<250	<250	<250	<250	<250	2400.0	
	3/30/09	362.0	38800.0	2230.0	<1	579.0	3900.0	<1	24.0	<1	6.0	<1	<1	3330.0	T(37.6), B(19.4), EB(8.9), X(8.6), 1,2-DCE (42.6)
	11/5/09	521.0	60000.0	<500	<500	743.0	4220.0	<500	<0.500	<1000	<500	<500	<500	5130.0	T(723)
	4/30/10	349.0	J 61000.0	<1000	<1000	640.0	J 4980.0	<1000	<1000	<2000	<1000	<1000	<1000	3870.0	
	12/22/10	529.0	J 67200.0	<1000	<1000	850.0	J 4690.0	<1000	<1000	<2000	<1000	<1000	<1000	5800.0	
5/4/11	296.0	J 39900.0	<1000	<1000	412.0	J 1560.0	<1000	<1000	<2000	<1000	<1000	<1000	3510.0		
12/28/11	217.0	J 35000.0	<500	<500	347.0	J 816.0	<500	<500	<1000	<500	<500	<500	2980.0		
5/18/12	<500	32900.0	<500	<500	302.0	J 459.0	J <500	<500	<1000	<500	<500	<500	3500.0		
10/26/12	289.0	J 40600.0	<500	<500	398.0	J 922.0	<500	<500	<1000	<500	<500	<500	4090.0		
5/24/13	283.0	J 34500.0	<500	<500	308.0	J 2530.0	<500	<500	<1000	<500	<500	<500	2550.0		
12/12/13	365.0	J 48500.0	<500	<500	460.0	J 3640.0	<500	<500	<1000	<500	<500	<500	3500.0		
6/30/14	291.0	32800.0	148.0	E 1.0	J 339.0	1260.0	<1	47.0	<2	9.0	0.3	J <1	3440.0	B(18.8), CS ₂ (0.3J), CHX(0.62J), EB(4.2), T(17.7), X(2.5J)	
12/22/14	361.0	J 45800.0	<500	<500	414.0	J 2930.0	<500	<500	<1000	<500	<500	<500	2260.0		
6/10/15	298.0	J 44800.0	<500	<500	330.0	J 2470.0	<500	<500	<1000	<500	<500	<500	2950.0	MC (1420)	
12/8/15	544.0	52200.0	159.0	J <250	491.0	4900.0	<250	131.0	J <500	<500	<250	<250	3600.0	MC(691 JB)	
6/28/16	323.0	J 42600.0	<500	<500	360.0	J 3300.0	<500	<500	<1000	<500	<500	<500	3360.0		
12/14/16	272.0	J 42600.0	<500	<500	311.0	J 3750.0	<500	<500	<1000	<500	<500	<500	2510.0		
6/5/17	191.0	J 29200.0	<500	<500	198.0	J 1630.0	<500	<500	<1000	<500	<500	<500	2770.0		
12/28/17	382.0	J 55100.0	150.0	J <500	359.0	J 7510.0	<500	120.0	J <1000	<500	<500	<500	2680.0		
6/4/18	348.0	J 50500.0	<500	<500	279.0	J 5530.0	<500	<500	<1000	<500	<500	<500	3210.0		
12/21/18	317.0	J 49300.0	142.0	J <500	269.0	J 5990.0	<500	<500	<500	<500	<500	<500	2850.0		
6/12/19	279.0	J 41700.0	<500	<500	218.0	J 4780.0	<500	<500	<1000	<500	<500	<500	2820.0		
12/20/19	264.0	J 45600.0	<500	<500	<500	5640.0	<500	<500	<1000	<500	<500	<500	2200.0		
6/4/20	292.0	J 45400.0	121.0	J <500	243.0	J 5580.0	<500	<500	<1000	<500	<500	<500	2510.0		
12/16/20	318.0	J 48600.0	<500	<500	234.0	J 6350.0	<500	<500	<1000	<500	<500	<500	1910.0		
6/7/21	328.0	J 40200.0	123.0	J <500	<500	5000.0	<500	<500	<1000	<500	<500	<500	2090.0		
12/15/21	<1	5.8	<1	<1	9.5	<1	<1	30.6	59.5	6.3	<1	0.9	J 525.0	Ac (63), B(11.8), MEK(134), MIBK(2.1 J) T(8.8), X(1.5 J)	
MW-8	3/30/93	<50	172.0	<50	<50	10.0	2470.0	34.0	12.0	<100	8.0	<50	6.0	<100	
	2/22/95	<25	392.0	<25	<25	<25	5130.0	<25	<25	<50	<25	<25	<25	<50	
	5/18/95	3.0	131.0	3.0	<5	7.0	1650.0	4.0	55.0	<10	26.0	<5	29.0	3.0	B(22), T(3), X(3)
	8/15/95	<50	253.0	<50	<50	<50	2240.0	<50	<50	<100	<50	<50	<50	<100	

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L
MW-8 (cont'd)	11/13/95	4.0	227.0	<5	<5	6.0	3650.0	15.0	26.0	<10	12.0	<5	13.0	<10	
	2/20/96	4.0	900.0	2.0	<1	5.0	1140.0	4.0	43.0	<1	13.0	3.0	15.0	2.0	B(9)
	5/20/96	2.0	376.0	<1	<1	5.0	1694.0	3.0	49.0	<1	18.0	5.0	27.0	2.0	B(14), X(2)
	8/30/96	<1	233.0	<1	<1	7.0	1750.0	3.0	65.0	<1	33.0	6.0	<1	1.0	
	11/14/96	<1	356.0	2.0	<1	7.0	3475.0	6.0	45.0	<1	17.0	6.0	32.0	<1	B(12), X(3)
	2/28/97	6.0	474.0	<1	<1	<1	3695.0	8.0	31.0	<1	9.0	4.0	<1	5.0	
	5/8/97	2.0	186.0	3.0	<1	<1	631.0	<1	39.0	<1	13.0	4.0	18.0	8.0	B(19)
	8/26/97	<1	520.0	1.0	<1	6.0	3920.0	12.0	18.0	<1	6.0	3.0	3.0	3.0	
	11/26/97	6.0	632.0	<5	<5	<5	5950.0	12.0	7.0	<10	<5	<5	<5	<10	
	2/14/98	<5	458.0	<5	<5	<5	3170.0	19.0	12.0	<5	<5	<5	<5	<2	
	6/19/98	8.0	358.0	<5	<5	<5	4010.0	7.0	23.0	<10	8.0	<5	11.0	34.0	B(12)
	8/8/98	<5	236.0	<5	<5	8.0	2080.0	<5	41.0	<10	25.0	<5	23.0	138.0	
	11/30/98	<5	179.0	<5	<5	9.0	2180.0	<5	33.0	<10	102.0	10.0	36.0	182.0	B(77), T(8)
	2/15/99	<5	28.0	<5	<5	<5	2420.0	<5	<5	<10	10.0	<5	<5	22.0	
	5/15/99	<5	243.0	<5	<5	13.0	2580.0	<5	24.0	6.0	138.0	52.0	10.0	296.0	B(61), X(27)
	9/3/99	<5	150.0	<5	<5	8.0	990.0	<5	19.0	<5	140.0	13.0	41.0	140.0	B(130), T(10), X(16)
	12/27/99	8.0	182.0	<2	<2	15.0	1190.0	5.0	8.0	<2	31.0	8.0	19.0	175.0	B(41)
	3/16/00	21.0	95.0	<1	<1	13.0	1170.0	3.0	7.0	1.0	41.0	6.0	18.0	222.0	B(60), 2-CHT(14), 4-CHT(12), T(1), 1,2,4-B(1), X(3)
	5/31/00	5.0	290.0	3.0	<1	23.0	2050.0	3.0	10.0	<1	<1	<1	<1	<1	B(166), X(7.9)
	8/11/00	6.0	283.0	3.0	<1	21.0	924.0	<1	10.0	<1	<1	<1	<1	<1	B(49), T(2)
	11/10/00	<10	300.0	<10	<10	18.0	940.0	<10	<50	<25	62.0	<50	<50	140.0	B(19)
	3/16/01	<2	79.0	<2	<2	<2	140.0	<2	<10	<5	<10	<10	<10	<10	
	9/20/01	4.0	270.0	<2	<2	2.0	210.0	<2	<10	<5	<10	<10	<10	78.0	B(5)
	2/25/02	<2	180.0	<2	<2	<2	9.0	<2	<10	<5	<10	<10	<10	8.0	
	9/30/02	2.0	85.0	<2	<2	<2	27.0	<2	<10	<5	<10	<10	<10	46.0	
	3/17/03	3.0	230.0	<2	<2	<2	95.0	<200	<10	<5	<10	<10	<10	9.0	
	8/26/03	<2	89.0	<2	<2	5.0	4.0	<2	<10	<5	<10	<10	<10	38.0	B(25),T(4)
	2/27/04	<2	7.0	<2	<2	<2	4.0	<2	<10	<5	<10	<10	<10	<2	
	8/26/04	<2	99.0	<2	<2	3.0	34.0	<2	<10	<5	<10	<10	<10	94.0	B(5)
	4/13/05	<1	53.0	<1	<1	<1	17.0	<1	<1	<1	<1	<1	<1	40.0	
	9/6/05	<1	37.0	<1	<1	<1	2.0	<1	8.0	3.0	2.0	<1	<1	15.0	Ac(34), B(4.2), 2-But(16)
	2/2/06	<1	19.0	<1	<1	<1	6.6	<1	37.0	<1	4.7	<1	6.1	4.4	B(9), 2-CHT(1.1), EB(1.2), T(3.1), X(2.9)
	3/30/06	<5	9.9	<5	<5	<5	<5	<5	15.0	3.2	<5	<5	<5	18.0	B(3.7)
	10/4/06	<1	38.0	2.3	<1	1.4	<1	<1	17.0	<1	3.4	<1	4.7	79.0	B(4.1), T(3.5)
	1/23/07	<1	12.0	<1	<1	<1	2.5	<1	<1	<1	<1	<1	<1	3.5	2-CHT(1.8)
	8/1/07	<1	1.3	<1	<1	<1	<1	<1	8.3	<1	<1	<1	1.6	1.8	T(3.2)
	3/24/08	4.2	150.0	2.4	<1	1.0	<1	<1	71.0	4.1	27.0	2.1	9.9	140.0	B(2.8), T(2), X(1)
	8/27/08	2.0	130.0	1.0	<1	2.0	35.0	<1	4.0	<1	<1	<1	<1	16.0	
	3/30/09	<1	94.0	1.0	<1	2.0	24.0	<1	6.0	<1	7.0	<1	3.0	17.0	T(1.9), B(2.1), 1,2-DCE(99.6)
	11/5/09	1.8	J 163.0	1.0	J <2	1.7	J 34.0	<2	6.9	<4	3.0	0.5	J 2.0	10.6	B(3), T(0.99 J)
	4/30/10	<5	J 192.0	<5	J <5	8.6	J 19.7	<5	5.3	<10	24.0	1.8	J 6.2	590.0	B(34.7), MCH (2.4 J), T(4.3 J)
	12/22/10	5.2	J 476.0	<10	J <10	4.5	J 94.2	<10	36.0	<20	4.0	<1	<1	19.6	B(6.7J), T(3.7J)
	5/4/11	<1	J 28.0	0.7	J <1	1.5	J 1.8	<1	12.5	3.0	2.8	0.6	J 2.4	78.8	B(9.7), CS ₂ (0.58J), T(1)
	12/28/11	0.6	J 35.0	0.5	J <1	1.1	J 6.3	0.8	28.0	1.3	J 20.1	2.8	J 8.9	14.4	B(3.1), MCH(0.48J)
	5/18/12	3.6	J 196.0	1.4	J <1	1.8	J 12.8	0.7	J 4.1	<2	1.5	0.3	J 0.8	14.1	B(0.7J), T(0.93J)
	10/26/12	2.6	J 187.0	1.4	J <2	2.3	J 17.4	<2	8.5	<4	1.2	J <2	1.4	J 35.7	B(1.4J), T(1.4J)
	5/24/13	4.8	J 260.0	2.4	J <2	3.0	J 27.5	1.0	J 4.2	<4	4.6	0.8	J 2.4	107.0	B(1J), T(0.41 J)
	12/12/13	<1	J 69.0	<1	J <1	7.5	J 7.8	0.9	J 10.8	<2	1.4	0.8	J 3.1	51.0	B(0.74J), T(0.42J)
	6/30/14	<1	J 21.0	0.4	J <1	1.3	J 2.6	0.6	J 1.5	J 1.1	J 0.7	J <1	0.5	J 45.3	B(2.8), CS ₂ (0.32J), T(0.53J)
	12/22/14	<1	J 2.0	<1	J <1	<1	J 2.6	0.8	J 1.0	J <2	J <1	J <1	0.8	J 0.4	J Ac(11.3 J)
	6/10/15	<1	J 9.7	<1	J <1	1.0	J 2.0	0.6	J 1.6	J 1.1	J 1.0	0.3	J 1.0	45.8	Ac(12.9), B(2.8), MEK(3.3), T(2.1)
	12/8/15	1.7	J 146.0	3.0	J <1	3.0	J 9.8	0.7	J 12.9	<2	8.0	1.3	J 5.0	147.0	B(2), MCH (0.47J), T(0.7J)
	6/28/16	0.4	J 67.7	1.0	J <1	1.5	J 15.4	1.7	J 3.1	<2	3.5	0.4	J 1.2	34.5	Ac(21.5J), B(0.98J), MEK(3.5J), T(0.5J)
	12/14/16	1.6	J 114.0	1.0	J <1	2.2	J 24.0	0.4	J 9.9	<2	14.4	1.8	J 5.7	125.0	B(2), MCH (0.66J), T(0.86J)
	6/5/17	<1	J 4.9	<1	J <1	2.0	J 1.2	0.3	J 7.3	<2	3.5	0.7	J 2.5	17.0	B(2.2), T(0.54J)
	12/28/17	0.5	J 34.1	0.3	J <1	0.5	J 3.7	<1	J 12.4	<2	2.4	1.2	J 4.1	15.4	B(0.51J), MCH (0.47J)
	6/4/18	0.9	J 33.7	0.3	J <1	0.6	J 6.8	0.5	J 2.5	<2	5.4	J 0.7	J 2.5	21.0	X(1.1J)
	12/21/18	0.9	J 48.2	0.6	J <1	<1	J 7.0	1.2	J 2.3	<1	4.2	0.5	J 1.7	21.1	MEK(0.53)
	6/12/19	4.0	J 184.0	2.0	J <1	1.8	J 41.5	5.3	J <1	<2	0.8	J <1	<1	13.5	MEK(4.9)

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L	
MW-8 (cont'd)	12/20/19	0.6 J	37.4	0.3 J	<1	0.5	4.2	0.7	4.8	<2	4.9	0.6 J	2.0	3.5	MEK(1.1)	
	6/4/20	0.8 J	56.6	0.6 J	<1	0.5 J	14.5	3.1	0.9 J	<2	0.9 J	<1	0.4 J	4.3	MTBE(0.88J)	
	12/16/20	1.0 J	52.0	0.5 J	<1	0.5 J	3.6	0.4 J	5.6	<2	4.6	0.5 J	2.0	14.2	MTBE(0.58J) B(0.32J)	
	6/22/21	1.8	79.1	1.0 J	<1	0.5 J	9.3	1.5	2.2	<2	2.9	<1	1.2	17.6	MTBE(0.63J)	
	12/15/21	3.0	174.0 E	<1	<1	1.0 J	2.0	<1	6.7	<2	8.6	0.7 J	2.9	89.9	AC(11J), B(1.1), EB(12), MTBE(2.5) T(99.6), X(155)	
MW-13	9/20/01	310.0	33000.0	260.0	<100	630.0	1400.0	<100	<500	<250	<500	<500	<500	1900.0		
	10/24/01	<1000	59000.0	<1000	<1000	1300.0	1600.0	<1000	<5000	<2500	<5000	<5000	<5000	6400.0		
	11/19/01	<1000	52000.0	2300.0	<1000	1300.0	2000.0	<1000	<5000	<2500	<5000	<5000	<5000	7200.0		
	12/20/01	420.0	44000.0	790.0	<100	1500.0	1700.0	<100	<500	330.0	<500	<500	<500	7900.0	T(230)	
	1/30/02	<1000	36000.0	<1000	<1000	1000.0	1300.0	<1000	<5000	<2500	<5000	<5000	<5000	8200.0		
	2/25/02	<400	43000.0	<400	<400	1100.0	1800.0	<400	<2000	<400	<2000	<2000	<2000	6700.0		
	9/30/02	<1000	41000.0	<1000	<1000	1100.0	2000.0	<1000	<5000	<2500	<5000	<5000	<5000	7300.0		
	3/17/03	<1000	44000.0	<1000	<1000	<1000	2200.0	<1000	<5000	<2500	<5000	<5000	<5000	4200.0		
	8/26/03	<500	31000.0	<500	<500	600.0	1500.0	<500	<2500	<1300	<2500	<2500	<2500	3700.0		
	2/27/04	<1000	53000.0	<1000	<1000	<1000	2400.0	<1000	<5000	<2500	<5000	<5000	<5000	7500.0		
	5/13/04	<1000	23000.0	<1000	<1000	<1000	1000.0	<1000	<5000	<2500	<5000	<5000	<5000	4200.0		
	8/26/04	<2	75.0	<2	<2	<2	2.0	<2	<10	<5	<10	<10	<10	12.0		
	12/3/04	<200	24000.0	<200	<200	420.0	470.0	<200	<200	220.0	<10	<10	<10	4200.0	CH(220)	
	4/13/05	<200	19000.0	<200	<200	350.0	720.0	<200	<200	<200	<200	<200	<200	2100.0		
	7/1/05	93.0	11000.0	160.0	<20	<20	490.0	<20	<20	<20	<20	<20	<20	970.0		
	9/6/05	38.0	5700.0	29.0	<20	96.0	110.0	<20	<20	36.0	<20	<20	<20	910.0		
	12/20/05	<1	0.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	2/2/06	1.3	19.0	1.5	<1	2.6	4.6	<1	<1	<1	<1	<1	<1	11.0		
	3/30/06	<0.20	1.8	<0.20	<0.20	0.3	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	MC(0.80 JB)
	10/4/06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	1/23/07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	
	8/1/07	<1	10.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.2		
	3/24/08	<0.200	24000.0	<200	<200	260.0	<200	<200	<200	<200	<200	<200	<200	<200	1500.0	
8/28/08	<1	13.0	<1	<1	<1	4.0	<1	<1	<1	<1	<1	<1	<1	<1		
3/30/09	0.2	14400.0	122.0	<1	193.0	1370.0	<1	11.0	<1	4.0	<1	<1	1180.0	T(33), X(21), B(9.3), EB(5.7), 1,2-DCE (18.6) Ac(16 J), B(4.9), EB(0.6 J), T(1.6), X(1.8 J)		
11/5/09	166.0	0.5 J	<1	<1	<1	<1	<1	15.3	<2	0.5 J	<1	<1	<1	<1		
4/30/10	156.0 J	24800.0	<250	<250	235.0 J	484.0	<250	<250	<500	<250	<250	<250	2320.0			
12/22/10	241.0 J	34000.0	93.1 J	<250	372.0	2100.0	<250	<250	<500	<250	<250	<250	2420.0			
5/4/11	290.0 J	39200.0	<500	<500	431.0 J	1530.0	<500	<500	<1000	<500	<500	<500	3440.0			
12/28/11	227.0 J	27100.0	<500	<500	280.0	492.0 J	<500	<500	<1000	<500	<500	<500	2860.0			
5/18/12	146.0 J	18400.0	<200	<200	<200	350.0	<200	<200	<400	<200	<200	<200	1810.0	MC(800)		
10/26/12	151.0 J	23500.0 b	71.8 J	<200	210.0	502.0	<200	<200	<400	<200	<200	<200	2660.0			
5/24/13	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1		
12/12/13	183.0 E	19600.0	78.0	<1	193.0	451.0	<1	32.0	0.6	4.0	<1	0.9	1710.0	B(20), EB(0.6), MC(0.69), T(1.6), X(1.3)		
6/30/14	128.0 J	15800.0	181.0 E	0.3 J	149.0 J	357.0	<1	31.0	<2	4.0	0.2 J	0.8 J	1890.0	B(19.1), EB(0.7), MC(3.6), T(13.8), X(1.7J)		
12/22/14	164.0 J	20100.0	<250	<250	176.0 J	591.0	<250	83.4 J	<500	<250	<250	<250	1960.0	CS ₂ (247 J)		

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L
MW-13 (cont'd)	6/10/15	107.0 J	15500.0	46.9 J	<200	115.0 J	482.0	<200	<200	<400	<200	<200	<200	1380.0	
	12/8/15	172.0 J	18400.0	<250	<250	164.0 J	1680.0	<250	82.5 J	<500	<250	<250	<250	1400.0	MC(652 JB)
	6/28/16	123.0 J	15900.0	<200	<200	126.0 J	672.0	<200	40.1 J	<400	<200	<200	<200	1860.0	
	12/14/16	133.0 J	18000.0	70.0 J	<200	132.0 J	739.0	<200	<200	<400	<200	<200	<200	1950.0	
	6/5/17	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	
	12/26/17	140.0	26600.0	88.0	<1	145.0	828.0	<1	32.0	<2	4.0	<1	0.8 J	1670.0	B(24), EB(0.51J), T(1.1), X(1.6J)
	6/4/18	158.0 J	21500.0	53.6 J	<200	125.0 J	1010.0	<200	<200	<400	<200	<200	<200	2000.0	CHL(61.6J)
	12/21/18	<250	18700.0	<250	<250	<250	880.0	<250	<250	<250	<250	<250	<250	1830.0	
	6/12/19	104.0 J	16600.0	<250	<250	91.0 J	881.0	<250	<250	<500	<250	<250	<250	1470.0	
	12/20/19	142.0 J	25900.0	<250	<250	98.8 J	1410.0	<250	<250	<500	<250	<250	<250	2070.0	
	6/4/20	<250	15700.0	<250	<250	<250	897.0	<250	<250	<500	<250	<250	<250	1220.0	
	12/16/20	<250	24100.0	<250	<250	<250	1160.0	<250	<250	<500	<250	<250	<250	1840.0	
	6/7/21	<250	17900.0	77.7 J	<250	<250	1140.0	<250	<250	<500	<250	<250	<250	1240.0	
	12/15/21	0.4	67.0	1.1	<1	6.2	<1	<1	25.5	38.4	4.1	0.2 J	1.0	172.0	AC(1050), B(12.5), MEK(1490), 2-HEX(3J) T(8), X(2 J)
	MW-14	10/13/03	<100	840.0	<100	<100	<100	730.0	<100	<100	<100	NA	NA	NA	<0.100
12/11/03		97.0	2900.0	27.0	150.0	200.0	1800.0	<5	<5	15.0	NA	NA	NA	0.1	MEK (6700), 4-m-2-p (2200), Ace (3100), EB (4400), X (4000), MC (200), T (65000)
2/27/04		<20	4800.0	<20	160.0	150.0	6100.0	20.0	110.0	<50	450.0	<100	<100	0.1	Ac(2200), B(630), 2-But(9100), EB(6100) MC(95), 4-M-2-Pent(1700), T(96000) 1,1,1-T(780), 1,2,4-TMB(130) X(57000)
8/26/04		<2	5.0	<2	<2	<2	<2	<2	<10	<5	<10	<10	<10	<2	EB(4), T(70), X(42)
4/13/05		<1000	3400.0	<1000	<1000	<1000	1100.0	<1000	<1000	<1000	<1000	<1000	<1000	<1000	EB(5700), T(60000), X(54000)
9/6/05		<500	3500.0	<500	<500	<500	1500.0	<500	<500	<500	<500	<500	<500	<500	EB(6800), T(71000), X(67000)
2/2/06		<1000	2600.0	<1000	<1000	<1000	2100.0	<1000	<1000	<1000	<1000	<1000	<1000	<1000	EB(9100), T(90000)
3/30/06		<2500	3800.0	<2500	<2500	<2500	<2500	<2500	<2500	<2500	<2500	<2500	<2500	<2500	B(610), EB(9500), T(81000), X(84000)
10/4/06		<1000	6200.0	<1000	<1000	<1000	3100.0	<1000	<1000	<1000	<1000	<1000	<1000	<1000	EB(6700), T(90000), X(66000)
1/23/07		90.0	9100.0	35.0	<1000	<1000	2400.0	<1000	110.0	12.0	<1000	23.0	65.0	<1000	EB(9000), T(96000), X(91000), CHL (1.4), IPB (55), MC EB(4000), T(17000), X(36000)
8/1/07		<250	0.3	<250	<250	<250	350.0	<250	25	<250	1200.0	76.0	220.0	<250	
3/24/08		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
8/27/08		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
3/30/09		46.0	8240.0	19.0	<1	188.0	1560.0	<1	128.0	10.0	328.0	19.0	54.0	878.0	Ac(1.760), B(532), 2-But(5350), T-BB(1.3), S-BB(3.1), CS2(1.6), CHL(1.3), EB(6160), IPB(55.6), P-IP(22.1), MC(39.3), 4-M-2-Pent(2420), N(16.7), N-PB(30.9), T(86800), 1,1,1-TCA(514), 1,1,2-T(10), X(75600), 1,2- DCE(8860), 1,3,5-TMB(53), 1,2,4-TMB(122)
11/5/09		63.0 J	8290.0	<100	142.0	198.0	650.0	<1	<100	<200	190.0	<100	37.0 J	414.0	Ac(1370 J), B(784), 2-But.(2270), EB(5580), IPB(59.6 J), B(943 J), CHL(462 J), EB(8540), 4-M-2-Pent(2480 J), B(630J), EB(5820), MEK(7220J), 1,1,1-TCA(570J), B(747J), CS ₂ (2220J), EB(6280)
4/30/10	<1000	14700.0	<1000	<1000	<1000	1670.0	<1000	<1000	<2000	542.0 J	<1000	<1000	<1000	1,1,1-TCA(753J), T(101.000), X(56400)	
12/22/10	<2000	9000.0	<2000	<2000	<2000	1470.0	<2000	<2000	<4000	<2000	<2000	<2000	522.0 J	B(639J), EB(5420), MCH(2850J) MEK(5290), T(126.000), X(51100)	
5/4/11	<2000	10600.0	<2000	<2000	<2000	1600.0	<2000	<2000	<4000	<2000	<2000	<2000	753.0 J	B(827J), EB(5920), MEK(8630) T(113000), X(52900)	
12/28/11	<1000	8830.0	<1000	<1000	<1000	1240.0	<1000	<1000	<2000	<1000	<1000	<1000	697.0 J	B(805), EB(4570), MCH(2520), 1,1,1-TCA(582) B(812), EB(8300), 1,1,1-TCA(745), T(119000) X(77600)	
5/18/12	<2000	10300.0	<2000	<2000	<2000	1870.0	<2000	<2000	<4000	<2000	<2000	<2000	<2000	B(641 J), EB(8620), T(135.000), X(86600)	
10/26/12	<500	9890.0	<500	145.0 J	202.0 J	810.0	<500	<500	<1000	121.0 J	<500	<500	590.0	B(866J), EB(8980), 1,1,1-TCA(904J), T(124000), X(84100)	
5/24/13	<2000	11000.0	<2000	<2000	<2000	1980.0	<2000	<2000	<4000	494.0 J	<2000	<2000	<2000	B(863 J), EB(9650), 1,1,1-TCA(578 J), T(80100), X(80300)	
12/12/13	<2000	7540.0	<2000	<2000	<2000	889.0 J	<2000	<2000	<4000	689.0 J	<2000	<2000	<2000	B(745), EB(8020), MC(3450J), 4-M-2-Pent(1670J) T(116000), 1,1,1-TCA(399J), X(76700)	
6/30/14	<2000	11500.0	<2000	<2000	<2000	1260.0 J	<2000	<2000	<4000	770.0 J	<2000	<2000	<2000		
12/22/14	<1000	10800.0	<1000	<1000	<1000	551.0 J	<1000	<1000	<2000	927.0 J	<1000	<1000	421.0 J		
6/10/15	<1000	10800.0	<1000	<1000	233.0 J	266.0 J	<1000	<1000	<2000	725.0 J	<1000	<1000	547.0 J		

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L	
MW-14 (cont)	12/8/15	56.0	J 10600.0	<1000	143.0	243.0	539.0	<1000	<1000	<2000	1170.0	62.0	204.0	564.0	B(770), 2-But(1270), EB(9760), IPB(77.8 J), MC(294JB), 4-M-2-Pent(1380), Sy(176), 1,1,1-TCA(421), T(114000), X(86900)	
	6/28/16	<1000	12600.0	<1000	<1000	<1000	444.0	J <1000	217.0	<2000	1000.0	<1000	<1000	672.0	J B(877J), EB(9630), 4-M-2-Pent(2000J), T(125000 ^d), 1,1,1-TCA(436J), X(86100)	
	12/14/16	<2000	9650.0	<2000	<2000	<2000	634.0	J <2000	<2000	<4000	1510.0	<2000	<2000	<2000	B(940J), EB(10400), T(103000), 1,1,1-TCA(426J), X(82400)	
	6/5/17	<2000	7540.0	<2000	<2000	<2000	<2000	<2000	<2000	<4000	<2000	<2000	<2000	<2000	B(648J), EB(7110), T(101000), X (67600)	
	12/26/17	<2000	9310.0	<2000	<2000	<2000	<2000	<2000	<2000	<4000	<2000	<2000	<2000	<2000	B(700), EB(8640), T(110000), X(80100)	
	6/4/18	<2000	7450.0	<2000	<2000	<2000	<2000	<2000	<2000	<4000	<2000	<2000	<2000	<2000	CHL(1360J), EB(8840), T(102), X(84700)	
	12/21/18	<500	3060.0	<500	<500	<500	221.0	J <500	<500	<500	<500	613.0	<500	<500	B(274), EB(7100), T(60100), 1,1,1-TCA(176), X(71400)	
	6/12/19	<1000	5420.0	<1000	<1000	<1000	843.0	J <1000	<1000	<2000	<2000	525.0	J <1000	<1000	<1000	B(416J), EB(6890), T(68700), 1,1,1-TCA(312J), X(71400)
	12/20/19	<500	3820.0	<500	<500	<500	230.0	J <500	<500	<1000	<1000	379.0	J <500	<500	<500	B(299J), EB(4,480), T(45,300), 1,1,1-TCA(156J), X(49,400)
	6/4/20	<500	4950.0	<500	<500	<500	211.0	J <500	<500	<1000	<1000	570.0	<500	<500	<500	B(344J), MEK(1160), EB(4660), T(45200), 1,1,1-TCA(188J), X (58200)
	9/15/20	<500	1680.0	<500	<500	<500	345.0	J <500	<500	<1000	<1000	483.0	J <500	<500	<500	EB(2,220), T(25,000), X(20,000)
	9/17/20	<500	1110.0	<500	<500	<500	363.0	J <500	<500	<1000	<1000	485.0	J <500	<500	<500	EB(2780), T(25,600), X(25,300)
	9/23/20	<500	2380.0	<500	<500	<500	589.0	<500	<500	<1000	<1000	398.0	J <500	<500	<500	B(264), EB(4,110), T(43,900), X(38,800)
	12/16/20	<500	4820.0	<500	<500	<500	<500	<500	<500	<1000	<1000	568.0	<500	<500	<500	B(490J), EB(6270), T(61800), X(58500), 1,1,1-TCA(226J), MIBK(573J), MEK(1010J)
	6/7/21	<1000	4570.0	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<2000	465.0	J <1000	<1000	<1000	B(523), 2-But(2340), EB(7230), T(68700), X(76200)
	12/15/21	<1000	3750.0	<1000	<1000	<1000	<1000	<1000	<1000	<1000	<2000	423.0	J <1000	<1000	<1000	B(420 J), EB(5770), T(72900), X(67200)
MW-15	5/18/12	<1	4.4000	<1	<1	<1	<1	<1	4.8000	<2	<1	<1	<1	<1	B(0.35J), T(0.26J)	
	10/26/12	<1	4.000	<1	<1	<1	<1	<1	0.820	<2	<1	<1	<1	<1	T(0.22J)	
	5/24/13	<1	8.000	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	12/12/13	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	6/30/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	12/22/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	6/10/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	12/8/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	6/28/16	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	T(1.5), X(1.5J)	
	12/14/16	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	6/5/17	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	12/28/17	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	6/4/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1		
	12/21/18	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
	6/12/19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
	12/20/19	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1		
6/4/20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
12/16/20	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
6/7/21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
12/15/21	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1			
MW-20	6/7/21	9.6	J 756.0	<10	<10	31.6	<10	<10	55.3	<20	68.6	2.9	J 14.8	982.0	B(18.5)	
	12/15/21	<1	8.3	<1	<1	9.6	<1	<1	93.6	15.3	28.7	2.5	14.3	67.4	B (11.8), MCH(0.65), T(1.3), X (1.1J)	
MW-21	6/7/21	<50	2900.0	<50	<50	<50	803.0	<50	243.0	<100	<50	<50	<50	128.0	B(24.9)	
	12/15/21	4.3	974.0	4.1	<1	9.0	<1	<1	342.0	18.2	3.7	5.4	19.9	324.0	AC(30), B(32), MEK(58.6), CHX(0.41J), T(2.5), X(0.83J)	

Table 4
Summary of Groundwater Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 7/6/2021)

Well Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	1,2-DB ug/L	1,3-DB ug/L	1,4-DB ug/L	VC ug/L	Others mg/L
-------------	--------------	--------------	----------------	----------------	--------------	--------------	----------	----------	---------	---------	-------------	-------------	-------------	---------	-------------

LIST OF ABBREVIATIONS

Acetone	Ac	1,2-Dichloroethane	1,2-DCA	trans-1,2-Dichloroethene	t-1,2-DCE
Benzene	B	Ethylbenzene	EB	1,2,4-Trimethylbenzene	1,2,4-TMB
Bromobenzene	BB	Hydrocarbons (Mineral Spirits)	H-MIN	1,3,5-Trimethylbenzene	1,3,5-TMB
2-Butanone	2-But.	Isopropylbenzene	IPB	Toluene	T
Chlorobenzene	CB	Methyl Chloride	MC	Styrene	Sy
Chloroethane	CH	Methyl Bromide	MB	Vinyl Chloride	VC
Carbon Disulfide	CS ₂	Methyl ethyl ketone	MEK	Xylenes	X
Chloroform	CHL	4-Methyl-2-Pentanone	4-M-2-Pent	Methyl Tert Butyl Ether	MTBE
Chloromethane	CM	Methylcyclohexane	MCH	4-Methyl-2-pentanone	MIBK
cis-1,2-Dichloroethene	c-1,2-DCE	milligrams/Liter	mg/L	Not Sampled	NS
Cyclohexane	CHX	Naphthalene	N	Estimated value (result is between F Limit and Method Detection Limit)	J
1,2-Dichlorobenzene (O-DB)	1,2-DB	N-Propylbenzene	N-PB	Result is from Run# 2	^a
1,3-Dichlorobenzene M-DB)	1,3-DB	P-CY	p-Cymene	Analyte found in associated method	^o
1,4-Dichlorobenzene (P-DB)	1,4-DB	P-Isopropyltoluene	P-IP		
1,1-Dichloroethene	1,1-DCE	sec-Butylbenzene	S-BB		
1,2,4-Trichlorobenzene	1,2,4-B	tert-Butylbenzene	T-BB		
2-Chlorotoluene	2-CHT	Tetrachloroethene	PCE		
4-Chlorotoluene	4-CHT	Trichloroethene	TCE		
1,1-Dichloroethane	1,1-DCA	1,1,1-Trichloroethene	1,1,1-TCE		
		1,1,1-Trichloroethane	1,1,1-TCA		

Table 5
Summary of Surface Water Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Sample Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	VC ug/L	Others ug/L
SW-1	11/19/01	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	12/20/01	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	1/30/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	2/25/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	9/30/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	3/17/03	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	8/26/03	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	2/27/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	5/13/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	8/26/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	12/3/04	<1	4.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	4/13/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	7/1/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Chl (1.6)
	9/6/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	CM(1)
	12/20/05	<1	2.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	2/2/06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	3/30/06	<5	<5	<1	<5	<5	<5	<5	<5	<5	<5	ND
	10/4/06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	1/23/07	<1	1.5	<1	<1	<1	<1	<1	<1	<1	<1	ND
	8/1/07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	3/24/08	<1	1.8	<1	<1	<1	<1	<1	<1	<1	<1	ND
	8/27/08	<1	8.9	<1	<1	<1	<1	<1	<1	<1	<1	ND
	3/30/09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	11/5/09	<1	<1	<1	<1	<1	<1	<1	0.3	<1	<1	ND
	4/30/10	<1	8.6	<1	<1	<1	4.9	<1	0.5	<2	<1	EB(0.37), X(1)
	12/22/10	1.0	28.2	<1	<1	0.3	9.0	<1	0.8	<2	2.0	T(0.21J)
	5/4/11	4.0	159.0	1.9	<1	1.6	29.9	<1	1.6	<2	1.3	B(0.36J)
												1,2DCB(0.41J)
												MC(41.2J)
												T(1)
	12/28/11	<1	0.3	<1	<1	<1	<1	<1	<1	<2	<1	ND
	5/18/12	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	10/26/12	<1	0.6	<1	<1	<1	<1	<1	<1	<2	<1	T(0.22J)
	5/24/13	<1	5.0	<1	<1	<1	0.9	<1	<1	<2	<1	ND
	12/12/13	<1	<1	<1	<1	<1	<1	<1	0.7	<2	<1	ND
	6/30/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/22/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/10/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	CS ² (0.53J)
	12/8/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/28/16	<1	<1	<1	<1	<1	<1	<1	0.2	<2	<1	Ac(13.6J), T(0.65J)
	12/14/16	<1	6.0	<1	<1	<1	1.5	<1	<1	<2	<1	ND
	6/5/17	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/26/17	0.4	27.2	0.3	<1	<1	7.2	<1	0.4	<2	1.0	ND
	1/19/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/4/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/21/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/12/19	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/20/19	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/4/20	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	Ac(42.8)
	12/16/20	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/7/21	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/15/21	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND

Table 5
Summary of Surface Water Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Sample Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	VC ug/L	Others ug/L
SW-2	11/19/01	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	12/20/01	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	1/30/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	2/25/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	9/30/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	3/17/03	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	8/26/03	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	2/27/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	5/13/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	8/26/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	12/3/04	<1	3.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	4/13/05	<1	1.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	7/1/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Chl(1.5)
	9/6/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	12/20/05	<1	2.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	2/2/06	<1	1.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	3/30/06	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	10/4/06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Chl(1.4)
	1/23/07	<1	1.6	<1	<1	<1	<1	<1	<1	<1	<1	ND
	8/1/07	<1	<0.001	<1	<1	<1	<1	<1	<1	<1	<1	ND
	3/24/08	<1	1.8	<1	<1	<1	<1	<1	<1	<1	<1	ND
	8/27/08	<1	8.2	<1	<1	<1	2.7	<1	<1	<1	<1	ND
	3/30/09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	11/5/09	<1	<1	<1	<1	<1	<1	<1	0.39 J	<1	<1	ND
	4/30/10	<1	8.6	<1	<1	<1	4.9	<1	0.47 J	<2	0.51 J	EB(0.42J), X(1.1J)
	12/22/10	0.56J	27.8	<1	<1	<1	9.0	<1	0.74J	<2	1.6	T(0.21J)
	5/4/11	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/28/11	1.8	0.1	0.74J	<1	0.99J	16.9	<1	3.4	<2	8.6	B(0.26J), o-DCB(0.33J) T(0.38J)
	5/18/12	<1	<1	<1	<1	<1	<1	<1	<1	<2	<0.001	ND
	10/26/12	<1	13.0	<1	<1	<1	0.47 J	<1	4.0	<2	0.50 J	B(0.47J), T(0.36J)
	5/24/13	<1	4.0	<1	<1	<1	0.88 J	<1	<1	<2	<1	ND
	12/12/13	<1	<1	<1	<1	<1	<1	<1	0.41 J	<2	<1	ND
	6/30/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/22/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/10/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	CS ² (0.62J)
	12/8/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/28/16	<1	<1	<1	<1	<1	<1	<1	0.25 J	<2	<1	T(0.68J)
	12/14/16	<1	4.0	<1	<1	<1	1.0	<1	<1	<2	<1	ND
	6/5/17	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/26/17	4.7 J	3.0	0.35 J	<1	<1	8.0	<1	0.42 J	<2	1.0	ND
	1/19/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	CHI(0.97J)
	6/4/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/21/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/12/19	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/20/19	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/4/20	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	Ac(61.2)
	12/16/20	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/7/21	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/15/21	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND

Table 5
Summary of Surface Water Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Sample Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	VC ug/L	Others ug/L
SW-3	11/19/01	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	12/20/01	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	1/30/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	2/25/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	9/30/02	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	3/17/03	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	8/26/03	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	2/27/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	5/13/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	8/26/04	<2	<2	<2	<2	<2	<2	<2	<10	<5	<2	ND
	12/3/04	<1	3.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	4/13/05	<1	2.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	7/1/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Chl(1.6)
	9/6/05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	12/20/05	<1	3.0	<1	<1	<1	<1	<1	<1	<1	<1	ND
	2/2/06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	3/30/06	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ND
	10/4/06	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	1/23/07	<1	9.6	<1	<1	<1	<1	<1	<1	<1	<1	ND
	8/1/07	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ND
	3/24/08	<1	1.7	<1	<1	<1	<1	<1	<1	<1	<1	ND
	8/27/08	<1	7.0	<1	<1	<1	2.0	<1	<1	<1	<1	ND
	3/30/09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	Chl(7.1)
	11/5/09	<1	<1	<1	<1	<1	<1	<1	0.34 J	<1	<1	ND
	4/30/10	<1	6.4	<1	<1	<1	0.0	<1	0.41 J	<2	<1	EB(0.37J), X(0.77J)
	12/22/10	4.5J	30.5	<1	<1	<1	0.0	<1	0.67J	<2	2.0	ND
	5/4/11	<1	<1	<1	<1	<1	<1	<1	5.4	<2	<1	B(0.48J)
	12/28/11	1.0	87.3	4.6J	<1	0.57J	12.0	<1	1.4	<2	5.0	T(0.30J)
	5/18/12	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	10/26/12	<1	9.9	<1	<1	<1	0.34 J	<1	1.0	<2	<1	T(0.34J)
	5/24/13	<1	3.9	<1	<1	<1	0.88 J	<1	<1	<2	<1	ND
	12/12/13	<1	<1	<1	<1	<1	<1	<1	0.32 J	<2	<1	ND
	6/30/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/22/14	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/10/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/8/15	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/28/16	<1	<1	<1	<1	<1	<1	<1	0.34 J	<2	<1	T(0.66J)
	12/14/16	<1	4.0	<1	<1	<1	1.0	<1	<1	<2	<1	ND
	6/5/17	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/26/17	4.2 J	29.0	0.29 J	<1	<1	7.0	<1	0.44 J	<2	1.0	ND
	1/19/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/4/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/21/18	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/12/19	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/20/19	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/4/20	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	Ac(61.6)
	12/16/20	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	6/7/21	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND
	12/15/21	<1	<1	<1	<1	<1	<1	<1	<1	<2	<1	ND

Table 5
Summary of Surface Water Analyses
Brenntag Southeast
Charleston, South Carolina
(revised 1/13/2022)

Sample Number	Date Sampled	1,1-DCE ug/L	c-1,2-DCE ug/L	t-1,2-DCE ug/L	1,2-DCA ug/L	1,1-DCA ug/L	TCE ug/L	PCE ug/L	CB ug/L	CH ug/L	VC ug/L	Others ug/L
---------------	--------------	--------------	----------------	----------------	--------------	--------------	----------	----------	---------	---------	---------	-------------

LIST OF ABBREVIATIONS

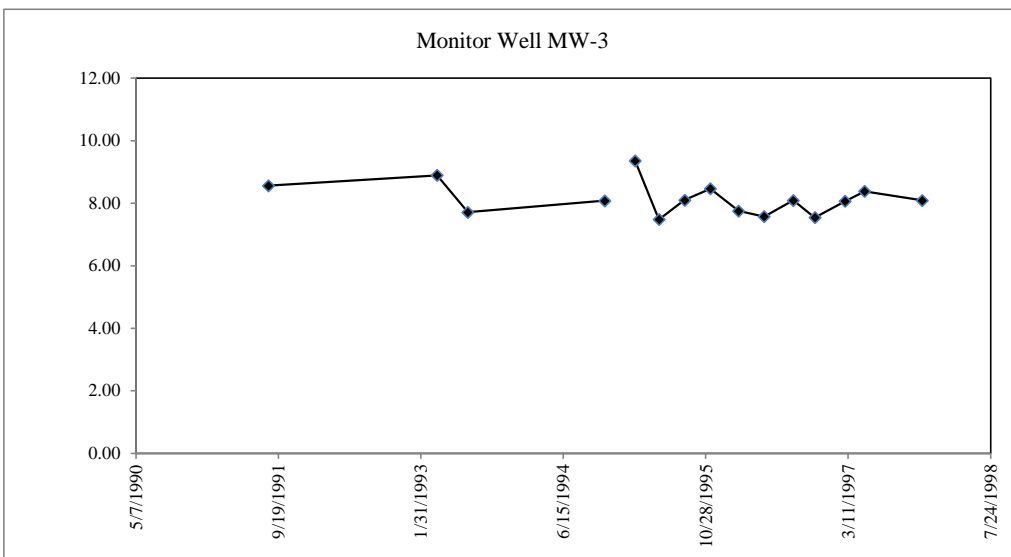
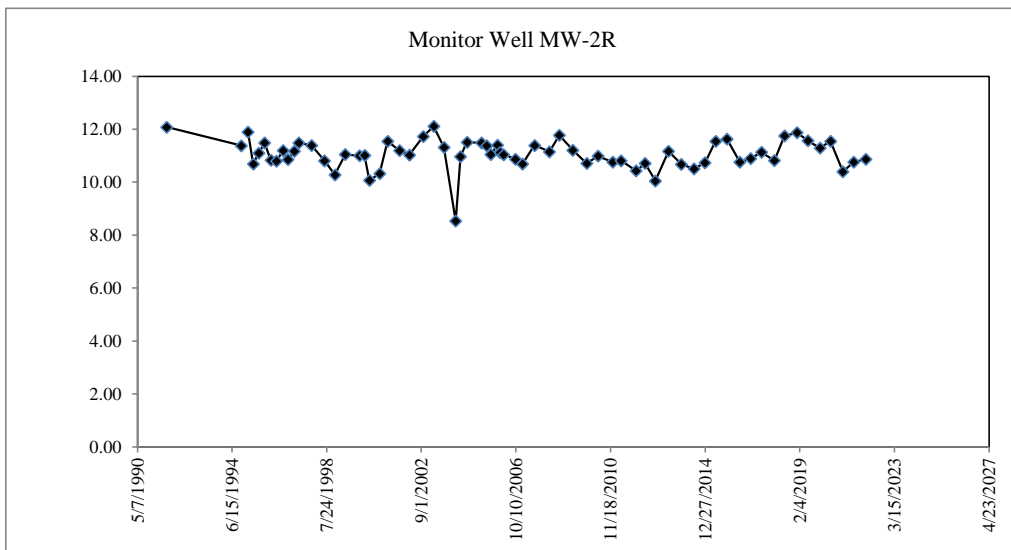
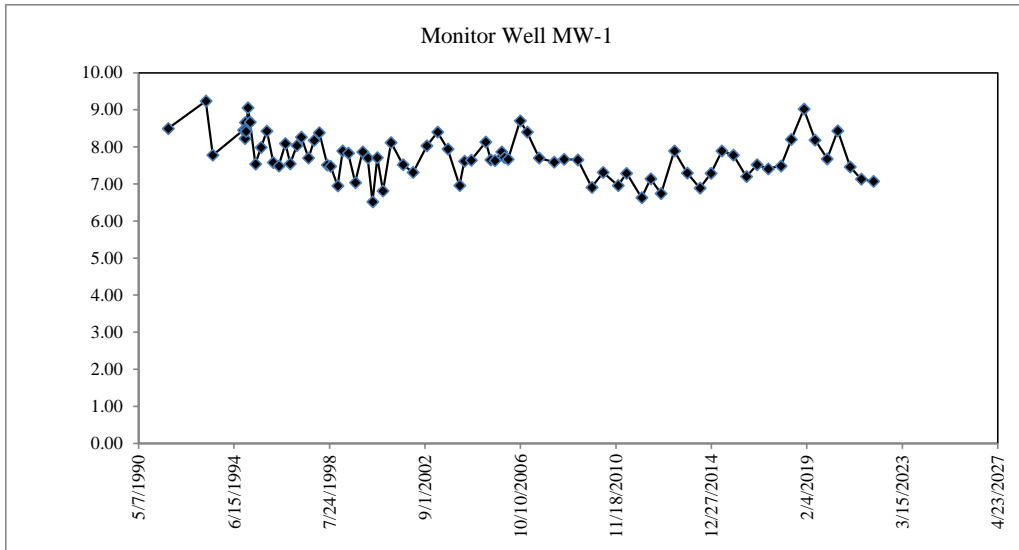
1,1-DCE = 1,1-Dichloroethene	PCE = Tetrachloroethene	MC = Methylene chloride	Ac=Acetone
c-1,2-DCE = cis-1,2-Dichloroethene	CB = Chlorobenzene	mg/L = Milligrams per liter	T=Toluene
t-1,2-DCE = trans-1,2-Dichloroethene	CH = Chloroethane	o-DCB= 1,2-Dichlorobenzene	
1,2-DCA = 1,2-Dichloroethane	VC = Vinyl chloride	Carbon Disulfide=CS ²	
1,1-DCA = 1,1-Dichloroethane	Chl = Chloroform	ND = Not detected	
TCE = Trichloroethene	CM=Chloromethane	J = Estimated value (result is between Reporting Limit and Method Detection Limit)	

APPENDIX A

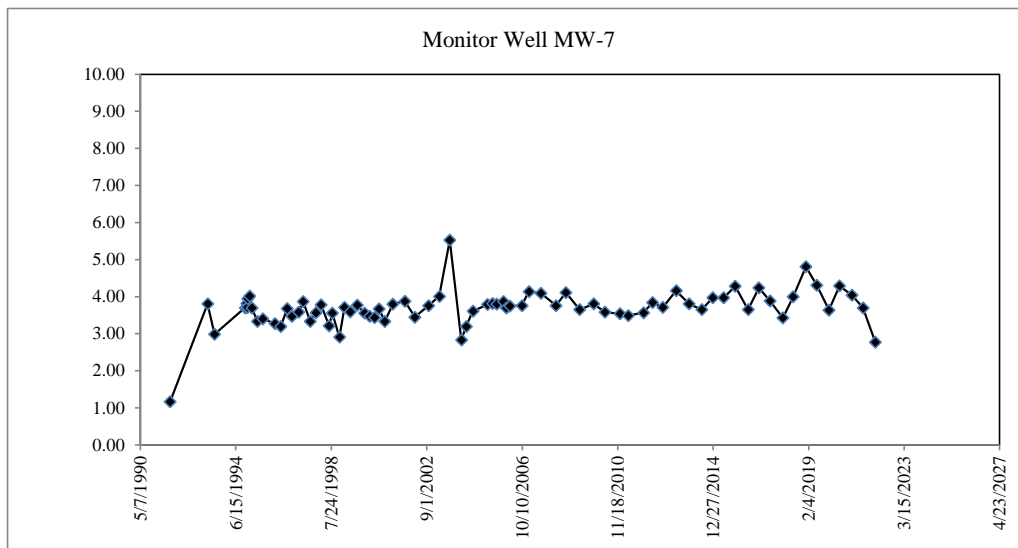
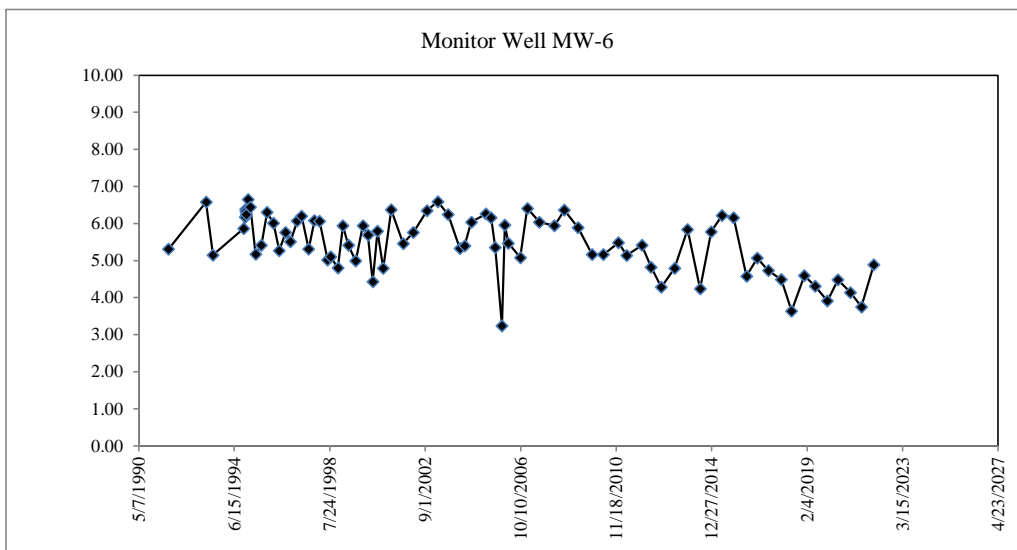
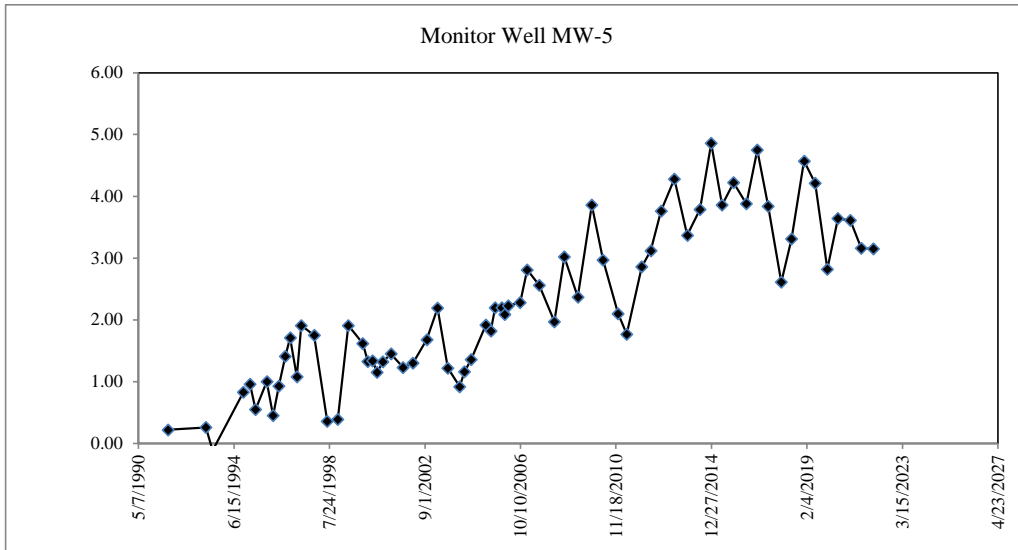
Hydrographs



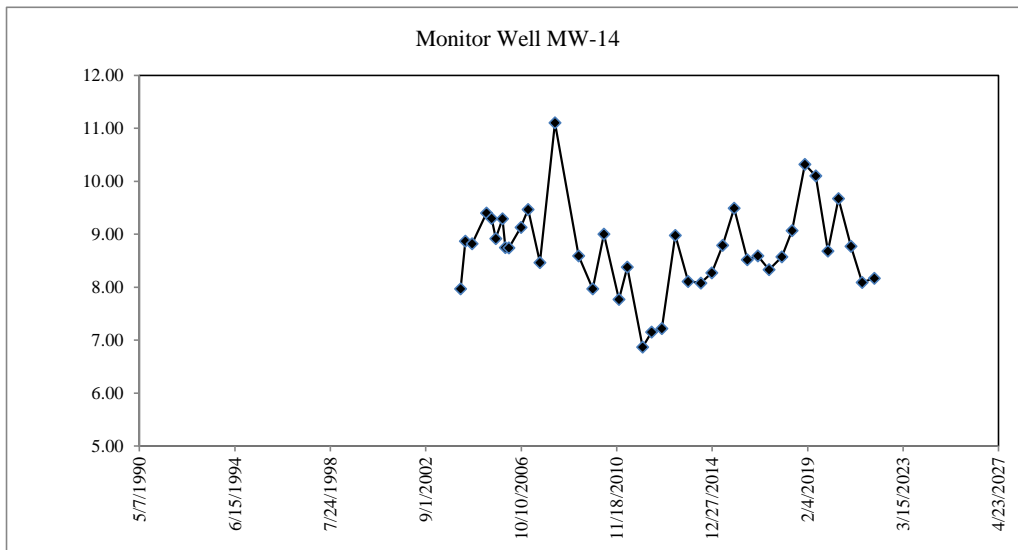
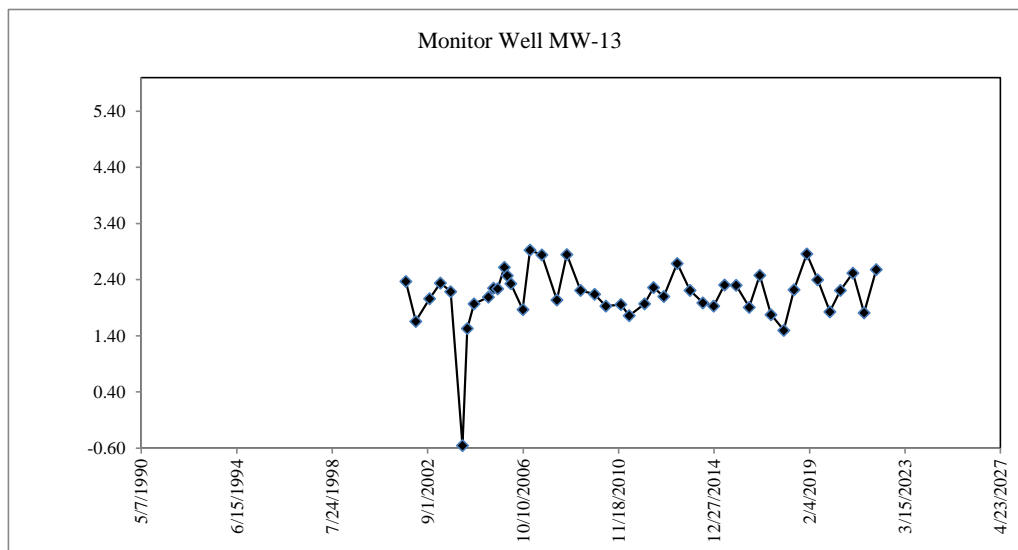
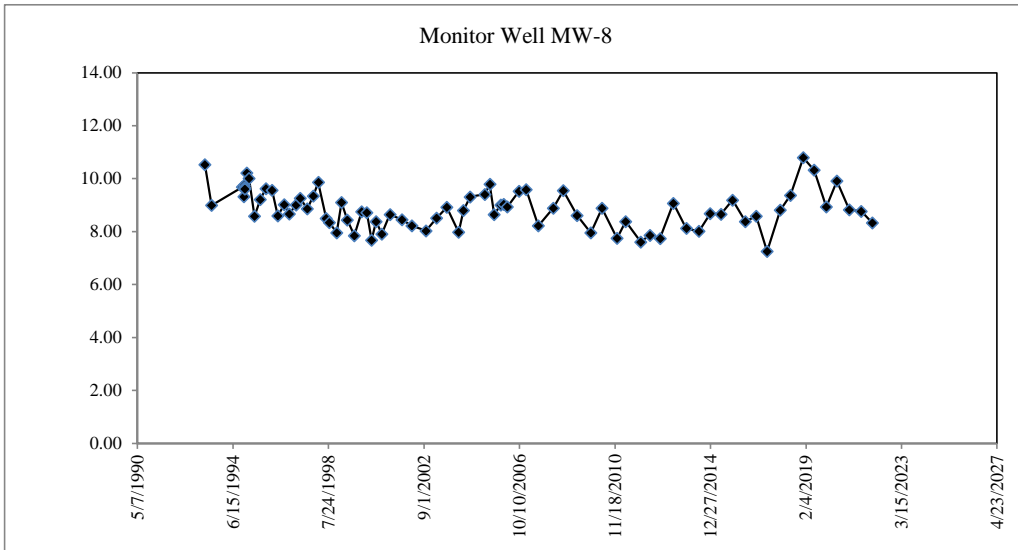
Appendix A. Groundwater Elevation Hydrographs
 Brenntag Southeast,
 Charleston, South Carolina
 (revised 12/19/2021)



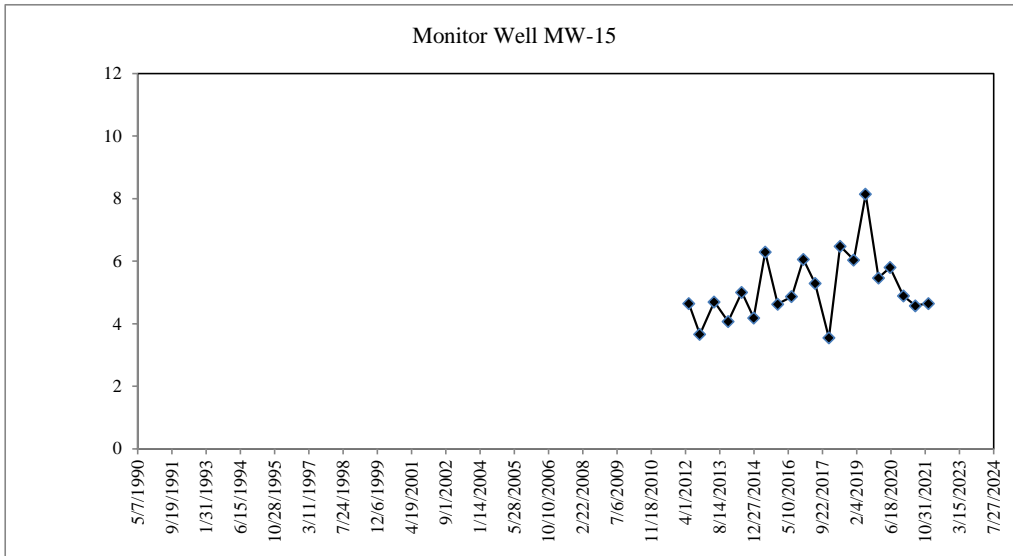
Appendix A. Groundwater Elevation Hydrographs
 Brenntag Southeast,
 Charleston, South Carolina
 (revised 12/19/2021)



Appendix A. Groundwater Elevation Hydrographs
 Brenntag Southeast,
 Charleston, South Carolina
 (revised 12/19/2021)



Appendix A. Groundwater Elevation Hydrographs
Brenntag Southeast,
Charleston, South Carolina
(revised 12/19/2021)



APPENDIX B

Groundwater Sampling Field Logs





SURFACE WATER SAMPLING FORM

Project No. SC000204.0017.00001

Date 12-15-21

Site Location : Brenntag Southeast, Charleston, South Carolina

Time start sampling 0700

Sample Loc. : SW-3

Time end sampling _____

FIELD SAMPLING DATA

pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Temp. (°C) (°F)	Dissolved Oxygen (mg/L)	Redox (mV)	Appearance	
						Color	Odor
6.81	17.6	1.1	14.82	5.24	264	Clear	NO

STREAM MEASUREMENT DATA

Time	Stream Depth	Stream Width	Velocity (ft/sec)
—	—	—	—

Constituents Sampled	Container	Number
8260B	40 ml vial	3
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Remarks _____

Sampling Personnel J. O'BRIEN



SURFACE WATER SAMPLING FORM

Project No. SC000204.0017.00001

Date 12-15-21

Site Location : Brenntag Southeast, Charleston, South Carolina

Time start sampling 0705

Sample Loc. : SW-3

Time end sampling _____

FIELD SAMPLING DATA

pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Temp. (°C) (°F)	Dissolved Oxygen (mg/L)	Redox (mV)	Appearance	
						Color	Odor
7.12	12.8	1.6	14.91	5.14	229	clear	NO

STREAM MEASUREMENT DATA

Time	Stream Depth	Stream Width	Velocity (ft/sec)
—	—	—	—

Constituents Sampled	Container	Number	Preservative
8260B	40 ml vial	3	Hcl
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Remarks _____

Sampling Personnel J. O'Brien



SURFACE WATER SAMPLING FORM

Project No. SC000204.0017.00001

Date 12-15-21

Site Location: Brenntag Southeast, Charleston, South Carolina

Time start sampling 0710

Sample Loc. : SW-1

Time end sampling _____

FIELD SAMPLING DATA

pH	Cond. (µMhos) (mS/cm)	Turbidity (NTU)	Temp. (°C) (°F)	Dissolved Oxygen (mg/L)	Redox (mV)	Appearance	
						Color	Odor
7.22	17.8	1.8	15.01	5.13	212	Clear	no

STREAM MEASUREMENT DATA

Time	Stream Depth	Stream Width	Velocity (ft/sec)
—	—	—	—

Constituents Sampled

8260B

Container

40 ml vial

Number

3

Preservative

Hcl

Remarks _____

Sampling Personnel

J. O'Brien

APPENDIX C

Second Semi-Annual Groundwater Analytical Laboratory Reports



The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

ARCADIS Geraghty & Miller

Brenntag; Charleston, SC

SC000204.0011.00001

SGS Job Number: FA91733

Sampling Date: 12/15/21



Report to:

ARCADIS Geraghty & Miller
1450 Greene St Suite 220
Augusta, GA 30901
charles.lawson@arcadis.com; Edward.Hirshenson@arcadis.com

ATTN: Charles Lawson

Total number of pages in report: 49



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Norm Farmer
Technical Director

Client Service contact: Evita Martinez 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001)
DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
AL, AK, AR, CT, IA, KY, MA, MI, MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV
This report shall not be reproduced, except in its entirety, without the written approval of SGS.
Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	5
Section 3: Sample Results	9
3.1: FA91733-1: SW-3	10
3.2: FA91733-2: SW-2	12
3.3: FA91733-3: SW-1	14
3.4: FA91733-4: MW-15	16
3.5: FA91733-5: MW-5	18
3.6: FA91733-6: MW-2R	20
3.7: FA91733-7: MW-14	22
3.8: FA91733-8: MW-8	24
3.9: FA91733-9: MW-6	26
3.10: FA91733-10: MW-13	28
3.11: FA91733-11: MW-7	30
3.12: FA91733-12: MW-1	32
3.13: FA91733-13: MW-20	34
3.14: FA91733-14: MW-21	36
Section 4: Misc. Forms	38
4.1: Chain of Custody	39
Section 5: MS Volatiles - QC Data Summaries	41
5.1: Method Blank Summary	42
5.2: Blank Spike Summary	45
5.3: Matrix Spike/Matrix Spike Duplicate Summary	48

1

2

3

4

5



Sample Summary

ARCADIS Geraghty & Miller

Job No: FA91733

Brenntag; Charleston, SC

Project No: SC000204.0011.00001

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:
 Organics ND = Not detected above the MDL

FA91733-1	12/15/21	07:00	JO	12/16/21	AQ	Ground Water	SW-3
FA91733-2	12/15/21	07:05	JO	12/16/21	AQ	Ground Water	SW-2
FA91733-3	12/15/21	07:10	JO	12/16/21	AQ	Ground Water	SW-1
FA91733-4	12/15/21	07:50	JO	12/16/21	AQ	Ground Water	MW-15
FA91733-5	12/15/21	08:33	JO	12/16/21	AQ	Ground Water	MW-5
FA91733-6	12/15/21	09:15	JO	12/16/21	AQ	Ground Water	MW-2R
FA91733-7	12/15/21	09:55	JO	12/16/21	AQ	Ground Water	MW-14
FA91733-8	12/15/21	10:35	JO	12/16/21	AQ	Ground Water	MW-8
FA91733-9	12/15/21	11:15	JO	12/16/21	AQ	Ground Water	MW-6
FA91733-10	12/15/21	11:55	JO	12/16/21	AQ	Ground Water	MW-13
FA91733-11	12/15/21	12:40	JO	12/16/21	AQ	Ground Water	MW-7
FA91733-12	12/15/21	13:25	JO	12/16/21	AQ	Ground Water	MW-1



Sample Summary

(continued)

ARCADIS Geraghty & Miller

Job No: FA91733

Brenntag, Charleston, SC
Project No: SC000204.0011.00001

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
FA91733-13	12/15/21	14:05 JO	12/16/21	AQ	Ground Water	MW-20
FA91733-14	12/15/21	14:50 JO	12/16/21	AQ	Ground Water	MW-21

Summary of Hits

Job Number: FA91733
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 12/15/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA91733-1 SW-3

No hits reported in this sample.

FA91733-2 SW-2

No hits reported in this sample.

FA91733-3 SW-1

No hits reported in this sample.

FA91733-4 MW-15

No hits reported in this sample.

FA91733-5 MW-5

Chlorobenzene	0.27 J	1.0	0.20	ug/l	SW846 8260D
---------------	--------	-----	------	------	-------------

FA91733-6 MW-2R

cis-1,2-Dichloroethylene	0.63 J	1.0	0.28	ug/l	SW846 8260D
Trichloroethylene	0.97 J	1.0	0.35	ug/l	SW846 8260D

FA91733-7 MW-14

Benzene	420 J	1000	310	ug/l	SW846 8260D
1,2-Dichlorobenzene	423 J	1000	320	ug/l	SW846 8260D
cis-1,2-Dichloroethylene	3750	1000	280	ug/l	SW846 8260D
Ethylbenzene	5770	1000	360	ug/l	SW846 8260D
Toluene	72900	1000	300	ug/l	SW846 8260D
Xylene (total)	67200	3000	720	ug/l	SW846 8260D

FA91733-8 MW-8

Acetone	11.0 J	25	10	ug/l	SW846 8260D
Benzene	1.1	1.0	0.31	ug/l	SW846 8260D
Chlorobenzene	6.7	1.0	0.20	ug/l	SW846 8260D
1,2-Dichlorobenzene	8.6	1.0	0.32	ug/l	SW846 8260D
1,3-Dichlorobenzene	0.66 J	1.0	0.22	ug/l	SW846 8260D
1,4-Dichlorobenzene	2.9	1.0	0.26	ug/l	SW846 8260D
1,1-Dichloroethane	0.99 J	1.0	0.34	ug/l	SW846 8260D
1,1-Dichloroethylene	3.0	1.0	0.32	ug/l	SW846 8260D
cis-1,2-Dichloroethylene ^a	174 E	1.0	0.28	ug/l	SW846 8260D

Summary of Hits

Job Number: FA91733
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 12/15/21

Lab Sample ID	Client Sample ID	Result/ Analyte	Qual	RL	MDL	Units	Method
		Ethylbenzene	12.0	1.0	0.36	ug/l	SW846 8260D
		Methyl Tert Butyl Ether	2.5	1.0	0.23	ug/l	SW846 8260D
		Toluene	99.6	1.0	0.30	ug/l	SW846 8260D
		Trichloroethylene	2.0	1.0	0.35	ug/l	SW846 8260D
		Vinyl Chloride	89.9	1.0	0.41	ug/l	SW846 8260D
		Xylene (total)	155	3.0	0.72	ug/l	SW846 8260D

FA91733-9 MW-6

No hits reported in this sample.

FA91733-10 MW-13

Acetone ^b	1050	250	100	ug/l	SW846 8260D
Benzene ^c	12.5	1.0	0.31	ug/l	SW846 8260D
2-Butanone (MEK) ^b	1490	50	20	ug/l	SW846 8260D
Chlorobenzene ^c	25.5	1.0	0.20	ug/l	SW846 8260D
Chloroethane ^c	38.4	2.0	0.67	ug/l	SW846 8260D
1,2-Dichlorobenzene ^c	4.1	1.0	0.32	ug/l	SW846 8260D
1,3-Dichlorobenzene ^c	0.23 J	1.0	0.22	ug/l	SW846 8260D
1,4-Dichlorobenzene ^c	1.0	1.0	0.26	ug/l	SW846 8260D
1,1-Dichloroethane ^c	6.2	1.0	0.34	ug/l	SW846 8260D
1,1-Dichloroethylene ^c	0.44 J	1.0	0.32	ug/l	SW846 8260D
cis-1,2-Dichloroethylene ^c	67.0	1.0	0.28	ug/l	SW846 8260D
trans-1,2-Dichloroethylene ^c	1.1	1.0	0.22	ug/l	SW846 8260D
2-Hexanone ^c	3.0 J	10	2.0	ug/l	SW846 8260D
Toluene ^c	8.0	1.0	0.30	ug/l	SW846 8260D
Vinyl Chloride ^b	172	10	4.1	ug/l	SW846 8260D
Xylene (total) ^c	2.0 J	3.0	0.72	ug/l	SW846 8260D

FA91733-11 MW-7

Acetone ^d	63.0	25	10	ug/l	SW846 8260D
Benzene ^d	11.8	1.0	0.31	ug/l	SW846 8260D
2-Butanone (MEK) ^d	134	5.0	2.0	ug/l	SW846 8260D
Chlorobenzene ^d	30.6	1.0	0.20	ug/l	SW846 8260D
Chloroethane ^d	59.5	2.0	0.67	ug/l	SW846 8260D
1,2-Dichlorobenzene ^d	6.3	1.0	0.32	ug/l	SW846 8260D
1,4-Dichlorobenzene ^d	0.94 J	1.0	0.26	ug/l	SW846 8260D
1,1-Dichloroethane ^d	9.5	1.0	0.34	ug/l	SW846 8260D
cis-1,2-Dichloroethylene ^d	5.8	1.0	0.28	ug/l	SW846 8260D
4-Methyl-2-pentanone (MIBK) ^d	2.1 J	5.0	1.0	ug/l	SW846 8260D
Toluene ^d	8.8	1.0	0.30	ug/l	SW846 8260D
Vinyl Chloride ^b	525	20	8.2	ug/l	SW846 8260D
Xylene (total) ^d	1.5 J	3.0	0.72	ug/l	SW846 8260D

Summary of Hits

Job Number: FA91733
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 12/15/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

FA91733-12 MW-1

Acetone	11.6 J	25	10	ug/l	SW846 8260D
Benzene	1.4	1.0	0.31	ug/l	SW846 8260D
1,2-Dichlorobenzene	4.3	1.0	0.32	ug/l	SW846 8260D
1,4-Dichlorobenzene	0.31 J	1.0	0.26	ug/l	SW846 8260D
cis-1,2-Dichloroethylene	5.1	1.0	0.28	ug/l	SW846 8260D
Vinyl Chloride	11.4	1.0	0.41	ug/l	SW846 8260D

FA91733-13 MW-20

Benzene	11.8	1.0	0.31	ug/l	SW846 8260D
Chlorobenzene	93.6	1.0	0.20	ug/l	SW846 8260D
Chloroethane	15.3	2.0	0.67	ug/l	SW846 8260D
1,2-Dichlorobenzene	28.7	1.0	0.32	ug/l	SW846 8260D
1,3-Dichlorobenzene	2.5	1.0	0.22	ug/l	SW846 8260D
1,4-Dichlorobenzene	14.3	1.0	0.26	ug/l	SW846 8260D
1,1-Dichloroethane	9.6	1.0	0.34	ug/l	SW846 8260D
cis-1,2-Dichloroethylene	8.3	1.0	0.28	ug/l	SW846 8260D
Methylcyclohexane	0.65 J	1.0	0.44	ug/l	SW846 8260D
Toluene	1.3	1.0	0.30	ug/l	SW846 8260D
Vinyl Chloride	67.4	1.0	0.41	ug/l	SW846 8260D
Xylene (total)	1.1 J	3.0	0.72	ug/l	SW846 8260D

FA91733-14 MW-21

Acetone ^e	30.0	25	10	ug/l	SW846 8260D
Benzene ^e	32.0	1.0	0.31	ug/l	SW846 8260D
2-Butanone (MEK) ^e	58.6	5.0	2.0	ug/l	SW846 8260D
Chlorobenzene ^f	342	20	4.0	ug/l	SW846 8260D
Chloroethane ^e	18.2	2.0	0.67	ug/l	SW846 8260D
Cyclohexane ^e	0.41 J	1.0	0.39	ug/l	SW846 8260D
1,2-Dichlorobenzene ^e	3.7	1.0	0.32	ug/l	SW846 8260D
1,3-Dichlorobenzene ^e	5.4	1.0	0.22	ug/l	SW846 8260D
1,4-Dichlorobenzene ^e	19.9	1.0	0.26	ug/l	SW846 8260D
1,1-Dichloroethane ^e	9.0	1.0	0.34	ug/l	SW846 8260D
1,1-Dichloroethylene ^e	4.3	1.0	0.32	ug/l	SW846 8260D
cis-1,2-Dichloroethylene ^f	974	20	5.5	ug/l	SW846 8260D
trans-1,2-Dichloroethylene ^e	4.1	1.0	0.22	ug/l	SW846 8260D
Toluene ^e	2.5	1.0	0.30	ug/l	SW846 8260D
Vinyl Chloride ^f	324	20	8.2	ug/l	SW846 8260D
Xylene (total) ^e	0.83 J	3.0	0.72	ug/l	SW846 8260D

(a) Confirmed by reanalysis beyond hold-time.

Summary of Hits

Job Number: FA91733
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 12/15/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
---------------	------------------	-----------------	----	-----	-------	--------

- (b) Sample was not preserved to a pH < 2. Sample re-analyzed beyond hold time; reported results are considered minimum values.
- (c) Sample was treated with an anti-foaming agent.
- (d) Sample was treated with an anti-foaming agent. Sample was not preserved to a pH < 2; reported results are considered minimum values.
- (e) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.
- (f) Sample vial(s) contained bubbles greater than 6mm. Sample re-analyzed beyond hold time; reported results are considered minimum values.

Sample Results

Report of Analysis

Report of Analysis

3.1
3

Client Sample ID: SW-3		Date Sampled: 12/15/21
Lab Sample ID: FA91733-1		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73062.D	1	12/29/21 14:49	LR	n/a	n/a	VI2418
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SW-3	
Lab Sample ID: FA91733-1	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: SW846 8260D	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		83-118%
17060-07-0	1,2-Dichloroethane-D4	113%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SW-2		Date Sampled: 12/15/21
Lab Sample ID: FA91733-2		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73063.D	1	12/29/21 15:13	LR	n/a	n/a	VI2418
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SW-2	
Lab Sample ID: FA91733-2	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: SW846 8260D	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	114%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SW-1		Date Sampled: 12/15/21
Lab Sample ID: FA91733-3		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	102%		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-15		Date Sampled: 12/15/21
Lab Sample ID: FA91733-4		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73065.D	1	12/29/21 16:02	LR	n/a	n/a	VI2418
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-15	Date Sampled:	12/15/21
Lab Sample ID:	FA91733-4	Date Received:	12/16/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-5		Date Sampled: 12/15/21
Lab Sample ID: FA91733-5		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		83-118%
17060-07-0	1,2-Dichloroethane-D4	117%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	96%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-2R		
Lab Sample ID: FA91733-6		Date Sampled: 12/15/21
Matrix: AQ - Ground Water		Date Received: 12/16/21
Method: SW846 8260D		Percent Solids: n/a
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73067.D	1	12/29/21 16:50	LR	n/a	n/a	VI2418
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	0.63	1.0	0.28	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-2R		Date Sampled: 12/15/21
Lab Sample ID: FA91733-6		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	0.97	1.0	0.35	ug/l	J
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	116%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-14		Date Sampled: 12/15/21
Lab Sample ID: FA91733-7		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73068.D	1000	12/29/21 17:14	LR	n/a	n/a	VI2418
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25000	10000	ug/l	
71-43-2	Benzene	420	1000	310	ug/l	J
75-27-4	Bromodichloromethane	ND	1000	240	ug/l	
75-25-2	Bromoform	ND	1000	410	ug/l	
78-93-3	2-Butanone (MEK)	ND	5000	2000	ug/l	
75-15-0	Carbon Disulfide	ND	2000	530	ug/l	
56-23-5	Carbon Tetrachloride	ND	1000	360	ug/l	
108-90-7	Chlorobenzene	ND	1000	200	ug/l	
75-00-3	Chloroethane	ND	2000	670	ug/l	
67-66-3	Chloroform	ND	1000	300	ug/l	
110-82-7	Cyclohexane	ND	1000	390	ug/l	
124-48-1	Dibromochloromethane	ND	1000	280	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5000	1000	ug/l	
106-93-4	1,2-Dibromoethane	ND	2000	280	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2000	500	ug/l	
95-50-1	1,2-Dichlorobenzene	423	1000	320	ug/l	J
541-73-1	1,3-Dichlorobenzene	ND	1000	220	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1000	260	ug/l	
75-34-3	1,1-Dichloroethane	ND	1000	340	ug/l	
107-06-2	1,2-Dichloroethane	ND	1000	310	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1000	320	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3750	1000	280	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1000	220	ug/l	
78-87-5	1,2-Dichloropropane	ND	1000	430	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1000	290	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1000	210	ug/l	
100-41-4	Ethylbenzene	5770	1000	360	ug/l	
76-13-1	Freon 113	ND	1000	480	ug/l	
591-78-6	2-Hexanone	ND	10000	2000	ug/l	
98-82-8	Isopropylbenzene	ND	1000	220	ug/l	
79-20-9	Methyl Acetate	ND	20000	5000	ug/l	
74-83-9	Methyl Bromide	ND	5000	2000	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-14		Date Sampled: 12/15/21
Lab Sample ID: FA91733-7		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2000	500	ug/l	
108-87-2	Methylcyclohexane	ND	1000	440	ug/l	
75-09-2	Methylene Chloride	ND	5000	2000	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5000	1000	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1000	230	ug/l	
100-42-5	Styrene	ND	1000	220	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1000	300	ug/l	
127-18-4	Tetrachloroethylene	ND	1000	220	ug/l	
108-88-3	Toluene	72900	1000	300	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2000	500	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1000	250	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1000	470	ug/l	
79-01-6	Trichloroethylene	ND	1000	350	ug/l	
75-69-4	Trichlorofluoromethane	ND	2000	500	ug/l	
75-01-4	Vinyl Chloride	ND	1000	410	ug/l	
1330-20-7	Xylene (total)	67200	3000	720	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	118%		79-125%
2037-26-5	Toluene-D8	95%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-8		Date Sampled: 12/15/21
Lab Sample ID: FA91733-8		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73069.D	1	12/29/21 17:38	LR	n/a	n/a	VI2418
Run #2 ^a	1P84496.D	2	01/06/22 17:21	CF	n/a	n/a	V1P3374

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.0	25	10	ug/l	J
71-43-2	Benzene	1.1	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	6.7	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	8.6	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	0.66	1.0	0.22	ug/l	J
106-46-7	1,4-Dichlorobenzene	2.9	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	0.99	1.0	0.34	ug/l	J
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	3.0	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene ^c	174	1.0	0.28	ug/l	E
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	12.0	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-8	
Lab Sample ID: FA91733-8	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: SW846 8260D	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	2.5	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	99.6	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	2.0	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	89.9	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	155	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	115%	105%	79-125%
2037-26-5	Toluene-D8	94%	101%	85-112%
460-00-4	4-Bromofluorobenzene	97%	103%	83-118%

- (a) Confirmation run beyond holdtime.
 (b) Associated CCV outside of control limits low.
 (c) Confirmed by reanalysis beyond hold-time.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-6		Date Sampled: 12/15/21
Lab Sample ID: FA91733-9		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73070.D	1	12/29/21 18:02	LR	n/a	n/a	VI2418
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

39
3

Client Sample ID: MW-6		Date Sampled: 12/15/21
Lab Sample ID: FA91733-9		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	116%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	12/15/21
Lab Sample ID:	FA91733-10	Date Received:	12/16/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	8.0	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	172 ^c	10	4.1	ug/l	
1330-20-7	Xylene (total)	2.0	3.0	0.72	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%	102%	83-118%
17060-07-0	1,2-Dichloroethane-D4	117%	105%	79-125%
2037-26-5	Toluene-D8	95%	99%	85-112%
460-00-4	4-Bromofluorobenzene	100%	103%	83-118%

(a) Sample was treated with an anti-foaming agent.

(b) Sample was not preserved to a pH < 2. Sample re-analyzed beyond hold time; reported results are considered minimum values.

(c) Result is from Run# 2

(d) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-7		
Lab Sample ID: FA91733-11		Date Sampled: 12/15/21
Matrix: AQ - Ground Water		Date Received: 12/16/21
Method: SW846 8260D		Percent Solids: n/a
Project: Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	I73072.D	1	12/29/21 18:51	LR	n/a	n/a	VI2418
Run #2 ^b	1P84492.D	20	01/06/22 16:17	CF	n/a	n/a	V1P3374

	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	63.0	25	10	ug/l	
71-43-2	Benzene	11.8	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	134	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	30.6	1.0	0.20	ug/l	
75-00-3	Chloroethane	59.5	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^c	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	6.3	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.94	1.0	0.26	ug/l	J
75-34-3	1,1-Dichloroethane	9.5	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	5.8	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-1		Date Sampled: 12/15/21
Lab Sample ID: FA91733-12		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73073.D	1	12/29/21 19:15	LR	n/a	n/a	VI2418
Run #2 ^a	1P84490.D	1	01/06/22 15:45	CF	n/a	n/a	V1P3374

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	11.6	25	10	ug/l	J
71-43-2	Benzene	1.4	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	4.3	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	0.31	1.0	0.26	ug/l	J
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	5.1	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	12/15/21
Lab Sample ID:	FA91733-12	Date Received:	12/16/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	11.4	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	116%	104%	79-125%
2037-26-5	Toluene-D8	94%	101%	85-112%
460-00-4	4-Bromofluorobenzene	97%	101%	83-118%

- (a) Confirmation run beyond holdtime.
(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20		Date Sampled: 12/15/21
Lab Sample ID: FA91733-13		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	0.65	1.0	0.44	ug/l	J
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	1.3	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	67.4	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	1.1	3.0	0.72	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		79-125%
2037-26-5	Toluene-D8	91%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-21	Date Sampled:	12/15/21
Lab Sample ID:	FA91733-14	Date Received:	12/16/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	2.5	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	324 ^c	20	8.2	ug/l	
1330-20-7	Xylene (total)	0.83	3.0	0.72	ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	115%	112%	79-125%
2037-26-5	Toluene-D8	90%	102%	85-112%
460-00-4	4-Bromofluorobenzene	98%	100%	83-118%

(a) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

(b) Sample vial(s) contained bubbles greater than 6mm. Sample re-analyzed beyond hold time; reported results are considered minimum values.

(c) Result is from Run# 2

(d) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



ID#: _____

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM**FA91733**

Page ___ of ___

Lab Work Order # _____

Send Results to:	Contact & Company Name: <i>Charles Harrison</i>	Telephone: <i>706 828 4421</i>	Preservative: <i>B</i>							Keys Preservation Key: A. H ₂ O ₂ B. HCL C. HNO ₃ D. NaOH E. None F. Other: _____ G. Other: _____ H. Other: _____ Matrix Key: SO - Soil W - Water T - Tissue SE - Sediment SL - Sludge A - Air Container Information Key: 1. 40 ml Vial 2. 1 L Amber 3. 250 ml Plastic 4. 500 ml Plastic 5. Encore 6. 2 oz. Glass 7. 4 oz. Glass 8. 8 oz. Glass 9. Other: _____ 10. Other: _____ NL - NAPL/Oil SW - Sample Wipe Other: _____
	Address: <i>1750 College St Stg 220</i>	Fax:	# of Containers: <i>3</i>	Container Information: <i>1</i>						
	City: <i>Albion GA</i>	State: <i>GA</i>	Zip: <i>30901</i>	E-mail Address:	PARAMETER ANALYSIS & METHOD					REMARKS
	Project Name/Location (City/State): <i>Brentley Charleston SC</i>	Project #: <i>30049825</i>	Sample # Printed Name: <i>J. O'Brien</i>	Sample Signature: <i>J. O'Brien</i>						

	Sample ID	Collection		Type (✓)		Matrix														
		Date	Time	Comp	Grab															
1	SW-3	12-15	0700		✓	W	3													
2	SW-2	12-15	0705		✓	W	3													
3	SW-1	12-15	0710		✓	W	3													
4	MW-15	12-15	0740		✓	W	3													
5	MW-5	12-15	0835		✓	W	3													
6	MW-2R	12-15	0915		✓	W	3													
7	MW-14	12-15	0955		✓	W	3													
8	MW-8	12-15	1035		✓	W	3													
9	MW-6	12-15	1115		✓	W	3													
10	MW-13	12-15	1155		✓	W	3													
11	MW-7	12-15	1240		✓	W	3													
12	MW-11	12-15	1325		✓	W	3													
13	MW-20	12-15	1405		✓	W	3													
14	MW-21	12-15	1450		✓	W	3													

INITIAL ASSESSMENT *cm*

LABEL VERIFICATION *sm*

1:07 P1

Special Instructions/Comments: _____ Special QA/QC Instructions(✓): _____

Laboratory Information and Receipt		Relinquished By		Received By		Relinquished By		Laboratory Received By	
Lab Name: <i>SGS</i>	Cooler Custody Seal (✓) <input type="checkbox"/> Intact <input type="checkbox"/> Not Intact	Printed Name: <i>J. O'Brien</i>	Signature: <i>J. O'Brien</i>	Printed Name: <i>Nathan Spear</i>	Signature: <i>Nathan Spear</i>	Printed Name:	Signature:	Printed Name:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	Firm: <i>ARCADIS</i>	Date/Time: <i>12-15-21/1600</i>	Firm/Courier: <i>SGS</i>	Date/Time: <i>12/16/21 1045</i>	Firm/Courier:	Date/Time:	Firm:	Date/Time:
Shipping Tracking #:	Condition/Cooler Temp: _____								

20730826 CoC AR Form 08.27.2015 Distribution: WHITE - Laboratory returns with results YELLOW - Lab copy PINK - Retained by Arcadis

SGS Sample Receipt Summary

Job Number: FA91733

Client: ARCADIS

Project: BRENNTAG CHARLESTON, SC

Date / Time Received: 12/16/2021 10:45:00 AM

Delivery Method: FX

Airbill #'s: 506145137342

Therm ID: IR 1;

Therm CF: 0.2;

of Coolers: 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.0);

Cooler Temps (Corrected) °C: Cooler 1: (1.2);

Cooler Information

Y or N

- | | | |
|-----------------------------|-------------------------------------|--------------------------|
| 1. Custody Seals Present | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 2. Custody Seals Intact | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3. Temp criteria achieved | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4. Cooler temp verification | <u>IR Gun</u> | |
| 5. Cooler media | <u>Ice (Bag)</u> | |

Trip Blank Information

Y or N N/A

- | | | | |
|--------------------------------|-------------------------------------|--------------------------|-------------------------------------|
| 1. Trip Blank present / cooler | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 2. Trip Blank listed on COC | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| | <u>W or S</u> | | <u>N/A</u> |
| 3. Type Of TB Received | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Sample Information

Y or N N/A

- | | | | |
|---|-------------------------------------|-------------------------------------|-------------------------------------|
| 1. Sample labels present on bottles | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 2. Samples preserved properly | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 3. Sufficient volume/containers recvd for analysis: | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 4. Condition of sample | <u>Intact</u> | | |
| 5. Sample recvd within HT | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 6. Dates/Times/IDs on COC match Sample Label | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| 7. VOCs have headspace | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 8. Bottles received for unspecified tests | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| 9. Compositing instructions clear | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 10. Voa Soil Kits/Jars received past 48hrs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. % Solids Jar received? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Residual Chlorine Present? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Misc. Information

Number of Encores: 25-Gram _____ 5-Gram _____ Number of 5035 Field Kits: _____ Number of Lab Filtered Metals: _____
 Test Strip Lot #s: pH 0-3 230315 pH 10-12 219813A Other: (Specify) _____
 Residual Chlorine Test Strip Lot #: _____

Comments

SM001 Rev. Date 05/24/17 Technician: NATHANS Date: 12/16/2021 10:45:00 Reviewer: _____ Date: _____

FA91733: Chain of Custody

Page 2 of 2

4.1
4

MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: FA91733
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI2418-MB	I73059.D	1	12/29/21	LR	n/a	n/a	VI2418

The QC reported here applies to the following samples:

Method: SW846 8260D

FA91733-1, FA91733-2, FA91733-3, FA91733-4, FA91733-5, FA91733-6, FA91733-7, FA91733-8, FA91733-9, FA91733-10, FA91733-11, FA91733-12, FA91733-13, FA91733-14

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	

Method Blank Summary

Job Number: FA91733
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI2418-MB	I73059.D	1	12/29/21	LR	n/a	n/a	VI2418

The QC reported here applies to the following samples:

Method: SW846 8260D

FA91733-1, FA91733-2, FA91733-3, FA91733-4, FA91733-5, FA91733-6, FA91733-7, FA91733-8, FA91733-9, FA91733-10, FA91733-11, FA91733-12, FA91733-13, FA91733-14

CAS No.	Compound	Result	RL	MDL	Units	Q
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Limits	
1868-53-7	Dibromofluoromethane	101%	83-118%
17060-07-0	1,2-Dichloroethane-D4	114%	79-125%
2037-26-5	Toluene-D8	93%	85-112%
460-00-4	4-Bromofluorobenzene	95%	83-118%

Method Blank Summary

Job Number: FA91733
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VIP3374-MB	1P84484.D	1	01/06/22	CF	n/a	n/a	VIP3374

The QC reported here applies to the following samples:

Method: SW846 8260D

FA91733-10, FA91733-11, FA91733-14

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	

CAS No.	Surrogate Recoveries	Limits
1868-53-7	Dibromofluoromethane	99% 83-118%
17060-07-0	1,2-Dichloroethane-D4	100% 79-125%
2037-26-5	Toluene-D8	98% 85-112%
460-00-4	4-Bromofluorobenzene	104% 83-118%

Blank Spike Summary

Job Number: FA91733
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI2418-BS	I73061.D	1	12/29/21	LR	n/a	n/a	VI2418

The QC reported here applies to the following samples:

Method: SW846 8260D

FA91733-1, FA91733-2, FA91733-3, FA91733-4, FA91733-5, FA91733-6, FA91733-7, FA91733-8, FA91733-9, FA91733-10, FA91733-11, FA91733-12, FA91733-13, FA91733-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	139	111	50-147
71-43-2	Benzene	25	26.1	104	81-122
75-27-4	Bromodichloromethane	25	23.6	94	79-123
75-25-2	Bromoform	25	20.0	80	66-123
78-93-3	2-Butanone (MEK)	125	128	102	56-143
75-15-0	Carbon Disulfide	25	21.8	87	66-148
56-23-5	Carbon Tetrachloride	25	24.7	99	76-136
108-90-7	Chlorobenzene	25	22.5	90	82-124
75-00-3	Chloroethane	25	30.8	123	62-144
67-66-3	Chloroform	25	23.9	96	80-124
110-82-7	Cyclohexane	25	23.5	94	73-138
124-48-1	Dibromochloromethane	25	20.5	82	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	20.3	81	64-123
106-93-4	1,2-Dibromoethane	25	20.6	82	75-120
75-71-8	Dichlorodifluoromethane	25	20.3	81	42-167
95-50-1	1,2-Dichlorobenzene	25	22.1	88	82-124
541-73-1	1,3-Dichlorobenzene	25	22.5	90	84-125
106-46-7	1,4-Dichlorobenzene	25	22.0	88	78-120
75-34-3	1,1-Dichloroethane	25	25.6	102	81-122
107-06-2	1,2-Dichloroethane	25	26.6	106	75-125
75-35-4	1,1-Dichloroethylene	25	25.3	101	78-137
156-59-2	cis-1,2-Dichloroethylene	25	23.4	94	78-120
156-60-5	trans-1,2-Dichloroethylene	25	25.7	103	76-127
78-87-5	1,2-Dichloropropane	25	24.2	97	76-124
10061-01-5	cis-1,3-Dichloropropene	25	23.2	93	75-118
10061-02-6	trans-1,3-Dichloropropene	25	22.2	89	80-120
100-41-4	Ethylbenzene	25	23.5	94	81-121
76-13-1	Freon 113	25	25.0	100	72-134
591-78-6	2-Hexanone	125	122	98	61-129
98-82-8	Isopropylbenzene	25	22.5	90	83-132
79-20-9	Methyl Acetate	125	115	92	65-126
74-83-9	Methyl Bromide	25	18.3	73	59-143
74-87-3	Methyl Chloride	25	24.7	99	50-159
108-87-2	Methylcyclohexane	25	24.4	98	76-129
75-09-2	Methylene Chloride	25	24.0	96	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	124	99	66-122

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA91733
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VI2418-BS	I73061.D	1	12/29/21	LR	n/a	n/a	VI2418

The QC reported here applies to the following samples:

Method: SW846 8260D

FA91733-1, FA91733-2, FA91733-3, FA91733-4, FA91733-5, FA91733-6, FA91733-7, FA91733-8, FA91733-9, FA91733-10, FA91733-11, FA91733-12, FA91733-13, FA91733-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	25	21.3	85	72-117
100-42-5	Styrene	25	21.3	85	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	22.5	90	72-120
127-18-4	Tetrachloroethylene	25	23.2	93	76-135
108-88-3	Toluene	25	22.6	90	80-120
120-82-1	1,2,4-Trichlorobenzene	25	19.9	80	73-129
71-55-6	1,1,1-Trichloroethane	25	24.4	98	75-130
79-00-5	1,1,2-Trichloroethane	25	22.6	90	76-119
79-01-6	Trichloroethylene	25	24.3	97	81-126
75-69-4	Trichlorofluoromethane	25	30.4	122	71-156
75-01-4	Vinyl Chloride	25	25.4	102	69-159
1330-20-7	Xylene (total)	75	69.0	92	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	83-118%
17060-07-0	1,2-Dichloroethane-D4	114%	79-125%
2037-26-5	Toluene-D8	94%	85-112%
460-00-4	4-Bromofluorobenzene	97%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA91733
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V1P3374-BS ^a	1P84480.D	1	01/06/22	CF	n/a	n/a	V1P3374

The QC reported here applies to the following samples:

Method: SW846 8260D

FA91733-10, FA91733-11, FA91733-14

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	111	89	50-147
78-93-3	2-Butanone (MEK)	125	106	85	56-143
108-90-7	Chlorobenzene	25	24.2	97	82-124
156-59-2	cis-1,2-Dichloroethylene	25	23.2	93	78-120
75-01-4	Vinyl Chloride	25	21.7	87	69-159

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	103%	83-118%
17060-07-0	1,2-Dichloroethane-D4	101%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	105%	83-118%

(a) No MS/MSD available for this run.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA91733
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA91733-7MS	I73082.D	1000	12/29/21	LR	n/a	n/a	VI2418
FA91733-7MSD	I73083.D	1000	12/29/21	LR	n/a	n/a	VI2418
FA91733-7	I73068.D	1000	12/29/21	LR	n/a	n/a	VI2418

The QC reported here applies to the following samples:

Method: SW846 8260D

FA91733-1, FA91733-2, FA91733-3, FA91733-4, FA91733-5, FA91733-6, FA91733-7, FA91733-8, FA91733-9, FA91733-10, FA91733-11, FA91733-12, FA91733-13, FA91733-14

CAS No.	Compound	FA91733-7		MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD	
		ug/l	Q								
67-64-1	Acetone	ND		125000	141000	113	125000	143000	114	1	50-147/21
71-43-2	Benzene	420	J	25000	27300	108	25000	27500	108	1	81-122/14
75-27-4	Bromodichloromethane	ND		25000	23800	95	25000	24300	97	2	79-123/19
75-25-2	Bromoform	ND		25000	19600	78	25000	20200	81	3	66-123/21
78-93-3	2-Butanone (MEK)	ND		125000	132000	106	125000	135000	108	2	56-143/18
75-15-0	Carbon Disulfide	ND		25000	21800	87	25000	22700	91	4	66-148/23
56-23-5	Carbon Tetrachloride	ND		25000	24700	99	25000	25100	100	2	76-136/23
108-90-7	Chlorobenzene	ND		25000	23300	93	25000	23500	94	1	82-124/14
75-00-3	Chloroethane	ND		25000	32300	129	25000	33500	134	4	62-144/20
67-66-3	Chloroform	ND		25000	24500	98	25000	24500	98	0	80-124/15
110-82-7	Cyclohexane	ND		25000	23300	93	25000	24000	96	3	73-138/18
124-48-1	Dibromochloromethane	ND		25000	20100	80	25000	20500	82	2	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		25000	20200	81	25000	20800	83	3	64-123/18
106-93-4	1,2-Dibromoethane	ND		25000	20400	82	25000	21300	85	4	75-120/13
75-71-8	Dichlorodifluoromethane	ND		25000	19000	76	25000	21100	84	10	42-167/19
95-50-1	1,2-Dichlorobenzene	423	J	25000	22400	88	25000	22900	90	2	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		25000	22400	90	25000	23000	92	3	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		25000	22300	89	25000	22800	91	2	78-120/15
75-34-3	1,1-Dichloroethane	ND		25000	26400	106	25000	26700	107	1	81-122/15
107-06-2	1,2-Dichloroethane	ND		25000	27600	110	25000	27500	110	0	75-125/14
75-35-4	1,1-Dichloroethylene	ND		25000	25400	102	25000	26300	105	3	78-137/18
156-59-2	cis-1,2-Dichloroethylene	3750		25000	27900	97	25000	28500	99	2	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25000	25800	103	25000	26100	104	1	76-127/17
78-87-5	1,2-Dichloropropane	ND		25000	24600	98	25000	25200	101	2	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		25000	22500	90	25000	23000	92	2	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25000	21300	85	25000	21800	87	2	80-120/22
100-41-4	Ethylbenzene	5770		25000	29600	95	25000	30200	98	2	81-121/14
76-13-1	Freon 113	ND		25000	24900	100	25000	25200	101	1	72-134/20
591-78-6	2-Hexanone	ND		125000	125000	100	125000	126000	101	1	61-129/18
98-82-8	Isopropylbenzene	ND		25000	22300	89	25000	22900	92	3	83-132/15
79-20-9	Methyl Acetate	ND		125000	118000	94	125000	122000	98	3	65-126/18
74-83-9	Methyl Bromide	ND		25000	9470	38*	25000	15000	60	45*	59-143/19
74-87-3	Methyl Chloride	ND		25000	23000	92	25000	25900	104	12	50-159/19
108-87-2	Methylcyclohexane	ND		25000	23500	94	25000	24300	97	3	76-129/17
75-09-2	Methylene Chloride	ND		25000	25600	102	25000	25800	103	1	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125000	126000	101	125000	129000	103	2	66-122/16

* = Outside of Control Limits.

5.3.1
5

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA91733
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA91733-7MS	I73082.D	1000	12/29/21	LR	n/a	n/a	VI2418
FA91733-7MSD	I73083.D	1000	12/29/21	LR	n/a	n/a	VI2418
FA91733-7	I73068.D	1000	12/29/21	LR	n/a	n/a	VI2418

The QC reported here applies to the following samples:

Method: SW846 8260D

FA91733-1, FA91733-2, FA91733-3, FA91733-4, FA91733-5, FA91733-6, FA91733-7, FA91733-8, FA91733-9, FA91733-10, FA91733-11, FA91733-12, FA91733-13, FA91733-14

CAS No.	Compound	FA91733-7 ug/l	Spike Q ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
1634-04-4	Methyl Tert Butyl Ether	ND	25000	21200	85	25000	22000	88	4	72-117/14
100-42-5	Styrene	ND	25000	21300	85	25000	21800	87	2	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND	25000	22600	90	25000	23100	92	2	72-120/14
127-18-4	Tetrachloroethylene	ND	25000	24500	98	25000	24900	100	2	76-135/16
108-88-3	Toluene	72900	25000	85300	50* a	25000	87400	58* a	2	80-120/14
120-82-1	1,2,4-Trichlorobenzene	ND	25000	19100	76	25000	20100	80	5	73-129/20
71-55-6	1,1,1-Trichloroethane	ND	25000	25400	102	25000	25800	103	2	75-130/16
79-00-5	1,1,2-Trichloroethane	ND	25000	23300	93	25000	23400	94	0	76-119/14
79-01-6	Trichloroethylene	ND	25000	25200	101	25000	25400	102	1	81-126/15
75-69-4	Trichlorofluoromethane	ND	25000	29200	117	25000	31000	124	6	71-156/21
75-01-4	Vinyl Chloride	ND	25000	23800	95	25000	27400	110	14	69-159/18
1330-20-7	Xylene (total)	67200	75000	133000	88	75000	136000	92	2	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA91733-7	Limits
1868-53-7	Dibromofluoromethane	107%	106%	104%	83-118%
17060-07-0	1,2-Dichloroethane-D4	115%	115%	118%	79-125%
2037-26-5	Toluene-D8	94%	94%	95%	85-112%
460-00-4	4-Bromofluorobenzene	95%	95%	98%	83-118%

(a) Outside control limits due to high level in sample relative to spike amount.

* = Outside of Control Limits.

5.3.1
5

The results set forth herein are provided by SGS North America Inc.

e-Hardcopy 2.0
Automated Report

Technical Report for

ARCADIS Geraghty & Miller

Brenntag; Charleston, SC

SC000204.0011.00001

SGS Job Number: FA91738

Sampling Date: 12/15/21

Report to:

ARCADIS Geraghty & Miller

jbeckner@arcadis-us.com

ATTN: Jeff Beckner

Total number of pages in report: **35**



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

A handwritten signature in black ink that reads "Norm Farmer".

Norm Farmer
Technical Director

Client Service contact: Evita Martinez 407-425-6700

Certifications: FL(E83510), LA(03051), KS(E-10327), NC(573), NJ(FL002), NY(12022), SC(96038001)
DoD ELAP(ANAB L2229), AZ(AZ0806), CA(2937), TX(T104704404), PA(68-03573), VA(460177),
AL, AK, AR, CT, IA, KY, MA, MI, MS, ND, NH, NV, OK, OR, IL, UT, VT, WA, WI, WV

This report shall not be reproduced, except in its entirety, without the written approval of SGS.

Test results relate only to samples analyzed.

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	6
3.1: FA91738-1: SW-1	7
3.2: FA91738-1F: SW-1	11
3.3: FA91738-2: MW-13	12
3.4: FA91738-2F: MW-13	16
3.5: FA91738-3: MW-7	17
3.6: FA91738-3F: MW-7	21
3.7: FA91738-4: MW-20	22
3.8: FA91738-4F: MW-20	26
3.9: FA91738-5: MW-21	27
3.10: FA91738-5F: MW-21	31
Section 4: Misc. Forms	32
4.1: Chain of Custody	33

1

2

3

4



Sample Summary

ARCADIS Geraghty & Miller

Job No: FA91738

Brenntag; Charleston, SC

Project No: SC000204.0011.00001

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
---------------	----------------	---------	----------	-------------	------	------------------

This report contains results reported as ND = Not detected. The following applies:
 Organics ND = Not detected above the MDL

FA91738-1	12/15/21	07:10	JO	12/16/21	AQ	Ground Water	SW-1
FA91738-1F	12/15/21	07:10	JO	12/16/21	AQ	Groundwater Filtered	SW-1
FA91738-2	12/15/21	11:15	JO	12/16/21	AQ	Ground Water	MW-13
FA91738-2F	12/15/21	11:55	JO	12/16/21	AQ	Groundwater Filtered	MW-13
FA91738-3	12/15/21	12:40	JO	12/16/21	AQ	Ground Water	MW-7
FA91738-3F	12/15/21	12:40	JO	12/16/21	AQ	Groundwater Filtered	MW-7
FA91738-4	12/15/21	14:05	JO	12/16/21	AQ	Ground Water	MW-20
FA91738-4F	12/15/21	14:05	JO	12/16/21	AQ	Groundwater Filtered	MW-20
FA91738-5	12/15/21	14:50	JO	12/16/21	AQ	Ground Water	MW-21
FA91738-5F	12/15/21	14:50	JO	12/16/21	AQ	Groundwater Filtered	MW-21

Summary of Hits

Job Number: FA91738
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 12/15/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA91738-1		SW-1				
Methane		34.5	0.50	0.16	ug/l	RSKSOP-147/175
Sulfate		796	400		mg/l	EPA 300/SW846 9056A
Sulfide		0.93	0.67		mg/l	SM4500S2- F-11
Total Organic Carbon ^a		9.2	1.0		mg/l	SM5310 B-11/SW9060A
FA91738-1F		SW-1				
Iron		401	300		ug/l	SW846 6010D
FA91738-2		MW-13				
Vinyl Chloride ^b		472	250	100	ug/l	SW846 8260D
Methane		5780	5.0	1.6	ug/l	RSKSOP-147/175
Ethane		71.7	1.0	0.32	ug/l	RSKSOP-147/175
Ethene		194	1.0	0.43	ug/l	RSKSOP-147/175
Sulfide		3.8	0.71		mg/l	SM4500S2- F-11
Total Organic Carbon ^a		490	25		mg/l	SM5310 B-11/SW9060A
FA91738-2F		MW-13				
Iron		130000	300		ug/l	SW846 6010D
FA91738-3		MW-7				
Vinyl Chloride ^c		1200	1000	410	ug/l	SW846 8260D
Methane ^a		3350	5.0	1.6	ug/l	RSKSOP-147/175
Ethane		98.1	1.0	0.32	ug/l	RSKSOP-147/175
Ethene		266	1.0	0.43	ug/l	RSKSOP-147/175
Sulfide		3.0	0.68		mg/l	SM4500S2- F-11
Total Organic Carbon ^a		70.7	5.0		mg/l	SM5310 B-11/SW9060A
FA91738-3F		MW-7				
Iron		38900	300		ug/l	SW846 6010D
FA91738-4		MW-20				
Benzene ^d		9.0 J	10	3.1	ug/l	SW846 8260D
Chlorobenzene ^d		75.5	10	2.0	ug/l	SW846 8260D
1,2-Dichlorobenzene ^d		21.7	10	3.2	ug/l	SW846 8260D
1,4-Dichlorobenzene ^d		12.4	10	2.6	ug/l	SW846 8260D
cis-1,2-Dichloroethylene ^d		4.9 J	10	2.8	ug/l	SW846 8260D
Vinyl Chloride ^d		48.4	10	4.1	ug/l	SW846 8260D

Summary of Hits

Job Number: FA91738
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 12/15/21

Lab Sample ID	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Methane		6000	5.0	1.6	ug/l	RSKSOP-147/175
Ethane ^a		87.5	1.0	0.32	ug/l	RSKSOP-147/175
Ethene ^a		168	1.0	0.43	ug/l	RSKSOP-147/175
Sulfate		22.8	2.0		mg/l	EPA 300/SW846 9056A
Sulfide		8.0	0.67		mg/l	SM4500S2- F-11
Total Organic Carbon ^a		10.7	1.0		mg/l	SM5310 B-11/SW9060A
FA91738-4F MW-20						
Iron		31700	300		ug/l	SW846 6010D
FA91738-5 MW-21						
Benzene ^b		23.6	20	6.2	ug/l	SW846 8260D
Chlorobenzene ^b		340	20	4.0	ug/l	SW846 8260D
1,4-Dichlorobenzene ^b		16.9 J	20	5.1	ug/l	SW846 8260D
cis-1,2-Dichloroethylene ^e		2290 E	20	5.5	ug/l	SW846 8260D
Vinyl Chloride ^b		793	20	8.2	ug/l	SW846 8260D
Methane		7630	5.0	1.6	ug/l	RSKSOP-147/175
Ethane		237	1.0	0.32	ug/l	RSKSOP-147/175
Ethene		129	1.0	0.43	ug/l	RSKSOP-147/175
Sulfide		2.0	0.67		mg/l	SM4500S2- F-11
Total Organic Carbon ^a		24.5	1.0		mg/l	SM5310 B-11/SW9060A
FA91738-5F MW-21						
Iron		19600	300		ug/l	SW846 6010D

(a) Sample was not preserved to a pH < 2.

(b) Sample was treated with an anti-foaming agent.

(c) Sample was treated with an anti-foaming agent. Sample was not preserved to a pH < 2; reported results are considered minimum values.

(d) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

(e) Sample was treated with an anti-foaming agent. No sample available for reanalysis.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID: SW-1		Date Sampled: 12/15/21
Lab Sample ID: FA91738-1		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	I73076.D	1	12/29/21 20:27	LR	n/a	n/a	VI2418
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	0.24	ug/l	
75-25-2	Bromoform	ND	1.0	0.41	ug/l	
78-93-3	2-Butanone (MEK)	ND	5.0	2.0	ug/l	
75-15-0	Carbon Disulfide	ND	2.0	0.53	ug/l	
56-23-5	Carbon Tetrachloride	ND	1.0	0.36	ug/l	
108-90-7	Chlorobenzene	ND	1.0	0.20	ug/l	
75-00-3	Chloroethane	ND	2.0	0.67	ug/l	
67-66-3	Chloroform	ND	1.0	0.30	ug/l	
110-82-7	Cyclohexane	ND	1.0	0.39	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	0.28	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5.0	1.0	ug/l	
106-93-4	1,2-Dibromoethane	ND	2.0	0.28	ug/l	
75-71-8	Dichlorodifluoromethane ^a	ND	2.0	0.50	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1.0	0.32	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1.0	0.22	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1.0	0.26	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	0.34	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	0.31	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1.0	0.22	ug/l	
78-87-5	1,2-Dichloropropane	ND	1.0	0.43	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1.0	0.29	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1.0	0.21	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.36	ug/l	
76-13-1	Freon 113	ND	1.0	0.48	ug/l	
591-78-6	2-Hexanone	ND	10	2.0	ug/l	
98-82-8	Isopropylbenzene	ND	1.0	0.22	ug/l	
79-20-9	Methyl Acetate	ND	20	5.0	ug/l	
74-83-9	Methyl Bromide	ND	5.0	2.0	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SW-1	
Lab Sample ID: FA91738-1	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: SW846 8260D	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.0	0.50	ug/l	
108-87-2	Methylcyclohexane	ND	1.0	0.44	ug/l	
75-09-2	Methylene Chloride	ND	5.0	2.0	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	1.0	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1.0	0.23	ug/l	
100-42-5	Styrene	ND	1.0	0.22	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.0	0.30	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
108-88-3	Toluene	ND	1.0	0.30	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2.0	0.50	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	0.25	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	0.47	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	ND	1.0	0.41	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.72	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	117%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	97%		83-118%

(a) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.1
3

Client Sample ID: SW-1	
Lab Sample ID: FA91738-1	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: RSKSOP-147/175	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL77091.D	1	12/17/21 14:44	TD	n/a	n/a	GLL2677
Run #2							

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	20 Deg. C
Run #2				

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	34.5	0.50	0.16	ug/l	
74-84-0	Ethane	ND	1.0	0.32	ug/l	
74-85-1	Ethene	ND	1.0	0.43	ug/l	
74-86-2	Acetylene ^a	ND	5.0	1.5	ug/l	

(a) Associated CCV outside of control limits high, sample was ND.

ND = Not detected	MDL = Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SW-1	Date Sampled: 12/15/21
Lab Sample ID: FA91738-1	Date Received: 12/16/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate	796	400	mg/l	200	12/17/21 20:37	JB	EPA 300/SW846 9056A
Sulfide	0.93	0.67	mg/l	1	12/21/21 12:10	RA	SM4500S2- F-11
Total Organic Carbon ^a	9.2	1.0	mg/l	1	12/18/21 07:51	FN	SM5310 B-11/SW9060A

(a) Sample was not preserved to a pH < 2.

RL = Reporting Limit

Report of Analysis

32
3

Client Sample ID: SW-1	
Lab Sample ID: FA91738-1F	Date Sampled: 12/15/21
Matrix: AQ - Groundwater Filtered	Date Received: 12/16/21
	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	401	300	ug/l	1	12/28/21	12/28/21 DM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18346

(2) Prep QC Batch: MP40085

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-13		Date Sampled: 12/15/21
Lab Sample ID: FA91738-2		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	I73077.D	250	12/29/21 20:51	LR	n/a	n/a	VI2418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	6300	2500	ug/l	
71-43-2	Benzene	ND	250	78	ug/l	
75-27-4	Bromodichloromethane	ND	250	61	ug/l	
75-25-2	Bromoform	ND	250	100	ug/l	
78-93-3	2-Butanone (MEK)	ND	1300	500	ug/l	
75-15-0	Carbon Disulfide	ND	500	130	ug/l	
56-23-5	Carbon Tetrachloride	ND	250	89	ug/l	
108-90-7	Chlorobenzene	ND	250	50	ug/l	
75-00-3	Chloroethane	ND	500	170	ug/l	
67-66-3	Chloroform	ND	250	75	ug/l	
110-82-7	Cyclohexane	ND	250	98	ug/l	
124-48-1	Dibromochloromethane	ND	250	69	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	1300	260	ug/l	
106-93-4	1,2-Dibromoethane	ND	500	69	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	500	130	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	250	81	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	250	54	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	250	64	ug/l	
75-34-3	1,1-Dichloroethane	ND	250	85	ug/l	
107-06-2	1,2-Dichloroethane	ND	250	78	ug/l	
75-35-4	1,1-Dichloroethylene	ND	250	81	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	250	69	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	250	55	ug/l	
78-87-5	1,2-Dichloropropane	ND	250	110	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	250	73	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	250	54	ug/l	
100-41-4	Ethylbenzene	ND	250	89	ug/l	
76-13-1	Freon 113	ND	250	120	ug/l	
591-78-6	2-Hexanone	ND	2500	500	ug/l	
98-82-8	Isopropylbenzene	ND	250	55	ug/l	
79-20-9	Methyl Acetate	ND	5000	1300	ug/l	
74-83-9	Methyl Bromide	ND	1300	500	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-13	Date Sampled:	12/15/21
Lab Sample ID:	FA91738-2	Date Received:	12/16/21
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260D		
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	500	130	ug/l	
108-87-2	Methylcyclohexane	ND	250	110	ug/l	
75-09-2	Methylene Chloride	ND	1300	500	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	1300	250	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	250	57	ug/l	
100-42-5	Styrene	ND	250	56	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	250	75	ug/l	
127-18-4	Tetrachloroethylene	ND	250	54	ug/l	
108-88-3	Toluene	ND	250	75	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	500	130	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	250	62	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	250	120	ug/l	
79-01-6	Trichloroethylene	ND	250	86	ug/l	
75-69-4	Trichlorofluoromethane	ND	500	130	ug/l	
75-01-4	Vinyl Chloride	472	250	100	ug/l	
1330-20-7	Xylene (total)	ND	750	180	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	117%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

(a) Sample was treated with an anti-foaming agent.

(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-13	
Lab Sample ID: FA91738-2	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: RSKSOP-147/175	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	LL77092.D	1	12/17/21 14:57	TD	n/a	n/a	GLL2677
Run #2	1R6817.D	10	12/20/21 14:22	TD	n/a	n/a	G1R260

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	20 Deg. C
Run #2	38.0 ml	5.0 ml	500 ul	20 Deg. C

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	5780 ^a	5.0	1.6	ug/l	
74-84-0	Ethane	71.7	1.0	0.32	ug/l	
74-85-1	Ethene	194	1.0	0.43	ug/l	
74-86-2	Acetylene ^b	ND	5.0	1.5	ug/l	

(a) Result is from Run# 2

(b) Associated CCV outside of control limits high, sample was ND.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-13 Lab Sample ID: FA91738-2 Matrix: AQ - Ground Water Project: Brenntag; Charleston, SC	Date Sampled: 12/15/21 Date Received: 12/16/21 Percent Solids: n/a
---	---

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate	< 50	50	mg/l	25	12/17/21 20:56	JB	EPA 300/SW846 9056A
Sulfide	3.8	0.71	mg/l	1	12/21/21 12:10	RA	SM4500S2- F-11
Total Organic Carbon ^a	490	25	mg/l	25	12/20/21 11:30	FN	SM5310 B-11/SW9060A

(a) Sample was not preserved to a pH < 2.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-13	Date Sampled: 12/15/21
Lab Sample ID: FA91738-2F	Date Received: 12/16/21
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	130000	300	ug/l	1	12/28/21	12/28/21 DM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18346

(2) Prep QC Batch: MP40085

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-7		Date Sampled: 12/15/21
Lab Sample ID: FA91738-3		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8260D		
Project: Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	I73078.D	1000	12/29/21 21:15	LR	n/a	n/a	VI2418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	25000	10000	ug/l	
71-43-2	Benzene	ND	1000	310	ug/l	
75-27-4	Bromodichloromethane	ND	1000	240	ug/l	
75-25-2	Bromoform	ND	1000	410	ug/l	
78-93-3	2-Butanone (MEK)	ND	5000	2000	ug/l	
75-15-0	Carbon Disulfide	ND	2000	530	ug/l	
56-23-5	Carbon Tetrachloride	ND	1000	360	ug/l	
108-90-7	Chlorobenzene	ND	1000	200	ug/l	
75-00-3	Chloroethane	ND	2000	670	ug/l	
67-66-3	Chloroform	ND	1000	300	ug/l	
110-82-7	Cyclohexane	ND	1000	390	ug/l	
124-48-1	Dibromochloromethane	ND	1000	280	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	5000	1000	ug/l	
106-93-4	1,2-Dibromoethane	ND	2000	280	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	2000	500	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	1000	320	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	1000	220	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	1000	260	ug/l	
75-34-3	1,1-Dichloroethane	ND	1000	340	ug/l	
107-06-2	1,2-Dichloroethane	ND	1000	310	ug/l	
75-35-4	1,1-Dichloroethylene	ND	1000	320	ug/l	
156-59-2	cis-1,2-Dichloroethylene	ND	1000	280	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND	1000	220	ug/l	
78-87-5	1,2-Dichloropropane	ND	1000	430	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	1000	290	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	1000	210	ug/l	
100-41-4	Ethylbenzene	ND	1000	360	ug/l	
76-13-1	Freon 113	ND	1000	480	ug/l	
591-78-6	2-Hexanone	ND	10000	2000	ug/l	
98-82-8	Isopropylbenzene	ND	1000	220	ug/l	
79-20-9	Methyl Acetate	ND	20000	5000	ug/l	
74-83-9	Methyl Bromide	ND	5000	2000	ug/l	

ND = Not detected MDL = Method Detection Limit

J = Indicates an estimated value

RL = Reporting Limit

B = Indicates analyte found in associated method blank

E = Indicates value exceeds calibration range

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-7	
Lab Sample ID: FA91738-3	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: SW846 8260D	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2000	500	ug/l	
108-87-2	Methylcyclohexane	ND	1000	440	ug/l	
75-09-2	Methylene Chloride	ND	5000	2000	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5000	1000	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	1000	230	ug/l	
100-42-5	Styrene	ND	1000	220	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1000	300	ug/l	
127-18-4	Tetrachloroethylene	ND	1000	220	ug/l	
108-88-3	Toluene	ND	1000	300	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	2000	500	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1000	250	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1000	470	ug/l	
79-01-6	Trichloroethylene	ND	1000	350	ug/l	
75-69-4	Trichlorofluoromethane	ND	2000	500	ug/l	
75-01-4	Vinyl Chloride	1200	1000	410	ug/l	
1330-20-7	Xylene (total)	ND	3000	720	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		83-118%
17060-07-0	1,2-Dichloroethane-D4	115%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

(a) Sample was treated with an anti-foaming agent. Sample was not preserved to a pH < 2; reported results are considered minimum values.

(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-7		
Lab Sample ID: FA91738-3		Date Sampled: 12/15/21
Matrix: AQ - Ground Water		Date Received: 12/16/21
Method: RSKSOP-147/175		Percent Solids: n/a
Project: Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1R6818.D	1	12/20/21 14:29	TD	n/a	n/a	G1R260
Run #2 ^a	1R6822.D	10	12/20/21 15:21	TD	n/a	n/a	G1R260

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	20 Deg. C
Run #2	38.0 ml	5.0 ml	500 ul	20 Deg. C

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	3350 ^b	5.0	1.6	ug/l	
74-84-0	Ethane	98.1	1.0	0.32	ug/l	
74-85-1	Ethene	266	1.0	0.43	ug/l	
74-86-2	Acetylene	ND	5.0	1.5	ug/l	

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-7	Date Sampled: 12/15/21
Lab Sample ID: FA91738-3	Date Received: 12/16/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate	< 10	10	mg/l	5	12/18/21 17:54	JB	EPA 300/SW846 9056A
Sulfide	3.0	0.68	mg/l	1	12/21/21 12:10	RA	SM4500S2- F-11
Total Organic Carbon ^a	70.7	5.0	mg/l	5	12/20/21 11:55	FN	SM5310 B-11/SW9060A

(a) Sample was not preserved to a pH < 2.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-7	Date Sampled: 12/15/21
Lab Sample ID: FA91738-3F	Date Received: 12/16/21
Matrix: AQ - Groundwater Filtered	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	38900	300	ug/l	1	12/28/21	12/28/21 DM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18346

(2) Prep QC Batch: MP40085

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-20		
Lab Sample ID: FA91738-4		Date Sampled: 12/15/21
Matrix: AQ - Ground Water		Date Received: 12/16/21
Method: SW846 8260D		Percent Solids: n/a
Project: Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	I73079.D	10	12/29/21 21:39	LR	n/a	n/a	VI2418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	250	100	ug/l	
71-43-2	Benzene	9.0	10	3.1	ug/l	J
75-27-4	Bromodichloromethane	ND	10	2.4	ug/l	
75-25-2	Bromoform	ND	10	4.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	50	20	ug/l	
75-15-0	Carbon Disulfide	ND	20	5.3	ug/l	
56-23-5	Carbon Tetrachloride	ND	10	3.6	ug/l	
108-90-7	Chlorobenzene	75.5	10	2.0	ug/l	
75-00-3	Chloroethane	ND	20	6.7	ug/l	
67-66-3	Chloroform	ND	10	3.0	ug/l	
110-82-7	Cyclohexane	ND	10	3.9	ug/l	
124-48-1	Dibromochloromethane	ND	10	2.8	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	50	10	ug/l	
106-93-4	1,2-Dibromoethane	ND	20	2.8	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	20	5.0	ug/l	
95-50-1	1,2-Dichlorobenzene	21.7	10	3.2	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	10	2.2	ug/l	
106-46-7	1,4-Dichlorobenzene	12.4	10	2.6	ug/l	
75-34-3	1,1-Dichloroethane	ND	10	3.4	ug/l	
107-06-2	1,2-Dichloroethane	ND	10	3.1	ug/l	
75-35-4	1,1-Dichloroethylene	ND	10	3.2	ug/l	
156-59-2	cis-1,2-Dichloroethylene	4.9	10	2.8	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND	10	2.2	ug/l	
78-87-5	1,2-Dichloropropane	ND	10	4.3	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	10	2.9	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	10	2.1	ug/l	
100-41-4	Ethylbenzene	ND	10	3.6	ug/l	
76-13-1	Freon 113	ND	10	4.8	ug/l	
591-78-6	2-Hexanone	ND	100	20	ug/l	
98-82-8	Isopropylbenzene	ND	10	2.2	ug/l	
79-20-9	Methyl Acetate	ND	200	50	ug/l	
74-83-9	Methyl Bromide	ND	50	20	ug/l	

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20	
Lab Sample ID: FA91738-4	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: SW846 8260D	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	20	5.0	ug/l	
108-87-2	Methylcyclohexane	ND	10	4.4	ug/l	
75-09-2	Methylene Chloride	ND	50	20	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	50	10	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	10	2.3	ug/l	
100-42-5	Styrene	ND	10	2.2	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	10	3.0	ug/l	
127-18-4	Tetrachloroethylene	ND	10	2.2	ug/l	
108-88-3	Toluene	ND	10	3.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	20	5.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	10	2.5	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	10	4.7	ug/l	
79-01-6	Trichloroethylene	ND	10	3.5	ug/l	
75-69-4	Trichlorofluoromethane	ND	20	5.0	ug/l	
75-01-4	Vinyl Chloride	48.4	10	4.1	ug/l	
1330-20-7	Xylene (total)	ND	30	7.2	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	117%		79-125%
2037-26-5	Toluene-D8	93%		85-112%
460-00-4	4-Bromofluorobenzene	95%		83-118%

(a) Sample vial(s) contained bubbles greater than 6mm; reported results are considered minimum values.

(b) Associated CCV outside of control limits low.

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20		
Lab Sample ID: FA91738-4		Date Sampled: 12/15/21
Matrix: AQ - Ground Water		Date Received: 12/16/21
Method: RSKSOP-147/175		Percent Solids: n/a
Project: Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	1R6819.D	1	12/20/21 14:44	TD	n/a	n/a	G1R260
Run #2	1R6823.D	10	12/20/21 15:30	TD	n/a	n/a	G1R260

	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	20 Deg. C
Run #2	38.0 ml	5.0 ml	500 ul	20 Deg. C

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	6000 ^b	5.0	1.6	ug/l	
74-84-0	Ethane	87.5	1.0	0.32	ug/l	
74-85-1	Ethene	168	1.0	0.43	ug/l	
74-86-2	Acetylene	ND	5.0	1.5	ug/l	

(a) Sample was not preserved to a pH < 2.

(b) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-20	Date Sampled: 12/15/21
Lab Sample ID: FA91738-4	Date Received: 12/16/21
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate	22.8	2.0	mg/l	1	12/18/21 18:13	JB	EPA 300/SW846 9056A
Sulfide	8.0	0.67	mg/l	1	12/21/21 12:10	RA	SM4500S2- F-11
Total Organic Carbon ^a	10.7	1.0	mg/l	1	12/18/21 10:36	FN	SM5310 B-11/SW9060A

(a) Sample was not preserved to a pH < 2.

RL = Reporting Limit

Report of Analysis



Client Sample ID: MW-20	
Lab Sample ID: FA91738-4F	Date Sampled: 12/15/21
Matrix: AQ - Groundwater Filtered	Date Received: 12/16/21
	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	31700	300	ug/l	1	12/28/21	12/28/21 DM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18346

(2) Prep QC Batch: MP40085

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-21		
Lab Sample ID: FA91738-5		Date Sampled: 12/15/21
Matrix: AQ - Ground Water		Date Received: 12/16/21
Method: SW846 8260D		Percent Solids: n/a
Project: Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	I73080.D	20	12/29/21 22:04	LR	n/a	n/a	VI2418
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	500	200	ug/l	
71-43-2	Benzene	23.6	20	6.2	ug/l	
75-27-4	Bromodichloromethane	ND	20	4.8	ug/l	
75-25-2	Bromoform	ND	20	8.1	ug/l	
78-93-3	2-Butanone (MEK)	ND	100	40	ug/l	
75-15-0	Carbon Disulfide	ND	40	11	ug/l	
56-23-5	Carbon Tetrachloride	ND	20	7.1	ug/l	
108-90-7	Chlorobenzene	340	20	4.0	ug/l	
75-00-3	Chloroethane	ND	40	13	ug/l	
67-66-3	Chloroform	ND	20	6.0	ug/l	
110-82-7	Cyclohexane	ND	20	7.8	ug/l	
124-48-1	Dibromochloromethane	ND	20	5.5	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND	100	21	ug/l	
106-93-4	1,2-Dibromoethane	ND	40	5.5	ug/l	
75-71-8	Dichlorodifluoromethane ^b	ND	40	10	ug/l	
95-50-1	1,2-Dichlorobenzene	ND	20	6.5	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	20	4.3	ug/l	
106-46-7	1,4-Dichlorobenzene	16.9	20	5.1	ug/l	J
75-34-3	1,1-Dichloroethane	ND	20	6.8	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	6.2	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	6.4	ug/l	
156-59-2	cis-1,2-Dichloroethylene ^c	2290	20	5.5	ug/l	E
156-60-5	trans-1,2-Dichloroethylene	ND	20	4.4	ug/l	
78-87-5	1,2-Dichloropropane	ND	20	8.5	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	20	5.8	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	20	4.3	ug/l	
100-41-4	Ethylbenzene	ND	20	7.1	ug/l	
76-13-1	Freon 113	ND	20	9.6	ug/l	
591-78-6	2-Hexanone	ND	200	40	ug/l	
98-82-8	Isopropylbenzene	ND	20	4.4	ug/l	
79-20-9	Methyl Acetate	ND	400	100	ug/l	
74-83-9	Methyl Bromide	ND	100	40	ug/l	

ND = Not detected MDL = Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW-21	
Lab Sample ID: FA91738-5	Date Sampled: 12/15/21
Matrix: AQ - Ground Water	Date Received: 12/16/21
Method: SW846 8260D	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	40	10	ug/l	
108-87-2	Methylcyclohexane	ND	20	8.7	ug/l	
75-09-2	Methylene Chloride	ND	100	40	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	100	20	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND	20	4.6	ug/l	
100-42-5	Styrene	ND	20	4.4	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	20	6.0	ug/l	
127-18-4	Tetrachloroethylene	ND	20	4.3	ug/l	
108-88-3	Toluene	ND	20	6.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	40	10	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	20	5.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	20	9.3	ug/l	
79-01-6	Trichloroethylene	ND	20	6.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	40	10	ug/l	
75-01-4	Vinyl Chloride	793	20	8.2	ug/l	
1330-20-7	Xylene (total)	ND	60	14	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		83-118%
17060-07-0	1,2-Dichloroethane-D4	116%		79-125%
2037-26-5	Toluene-D8	94%		85-112%
460-00-4	4-Bromofluorobenzene	94%		83-118%

- (a) Sample was treated with an anti-foaming agent.
 (b) Associated CCV outside of control limits low.
 (c) No sample available for reanalysis.

ND = Not detected MDL = Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

3.9
3

Client Sample ID: MW-21		Date Sampled: 12/15/21
Lab Sample ID: FA91738-5		Date Received: 12/16/21
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: RSKSOP-147/175		
Project: Brenntag; Charleston, SC		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	1R6825.D	1	12/20/21 15:49	TD	n/a	n/a	G1R260
Run #2	1R6826.D	10	12/20/21 16:01	TD	n/a	n/a	G1R260

Run #	Initial Volume	Headspace Volume	Volume Injected	Temperature
Run #1	38.0 ml	5.0 ml	500 ul	20 Deg. C
Run #2	38.0 ml	5.0 ml	500 ul	20 Deg. C

CAS No.	Compound	Result	RL	MDL	Units	Q
74-82-8	Methane	7630 ^a	5.0	1.6	ug/l	
74-84-0	Ethane	237	1.0	0.32	ug/l	
74-85-1	Ethene	129	1.0	0.43	ug/l	
74-86-2	Acetylene	ND	5.0	1.5	ug/l	

(a) Result is from Run# 2

ND = Not detected MDL = Method Detection Limit J = Indicates an estimated value
 RL = Reporting Limit B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

3.9
3

Client Sample ID: MW-21 Lab Sample ID: FA91738-5 Matrix: AQ - Ground Water Project: Brenntag; Charleston, SC	Date Sampled: 12/15/21 Date Received: 12/16/21 Percent Solids: n/a
---	---

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Sulfate	< 2.0	2.0	mg/l	1	12/18/21 18:33	JB	EPA 300/SW846 9056A
Sulfide	2.0	0.67	mg/l	1	12/21/21 12:10	RA	SM4500S2- F-11
Total Organic Carbon ^a	24.5	1.0	mg/l	1	12/18/21 11:03	FN	SM5310 B-11/SW9060A

(a) Sample was not preserved to a pH < 2.

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-21	
Lab Sample ID: FA91738-5F	Date Sampled: 12/15/21
Matrix: AQ - Groundwater Filtered	Date Received: 12/16/21
	Percent Solids: n/a
Project: Brenntag; Charleston, SC	

Dissolved Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed By	Method	Prep Method
Iron	19600	300	ug/l	1	12/28/21	12/28/21 DM	SW846 6010D ¹	SW846 3010A ²

(1) Instrument QC Batch: MA18346

(2) Prep QC Batch: MP40085

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CSR: Muna Mohammed

Response Date: 12/16/21

Response: Per client request proceed with analysis.

4.1

4

SM001
Rev. Date 05/24/17

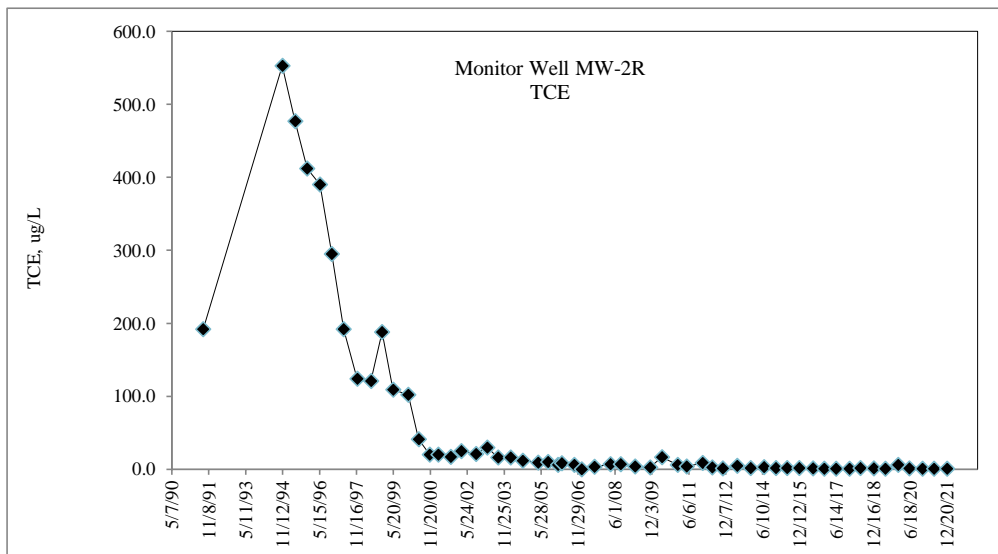
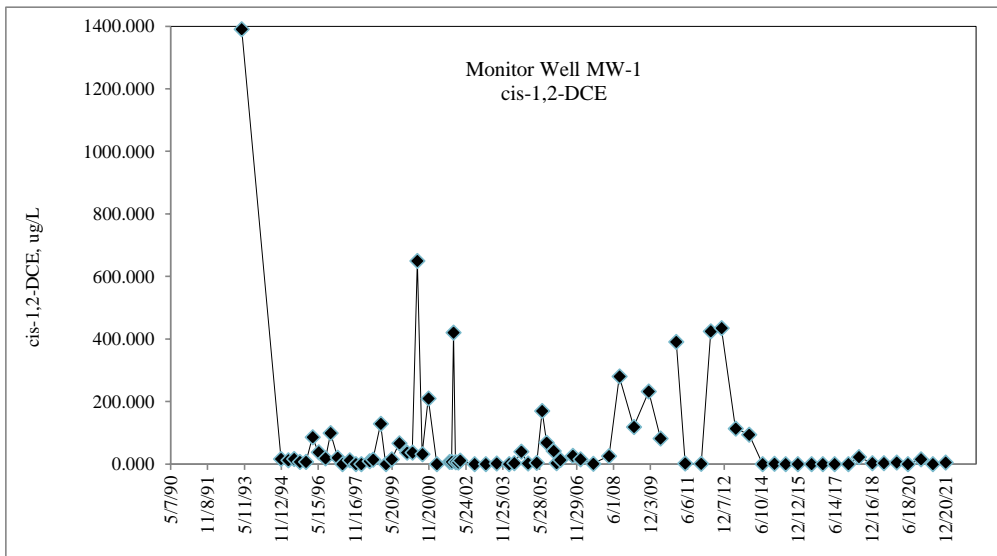
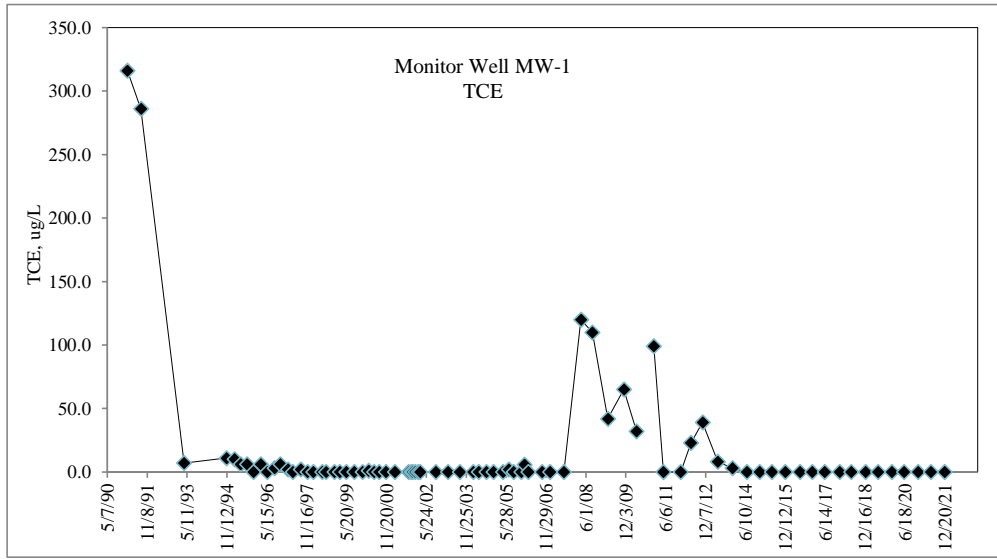
FA91738: Chain of Custody
Page 3 of 3

APPENDIX D

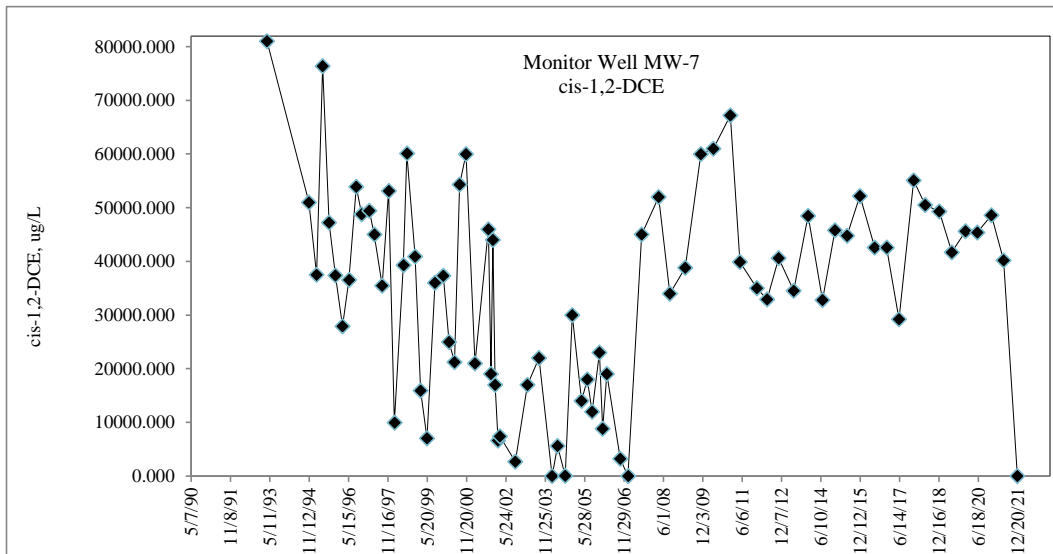
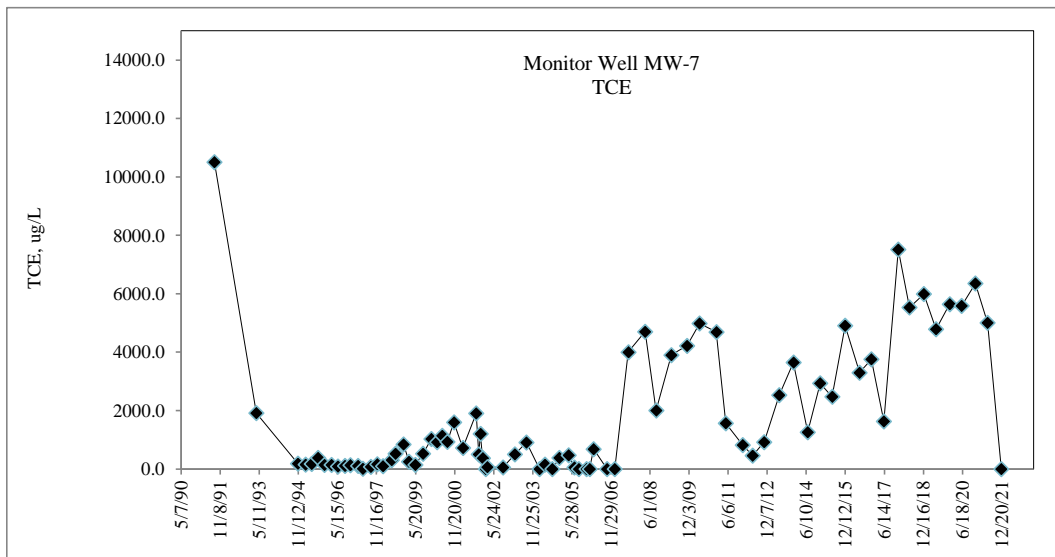
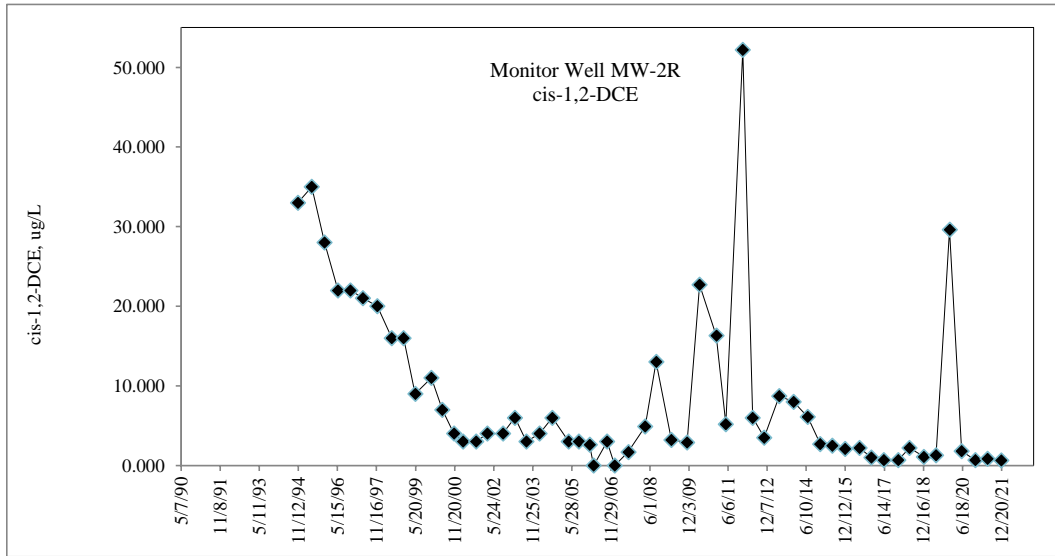
Isoconcentration Graphs



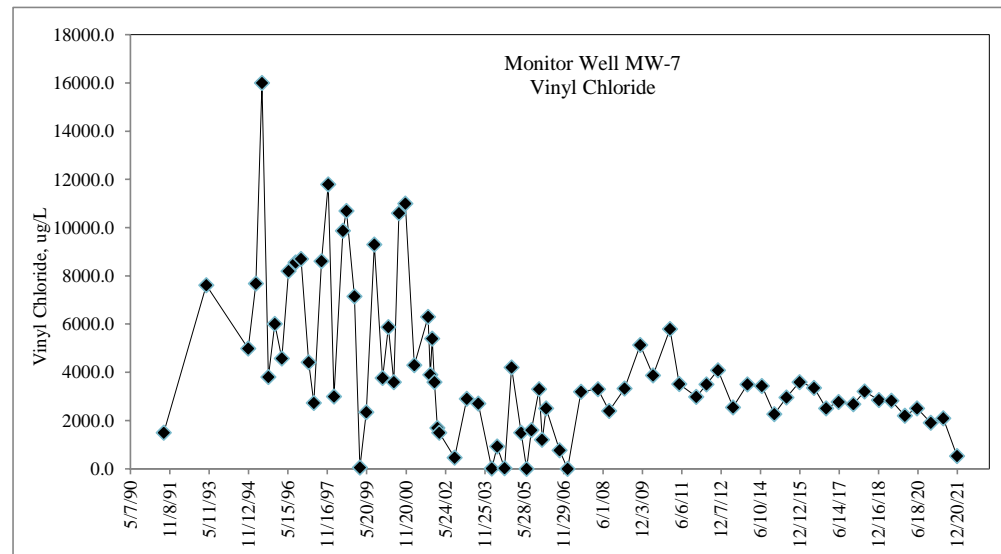
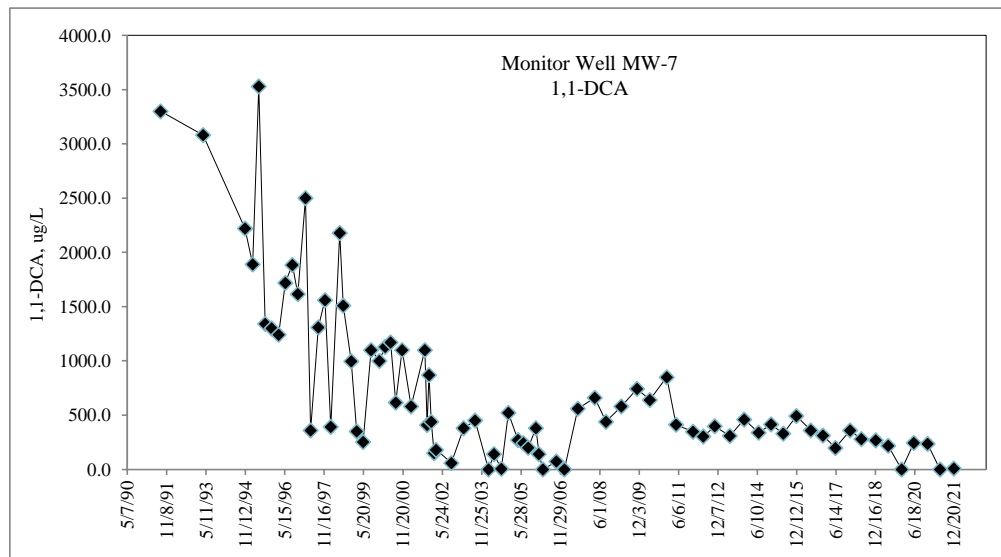
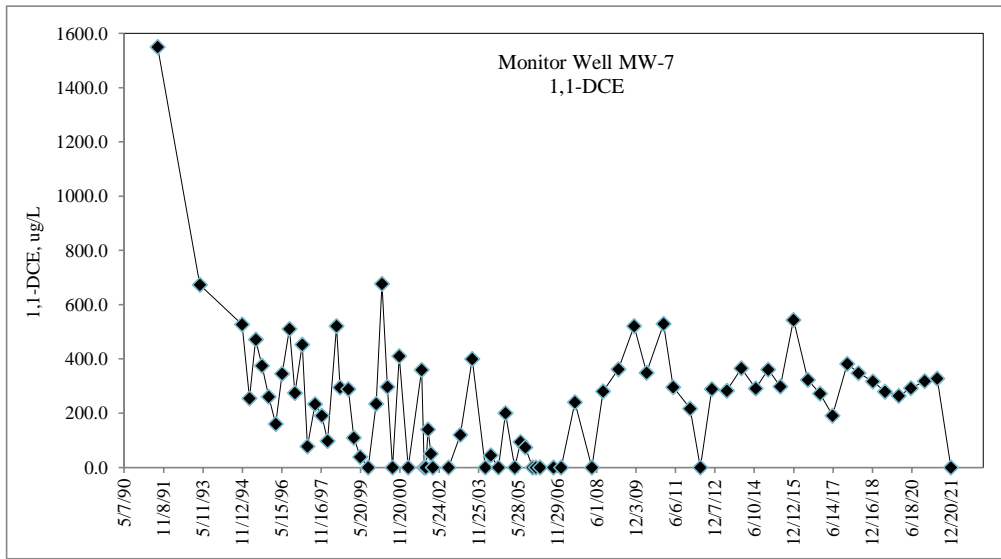
Appendix D. Time vs Concentration Graphs
 Brenntag Southeast, Charleston, South Carolina
 (revised 12/15/2021)



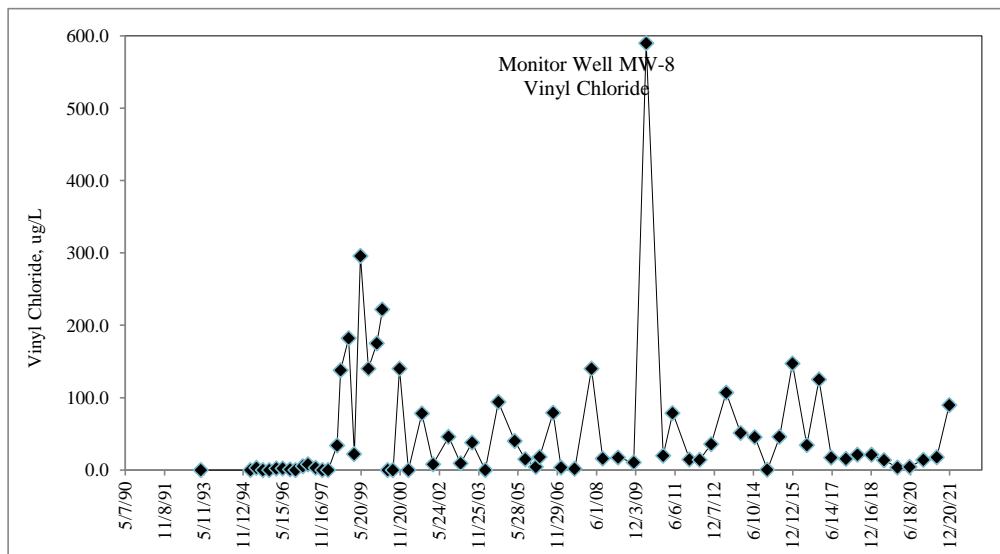
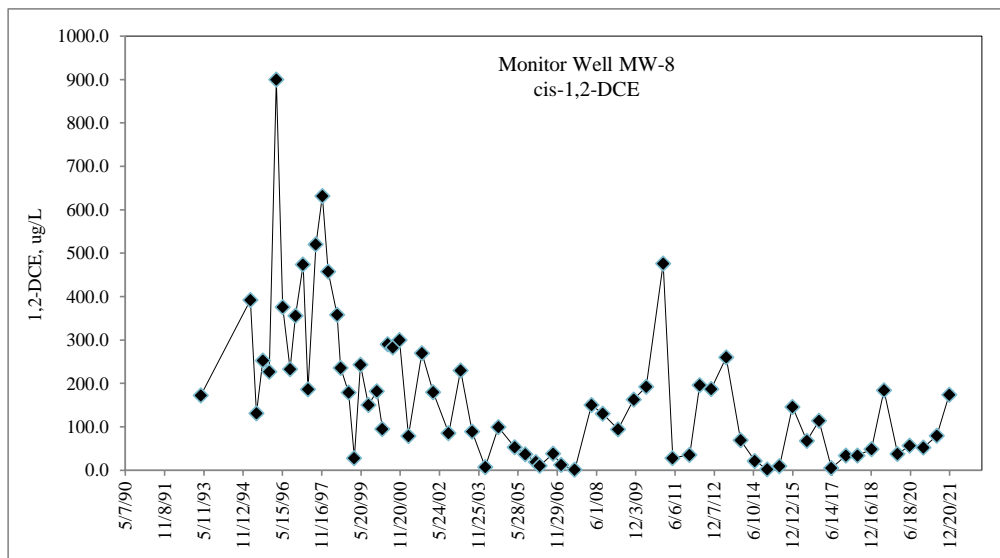
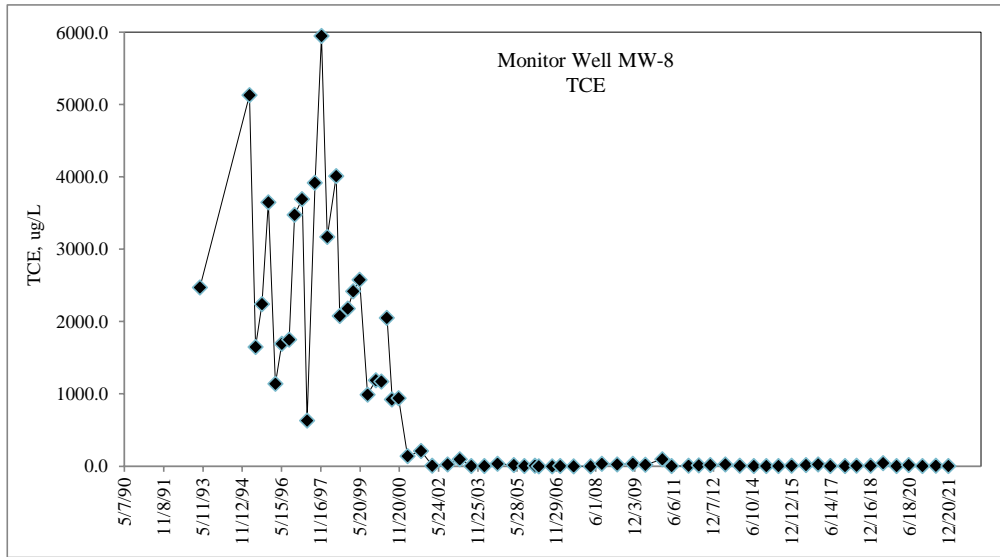
Appendix D. Time vs Concentration Graphs
 Brenntag Southeast, Charleston, South Carolina
 (revised 12/15/2021)



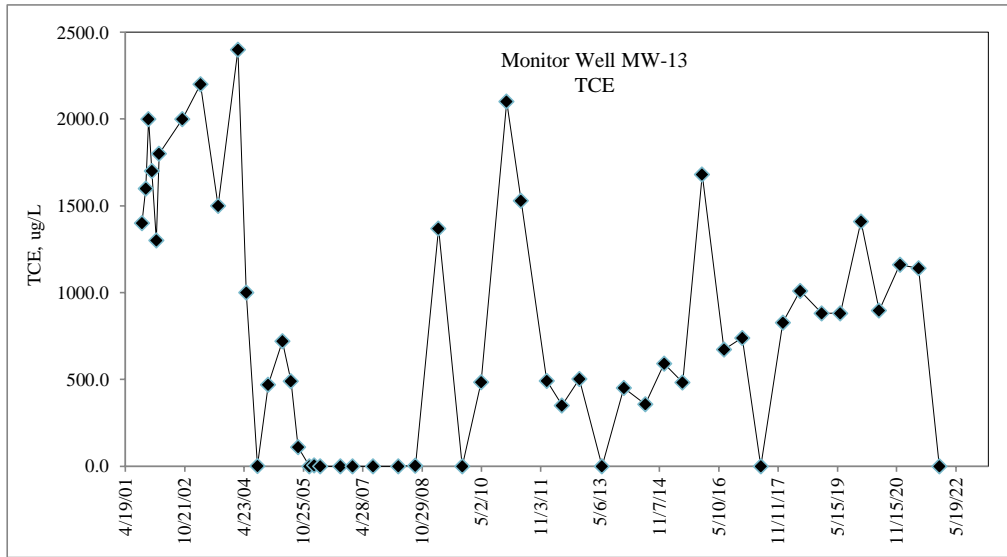
Appendix D. Time vs Concentration Graphs
Brenntag Southeast, Charleston, South Carolina
(revised 12/15/2021)



Appendix D. Time vs Concentration Graphs
Brenntag Southeast, Charleston, South Carolina
(revised 12/15/2021)



Appendix D. Time vs Concentration Graphs
 Brenntag Southeast, Charleston, South Carolina
 (revised 12/15/2021)

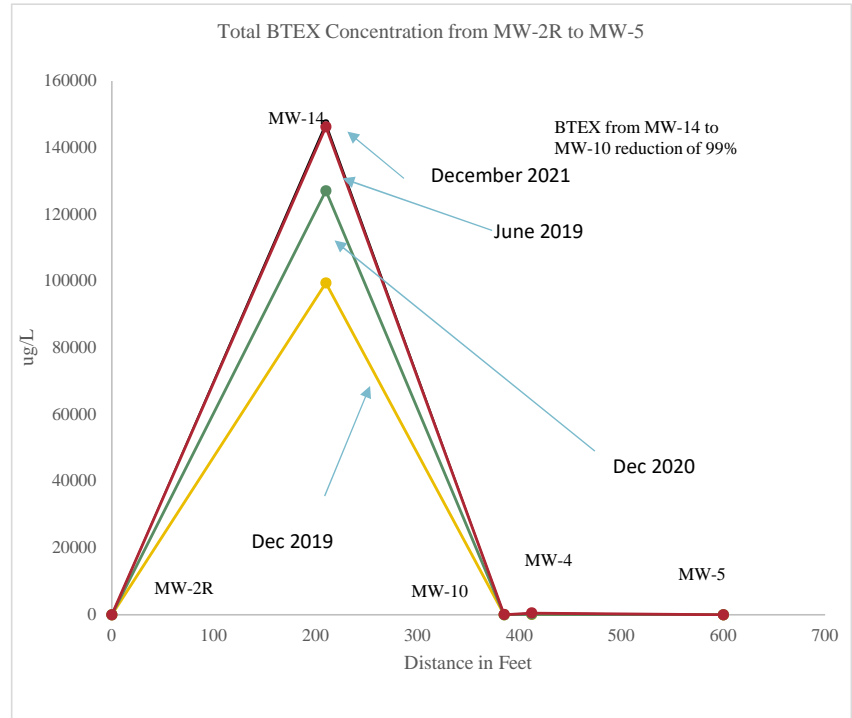
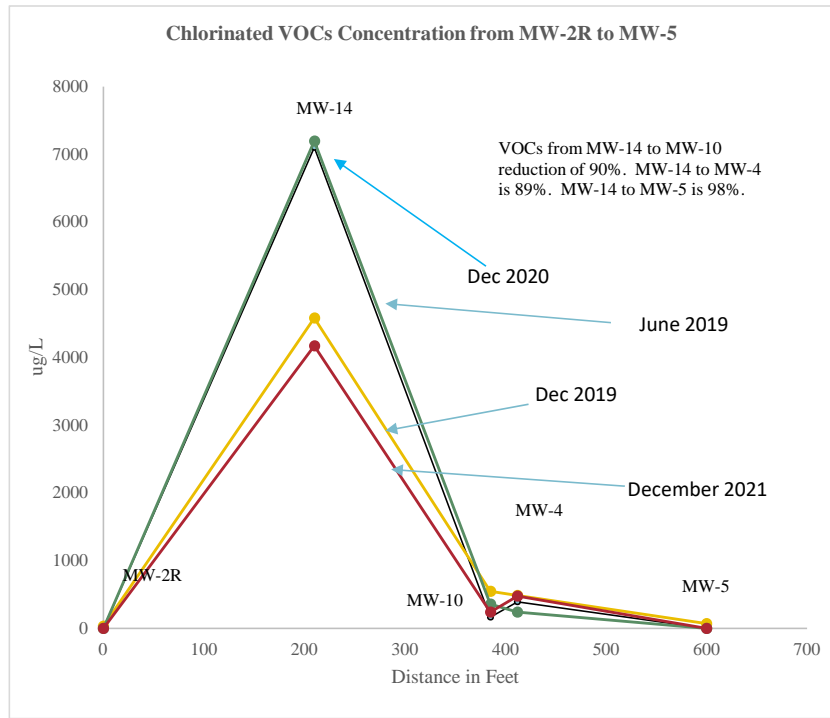


APPENDIX E

Distance vs Concentration Graphs



Appendix E. Distance vs Concentration Plots for Area #2



Arcadis U.S., Inc.

1450 Greene Street

Suite 220

Augusta, Georgia 30901-5201

Tel 706 828 4421

Fax 706 828 4722

www.arcadis.com

A decorative graphic consisting of three thin orange lines. One line is horizontal, extending across the width of the page. Two other lines are diagonal, starting from the bottom left and extending towards the top right, intersecting the horizontal line.