50975

CO Scanned
PM Copy

ARCADIS Design & Consultancy for natural and built assets

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:
Additional Geoprobe Investigation at the Former Unloading/Loading Area Near the Railroad Tracks
Brenntag Southeast, Charleston, South Carolina

ENVIRONMENT

Date:
16 September 2021

Contact:
Edward Hirshenson

Phone:
706.828.4421

Email:
Edward.hirshenson@arcadis.com

Our ref
30088889

Dear Tim Hornosky:

Brenntag Southeast, Inc. has authorized ARCADIS U.S., Inc. to forward the enclosed two copies of the Additional Geoprobe Investigation at the Former Unloading/Loading Area near the Railroad Tracks, and an electronic pdf, for the Brenntag Southeast facility in Charleston, South Carolina.

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

Sincerely,

Arcadis U.S., Inc.

Edward Hirshenson

Senior Scientist

Copies:

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

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

ENVIRONMENT

Subject:
Additional Geoprobe Investigation at the Former Unloading/Loading Railroad Tracks
Brenntag Southeast, Charleston, South Carolina

Date:
16 September 2021

Contact:
Edward Hirshenson

Phone:
706.828.4421

Email:
Edward.hirshenson@arcadis.com

Our ref:
30088889

Dear Tim Hornosky:

Brenntag Southeast, Inc. has authorized ARCADIS U.S., Inc. to submit the results of additional investigation at the former unloading/loading railroad tracks for the Brenntag Southeast facility located in Charleston, South Carolina. The South Carolina Department of Health and Environmental Control (SCDHEC) approved a Work Plan for Area #2-Rev.1 (dated September 25, 2020) in a correspondence letter from Hornosky to Wiram on September 29, 2020. A comprehensive soil/groundwater investigation was conducted 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. The field activities were conducted from November 16 thru November 20, 2020. The 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.

Work Performed

Prior to intrusive work, underground utilities were marked by ground penetrating radar (GPR) and drawings from the facility. The subsurface investigation was performed utilizing a geoprobe rig to a depth of approximately 20 feet below land surface (ft bls) which is the approximate depth of the Cooper Marl, a tight silty clayey unit. Soil samples were collected using a macro-core with plastic liner and depth discrete soil samples were directly transferred to laboratory provided

containers and placed on ice. Depth discrete soil samples were collected from a depth of 3 ft bls and just above the water table approximately 5 ft bls. Alquiot soil samples were placed in glass jars and allowed to equilibrate for organic vapor readings using a photo ionization meter (PID). Soil samples were analyzed for VOCs using EPA Method SW-846 8260B. Lithologic descriptions were described in the field. Lithologic logs for all borings are included in Appendix A and DHEC forms 1903 are also included in the same appendix.

Ten borings (B-27 thru B-36) were completed in the vicinity of the former unloading/loading tracks of the Brenntag facility (Figure 1). After completion, all boreholes were filled with neat cement grout to land surface.

Results

Photoionization (PID) readings were measured during soil sampling at all boring locations. A Mini-Rae 2000 meter was used to measure vapours. Aliquot soil samples were placed in glass jars and allowed to equilibrate for organic vapor readings. The highest PID reading was recorded at location A2-28 (4') with a reading of 304 ppm. All other readings were below 30 ppm.

Chlorinated Solvents in Soils

Chlorinated solvents were detected in all borings in the vicinity of the former unloading/loading tracks upgradient of the Brenntag office as depicted on Figure 2. Chlorinated solvent concentration ranged from 0 ug/kg to 194,649 ug/kg at boring A2-28 at a depth of 5 ft bls. Highest chlorinated solvent concentrations for soils are located at A2-28 next to railroad tracks. Concentrations decreased north, south, and east as indicated at borings A2-32 (0 ug/kg at 5 ft bls), A2-35 (0 ug/kg at 5 ft bls), and A2-36 (87 ug/kg at 5 ft bls). It should be noted that methylene chloride was detected in numerous borings but should be considered a suspected laboratory contaminant. Summary of chlorinated solvents in soils are included in Table 1. Laboratory analytical reports of all soils collected is included in Appendix B.

Chlorinated Solvents in Groundwater

Chlorinated solvents were detected in borings in the vicinity of the former unloading/loading tracks as depicted on Figure 3. Chlorinated solvent concentrations ranged from below detection limits (A2-27, A2-33, A2-34 at depths of 7-10 ft bls and 17-20 ft bls) to 63,740 ug/L (A2-28 at a depth of 17-20 ft bls). Concentrations of chlorinated solvents are concentrated at former borings A2-22, A2-24, and A2-25. Laboratory analytical data from additional borings at the former tracks, indicated that high concentrations of chlorinated solvents are in the vicinity of A2-28. Chlorinated solvent in the vicinity of the Brenntag office are originating from the former railroad loading/unloading as indicated by the analytical laboratory data (borings A2-24, A2-25, and A2-28). This area will be called Area #3. Figure 4 illustrates a cross-section from Bird monitor well MW-17 to borings A2-28 and A2-35. Summary of chlorinated solvents in groundwater are included in Table 1. Laboratory analytical reports for chlorinated solvents in groundwater are included in Appendix B.

Summary and Recommendations

The additional geoprobe investigation has revealed a third source area located at the railroad loading/unloading area which will be called Area #3. Results of the investigation indicated Area #3 has

high concentrations of chlorinated solvents in the vicinity of the railroad tracks due to unloading and loading activities from the previous owner. Arcadis recommends generating a Remedial Work Plan for Area #3.

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

Sincerely,

Arcadis U.S., Inc.

Edward Hirshenson

Senior Scientist

Copies:

Mr. Bill Krecker/SCDHEC Water Pollution Enforcement (without report)

Mr. Shawn Wiram/North America/Brenntag (with report)

Tables

Table 1. Summary of Soil and Groudnwater Analyses from Area #2 and #3
Brenntag Southeast, Charleston, South Carolina
(revised 08/21/2021)

Sample ID	Depth (ft bls)	AC	Ben	CB	CH	C_2Dis	Cyhex	1,1-DCA	1,1-DCE	Cis-1,2-DCE	trans-1,2-DCE	m-DCB	o-DCB	p-DCB	EB	IPB	MCH	MEK	1,1,1-TCA	1,2,4-TB	Toluene	PCE	TCE	VC	Xylene	Total
A#2-1	Soils (ug/kg)																									
	3	312	40.5	116	<1.6	2.3	12.8	1.8 J	<0.80	3.5 J	<0.80	4.7	24.8	57.5	1490	17.1	<1.6	<5.8	<0.80	<0.80	90.8	<1.0	<0.80	2.5 J	4580	6,789
	5	71.7 J	15.7	33.6	<1.4	<0.71	4.6	<1.3	<0.71	3.8	<0.71	2.3 J	19.1	13.8	1050	5.1	<1.4	7.4 J	<0.71	<0.71	123	<0.91	<0.71	0.79 J	4160	5,513
A#2-1	Groundwater (ug/L)																									
	7-9	<50	14.9	45.2	<3.3	<2.7	<2	<1.7	<1.6	20.1	<1.1	<1.1	3.6 J	4.4 J	230	8	<2.5	<10	<1.2	<2.5	25.7	<1.1	<1.7	2.7 J	827	1181.6
	17-20	<10	26.8	6.3	<0.67	<0.53	1.1	<0.34	<0.32	0.67 J	0.39 J	<0.22	0.74 J	<0.26	0.89 J	1.5	<0.50	<2.0	<0.25	<0.50	0.45 J	<0.22	<0.35	0.59 J	2.7 J	41.2
A#2-2	Soils (ug/kg)																									
	3	231	87.7	<0.66	<1.3	2.5 J	16.3	1.8 J	<0.66	4.9	<0.66	12.4	333	38.1	3450	55.1	<1.3	31.4	<0.66	<0.66	2080	<0.85	<0.66	1.9 J	11300	17,655
	5	<4700	344	<47	<94	<47	302	<83	<47	<65	<47	924	11300	2570	78700	3170	<94	<340	<47	215 J	25900	<60	<47	<47	483000	606,727
A#2-2	Groundwater (ug/L)																									
	7-9	<2000	96.2 J	<40	<130	<110	<78	<68	<64	<55	<44	<43	615	139 J	9960	198 J	<100	<400	<50	<100	4830	<43	<69	<82	52800	68,638.20
	17-19	<25	16.7	<0.50	<1.7	<1.3	<0.98	<0.85	<0.81	1.8 J	<0.55	<0.54	5.3	<0.64	115	1.3 J	<1.3	<5.0	<0.62	<1.3	76.6	<0.54	<0.86	<1.0	581	797.7
A#2-3	Soil (ug/kg)																									
	3	<4600	259	71.2 J	<92	<46	<58	<82	<46	817	<46	<46	493	119 J	2920	68.9 J	<78	2670	<46	<46	17800	<59	<46	<46	21600	46,818
	5	<97000	27400	<970	<1900	<970	20800	<1700	<970	46700	<970	11600	146000	30900	2270000	90600	17900	10800	3010 J	<970	6270000	<1200	31300	<970	20700000	29,734,910
A#2-3	Groundwater (ug/L)																									
	7-10	<5000	260 J	1000	<330	<270	<200	<170	<160	398 J	<110	<110	<160	<130	4940	137 J	<220	<1000	<120	<250	25300	<110	269 J	<200	39200	71,504
	17-20	<100	18.5	9.3 J	<6.7	<5.3	<3.9	<3.4	<3.2	50.2	<2.2	<2.2	5.6 J	<2.6	91.6	<2.2	<4.4	<20	<2.5	<5.0	479	<2.2	7.2 J	10.4	916	1,588
A#2-4	Soil (ug/kg)																									
	3	<5100	321	<51	<100	<51	166	<90	<51	624	<51	1550	19700	4060	42700	1080	<100	7040	<51	346	71000	<65	<51	<51	242000	390,798
	5	<5500	74.9	643	<110	<55	<69	<98	<55	<76	<55	<55	82.1 J	<64	1670	146 J	<610	<400	<55	<55	704	<71	<55	<55	11500	14,820
A#2-4	Groundwater (ug/L)																									
	7-10	<5000	558	<100	<330	<270	<200	<170	<160	2140	<110	<110	765	<130	11200	<110	<1000	<110	<120	<250	84800	<110	190 J	<200	117000	216,653
	17-20	<500	20.6 J	<10	<33	<27	<20	<17	<16	80.2	<11	<11	48 J	<13	679	<11	<100	<11	<12	<25	3540	<11	17.2 J	<20	6800	11,185
A#2-5	Soil (ug/kg)																									
	3	<81000	<980	<810	<1600	<810	<1000	<1400	<810	<1100	<810	3150 J	38800	8490	95800	2740 J	<1400	<5900	<810	<810	151000	<1000	<810	<810	962000	1,261,980
	5	<230000	8510 J	<2300	<4500	<2300	10800 J	<4000	<2300	17700	<2300	16300	207000	43400	4080000	53200	14300	<16000	<2300	<2300	6790000	<2900	5730 J	<2300	20900000	32,146,940
A#2-5	Groundwater (ug/L)																									
	7-10	<2000	120 J	<40	<130	<110	<78	<68	<64	419	<44	<43	156 J	<51	2660	<44	<87	<400	<50	<100	16400	<43	97.4 J	<82	25400	45,252
	16-20	<200	<6.2	<4	<13	<11	<7.8	<6.8	<6.4	19.7 J	<4.4	<4.3	22.7	<5.1	267	<4.4	<8.7	<40	<5	<10	820	<4.3	<6.9	<8.2	2760	3,889
A#2-6	Soil (ug/kg)																									
	3	<4200	361	341	<84	<42	<52	<74	<42	3990	<42	73.7 J	938	230	3340	79.9 J	<71	2290	<42	<42	25200	<54	<42	133 J	28700	66,145
	5	<490000	11900 J	20400 J	<9800	<4900	8660 J	<8700	<4900	93500	<4900	9070 J	129000	25500 J	859000	30900	12900 J	<36000	8180 J	<4900	4230000	<6300	88100	<4900	8510000	14,071,510
A#2-6	Groundwater (ug/L)																									
	7-10	<10000	537 J	<200	<670	<530	<390	<340	<320	7750	<220	<220	596 J	<260	10400	<220	<440	<2000	388 J	<500	134000	<220	1750	<410	105000	260,421
	17-20	<200	32.9	9.3 J	<13	<11	<7.8	<6.8	<6.4	67	<4.4	<4.3	<6.5	<5.1	142	<4.4	<8.7	<40	<5.0	<10	1180	<4.3	12.2 J	10.9 J	1260	2,714
A#2-7	Soil (ug/kg)																									
	3	<5100	63.4 J	357	<100	<51	<63	<89	<51	1070	<51	111 J	1360	323	2380	60 J	<86	2410	<51	<51	7530	<65	<51	<51	22600	38,264
	5	<460000	<5600	32200	<9200	<4600	<5800	<8200	<4600	57200	<4600	7950 J	112000	21000 J	697000	26700	<7900	<34000	<4600	<4600	1540000	<5900	<4600	<4600	7950000	10,453,750
A#2-7	Groundwater (ug/L)																									
	7-10	<2000	256	<40	<670	<110	<78	<68	<64	3320	<44	<43	486	<51	11000	148 J	<87	<400	108 J	<100	63200	<43	990	<82	129000	208,508
	17-20	<50	23.4	5.5	<3.3	<2.7	<2.0	<1.7	<1.6	16	<1.1	<1.1	5.8	<1.3	71.4	1.3 J	<2.2	<10	<1.2	<2.5	227	<1.1	1.8 J	3 J	800	1,155

Table 1. Summary of Soil and Groudnwater Analyses from Area #2 and #3
Brenntag Southeast, Charleston, South Carolina
(revised 08/21/2021)

Sample ID	Depth (ft bls)	AC	Ben	CB	CH	C_2Dis	Cyhex	1,1-DCA	1,1-DCE	Cis-1,2-DCE	trans-1,2-DCE	m-DCB	o-DCB	p-DCB	EB	IPB	MCH	MEK	1,1,1-TCA	1,2,4-TB	Toluene	PCE	TCE	VC	Xylene	Total
A#2-8	Soil (ug/kg)																									
	3	6750 J	46.2 J	<37	<75	<37	<47	<66	<37	220	<37	<37	556	84.7 J	3230	84.7 J	<410	6400	<37	<37	11200	<48	<37	<37	36400	65,464
	5	<91000	4000 J	<910	<1800	<910	<1100 J	<1600	<910	10300	<910	3710 J	50300	10100	1260000	28600	9440	7390 J	938 J	<910	2200000	<1200	1670 J	<910	10400000	13,990,258
A#2-8	Groundwater (ug/L)																									
	7-10	<2000	122 J	<40	<130	<110	<78	<68	<64	264	<44	<43	457	<51	8770	101 J	<87	<400	<50	<100	28200	<43	<69	<82	91200	129,114
	17-20	<200	<6.2	<4	<13	<11	<7.8	<6.8	<6.4	15.9 J	<4.4	<4.3	<6.5	<5.1	312	<4.4	<8.7	<40	<5	<10	1320	<4.3	<6.9	<8.2	3110	4,758
A#2-9	Soil (ug/kg)																									
	3	<4600	96.3 J	777	<92	55.5 J	57.6 J	<81	<46	360	<46	232	803	920	14100	268	179 J	<330	<46	<46	18500	<59	<46	<46	1660000	1,696,348
	6	<440000	<5400	<4400	<8900	<4400	<5500	<7900	<4400	<6100	<4400	4720 J	63800	13000 J	523000	15400 J	<7500	<32000	<4400	<4400	734000	<5700	7590 J	<4400	7040000	8,401,510
A#2-9	Groundwater (ug/L)																									
	7-10	<2000	<62	<40	<130	<110	<78	<68	<64	186 J	<44	<43	774	<51	10700	93.8 J	<87	<400	50.4 J	<100	18500	<43	274	<82	100000	130,578
	17-20	<100	<3.1	<2	<6.7	<5.3	<3.9	<3.4	<3.2	<2.8	<2.2	<2.2	9.2 J	<2.6	122	<2.2	<4.4	<20	<2.5	<5	278	<2.2	<3.5	<4.1	1470	1,879
A#2-10	Soil (ug/kg)																									
	3	<4400	<54	1160	<89	<44	<55	<79	<44	<61	<44	286	1520	1080	16000	775	237	<320	<44	93.2 J	6850	<57	<44	<44	60500	88,501
	6	<4200	<51	155 J	<83	<42	<52	<73	<42	<57	<42	<42	<42	53.8 J	1870	136 J	95 J	<300	<42	<42	1560	<53	<42	<42	5540	9,410
A#2-10	Groundwater (ug/L)																									
	7-10	<20	18.8	23	<1.3	<1.1	3.6	<0.68	<0.64	6.2	<0.44	0.59 J	2.7	2.2	69.3	50.3	21	<4	<0.50	<1	13.8	<0.43	<0.69	<0.82	205	416.5
	17-20	<10	1.3	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	0.40 J	<0.22	<0.22	<0.32	<0.26	4.7	0.31 J	<0.44	<2	<0.25	<0.50	3.7	<0.22	<0.35	<0.41	28.9	39.3
A#2-11	Soil (ug/kg)																									
	3	75 J	1.3 J	28.8	1.5	1.2 J	1.9 J	<1.3	<0.73	1.2 J	<0.73	1.1 J	2.5 J	3.4 J	1.7 J	<0.73	4	8.1 J	<0.73	<0.73	<7.3	<0.94	<0.73	2.4 J	2.7 J	135.3
	5	<76	<0.93	16.7	<1.5	<0.76	<0.95	<1.3	<0.76	<1.1	<0.76	<0.76	<0.76	<0.88	<0.76	<0.76	<1.3	<5.5	<0.76	<0.76	<7.6	<0.97	<0.76	<0.76	<1.6	16.7
A#2-11	Groundwater (ug/L)																									
	7-10	<20	7.9	19.9	<1.3	<1.1	<0.78	<0.68	<0.64	45	<0.44	<0.43	1.8 J	1.2 J	77.1	12.1	3.1	<4.0	<0.50	<1.0	16.3	<0.43	<0.69	4.8	162	351.2
	17-20	<20	6.2	<0.40	<1.3	<1.1	<0.78	<0.68	<0.64	<0.55	<0.44	<0.43	<0.65	<0.51	4.7	0.75 J	<0.87	<4.0	<0.50	<1.0	4.8	<0.43	<0.69	<0.82	40.9	57.3
A#2-12	Soil (mg/kg)																									
	3	<70	<0.85	<0.70	<1.4	<0.70	<0.87	<1.2	<0.70	<0.96	<0.96	<0.70	<0.70	<0.80	<0.70	<0.70	<1.2	<5.1	<0.70	<0.70	<7	<0.89	<0.70	<0.70	<1.5	0
	6	<81	2.1 J	4 J	<1.6	<0.81	<1	<1.4	<0.81	<1.1	<0.81	<0.81	<0.81	<0.93	<0.81	<0.81	<1.4	<5.9	<0.81	<0.81	<8.1	<1	<0.81	<0.81	<1.7	6.1
A#2-12	Groundwater (ug/L)																									
	7-10	<20	2.3	<0.40	<1.3	<1.1	<0.78	<0.68	<0.64	62.1	<0.44	<0.43	0.79 J	<0.51	36.4	5.3	1.6 J	<4.0	<0.50	<1.0	3.8	<0.43	<0.69	6.5	86.3	205
	17-20	27.1	<0.62	<0.40	<1.3	<1.1	<0.78	<0.68	<0.64	6.5	<0.44	<0.43	<0.65	<0.51	5.5	<0.44	<0.87	<4.0	<0.50	<1.0	3.3	<0.43	<0.69	<0.82	28.8	71
A#2-13	Soil (ug/kg)																									
	3	293	<0.96	3.8 J	<1.6	7	<0.98	<1.4	<0.79	<1.1	<0.79	<0.79	4.6	4.5	47.8	9	2.9 J	32	<0.79	<0.79	28.2	<1	<0.79	<0.79	106	540
	6	179	18.5	31.7	<1.6	2.7 J	5.2	<1.4	<0.78	<1.1	<0.78	1.8 J	2.6 J	8.1	86	59.5	54.3	22.2	<0.78	<0.78	44.7	<1	<0.78	<0.78	144	651.3
A#2-13	Groundwater (ug/L)																									
	7-10	<50	3.8 J	<1.0	<3.3	<2.7	<2.0	<1.7	<1.6	9.8	<1.1	<1.1	<1.6	<1.3	259	17.6	3.2 J	<10	<1.2	<2.5	10.1	<1.1	<1.7	<2.0	314	617.5
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	1.3	<0.22	<0.22	<0.32	<0.26	3.1	0.36 J	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	4.7	9.5
A#2-14	Soil (ug/kg)																									
	3	<5200	<63	<52	<100	<52	<65	<91	<52	<71	<52	<52	<52	<59	3200	332	219 J	<380	<52	<52	<520	<66	<52	<52	2050	5,801
	6	<72	8.5	<0.72	<1.4	0.89 J	4	<1.3	<0.72	<1.0	<0.72	<0.72	2.1 J	<0.83	8.9	134	90.8	<5.2	<0.72	<0.72	<7.2	<0.92	<0.72	<0.72	4.3 J	253.5
A#2-14	Groundwater (ug/L)																									
	7-10	<20	3.2	<0.40	<1.3	<1.1	<0.78	<0.68	<0.64	2.6	<0.44	<0.43	<0.65	<0.51	100	17.2	2.2	<4.0	<0.50	<1.0	<0.60	<0.43	<0.69	<0.82	112	237
	17-20	14 J	<0.31	<0.20	<0.67	0.77 J	<0.39	<0.34	<0.32	0.44 J	<0.22	<0.22	<0.32	<0.26	1.1	<0.22	<0.44	<2.0	<0.25	<0.50	0.61 J	<0.22	<0.35	<0.41	<0.72	17
A#2-15	Soil (ug/kg)																									
	3	<70	<0.86	<0.70	<1.4	<0.7	<0.88	<1.2	<0.70	<0.97	<0.7	<0.7	<0.7	<0.81	<0.7	<0.7	<1.2	<5.1	<0.7	<0.7	<7	<0.9	<0.7	<0.7	<1.5	0
	5	119 J	<0.92	<0.76	<1.5	<0.76	<0.95	<1.3	<0.76	<1	<0.76	<0.76	<0.76	<0.87	<0.76	<0.76	<1.3	8 J	<0.76	<0.76	<7.6	<0.97	<0.76	<0.76	<1.6	127
A#2-15	Groundwater (ug/L)																									
	7-10	<10	0.64 J	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	69.4	0.44 J	<0.22	<0.32	<0.26	18.6	0.90 J	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	12.8	33.9	137
	17-20	19.8 J	<0.31	<0.20	<0.67	0.84 J	<0.39	<0.34	<0.32	0.51 J	<0.22	<0.22	<0.32	<0.26	0.47 J	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	22

Table 1. Summary of Soil and Groudnwater Analyses from Area #2 and #3
Brenntag Southeast, Charleston, South Carolina
(revised 08/21/2021)

Sample ID	Depth (ft bls)	AC	Ben	CB	CH	C_2Dis	Cyhex	1,1-DCA	1,1-DCE	Cis-1,2-DCE	trans-1,2-DCE	m-DCB	o-DCB	p-DCB	EB	IPB	MCH	MEK	1,1,1-TCA	1,2,4-TB	Toluene	PCE	TCE	VC	Xylene	Total
A#2-16	Soil (ug/kg)																									
	3	<68	<0.83	<0.68	<1.4	<0.68	<0.85	<1.2	<0.68	<0.94	<0.68	<0.68	<0.68	<0.78	<0.68	<0.68	<1.2	<5	<0.68	<0.68	<6.8	<0.87	<0.68	<0.68	<1.4	0
	5	<77	<0.94	<0.77	<1.5	<0.77	<0.97	<1.4	<0.77	<1.1	<0.77	<0.77	<0.77	<0.89	<0.77	<0.77	<1.3	<5.6	<0.77	<0.77	<7.7	<0.99	<0.77	<0.77	<1.6	0
A#2-16	Groundwater (ug/L)																									
	7-10	<250	<7.8	<5.0	<17	<13	<9.8	<8.5	<8.1	1830	<5.5	<5.4	<8.1	<6.4	<8.9	<5.5	<11	<50	<6.2	<13	<7.5	<5.4	<8.6	1820	<18	3,650
	17-20	<2500	<78	<50	<170	<130	<98	<85	<81	23500	177 J	<54	<81	<64	<89	<55	<110	<500	<62	<130	<75	<54	<86	2190	<180	25,867
A#2-17	Soil (ug/kg)																									
	3	<69	<0.84	<0.69	<1.4	<0.69	<0.87	<1.2	<0.69	<0.96	<0.69	<0.69	<0.69	<0.80	<0.69	<0.69	<1.2	<5	<0.69	<0.69	<6.9	<0.89	<0.69	<0.69	<1.5	0
	5	69.9 J	<0.84	<0.69	<1.4	1.6 J	<0.86	<1.2	<0.69	<0.95	<0.69	<0.69	<0.69	<0.79	<0.69	<0.69	<1.2	7.3 J	<0.69	<0.69	<6.9	<0.88	<0.69	<0.69	<1.4	78.8
A#2-17	Groundwater (ug/L)																									
	7-10	<500	<16	<10	<33	<27	<20	<17	<16	4880	<11	<11	<16	<13	<18	<11	<22	<100	<12	<25	<15	<11	<17	1130	<36	6,010
	17-20	<1000	<31	<20	<67	<53	<39	<34	<32	15400	177	<22	<32	<26	<36	<22	<44	<200	<25	<50	<30	<22	463	141	<72	16,181
A#2-18	Soil (ug/kg)																									
	3	<76	<0.92	<0.76	<1.5	<0.76	<0.95	<1.3	<0.76	<1	<0.76	<0.76	<0.76	<0.87	<0.76	<0.76	<1.3	<5.5	<0.76	<0.76	<7.6	<0.97	<0.76	<0.76	<1.6	0
	5	<81	<0.99	<0.81	<1.6	<0.81	<1	<1.4	<0.81	2.2 J	<0.81	<0.81	<0.81	<0.94	<0.81	<0.81	<1.4	<5.9	<0.81	<0.81	<8.1	<1	<0.81	<0.81	<1.7	2.2
A#2-18	Groundwater (ug/L)																									
	7-10	<2500	<78	<50	<170	<130	<98	<85	<81	5650	99.2 J	<54	<81	<64	<89	<55	<110	<500	<62	<130	<75	<54	16800	232 J	<180	22,781
	17-20	Dry																								
A#2-19	Soil (ug/kg)																									
	3	77 J	<0.86	<0.71	<1.4	<0.71	<0.88	<1.3	<0.71	57.2	0.76 J	<0.71	<0.71	<0.81	<0.71	<0.71	<1.2	5.5 J	<0.71	<0.71	<7.1	<0.91	3.5	<0.71	<1.5	144
	5	<85	<1	<0.85	<1.7	<0.85	<1.1	<1.5	<0.85	70.4	0.96 J	<0.85	<0.85	<0.98	<0.85	<0.85	<1.4	<6.2	<0.85	<0.85	<8.5	<1.1	28.2	2.2 J	<1.8	102
A#2-19	Groundwater (ug/L)																									
	7-10	<2500	<78	<50	<170	<130	<98	<85	<81	12900	76.6 J	<54	<81	<64	<89	<55	<110	<500	<62	<130	<75	<54	6090	224 J	<180	19,291
	17-20	<1000	<31	<20	<67	<53	<39	<34	<32	5290	78 J	<22	<32	<26	<36	<22	<44	<200	<25	<50	<30	<22	1220	518	<72	7,106
A#2-20	Soil (ug/kg)																									
	3	74.4 J	6.3	85.3	<1.3	<0.67	18.7	3 J	<0.67	7.6	0.74 J	2.6 J	10.8	10.8	9.8	<0.67	12.7	14.7 J	<0.67	<0.67	<6.7	<0.86	<0.67	2.3 J	40.4	300.14
	5	78.2	1.5 J	8.4	<1.3	<0.67	11	1.6 J	<0.67	2.4 J	<0.67	<0.67	1.3 J	1.6 J	5.9	<0.67	6.6	8.5 J	<0.67	<0.67	<6.7	<0.85	<0.67	1.5 J	31.2	160
A#2-20	Groundwater (ug/L)																									
	7-10	<20	2	3.2	<1.3	<1.1	2.5	<0.68	<0.64	4.4	<0.44	<0.43	1.3 J	<0.51	17.3	<0.44	<0.87	<4	<0.50	<1	31.2	<0.43	<0.69	8	177	247
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	1.4	<0.22	<0.22	<0.47 J	<0.26	7.8	<0.22	<0.44	<2	<0.25	<0.50	10	<0.22	<0.35	<0.41	79.2	99
A#2-21	Soil (ug/kg)																									
	3	<67	<0.82	<0.67	<1.3	<0.67	<0.84	<1.2	<0.67	<0.92	<0.67	<0.67	<0.67	<0.77	<0.67	<0.67	<1.1	<4.9	<0.67	<0.67	<6.7	<0.86	<0.67	<0.67	<1.4	0
	5	<72	<0.88	<0.72	<1.4	<0.72	<0.90	<1.3	<0.72	<0.99	<0.72	<0.72	<0.72	<0.83	<0.72	<0.72	<1.2	<5.2	<0.72	<0.72	<7.2	<0.92	<0.72	<0.72	<1.5	0
A#2-21	Groundwater (ug/L)																									
	7-10	Not Sampled																								
	17-20	Not Sampled																								
A#2-22	Soil (ug/kg)																									
	3	<64	<0.79	<0.64	<1.3	<0.64	<0.80	<1.1	<0.64	<0.89	<0.64	<0.64	<0.64	<0.74	<0.64	<0.64	<1.1	<4.7	<0.64	<0.64	<6.4	<0.82	<0.64	<0.64	<1.4	0
	6	<69	<0.84	<0.69	<1.4	<0.69	<0.86	<1.2	<0.69	9.1	<0.69	<0.69	<0.69	<0.79	<0.69	<0.69	<1.2	<5	<0.69	<0.69	<6.9	<0.88	<0.69	1.3 J	<1.4	10.4
A#2-22	Groundwater (ug/L)																									
	7-10	<20	<0.62	<0.40	<1.3	<1.1	<0.78	<0.68	<0.64	6	<0.44	<0.43	<0.65	<0.51	<0.71	<0.44	<0.87	<4.0	<0.50	<1.0	<0.60	<0.43	1.8 J	6	<1.4	14
	17-20	<5000	<160	<100	<330	<270	<200	<170	560	14,000	406 J	<110	<160	<130	<180	<110	<220	<1000	<120	<250	<150	<110	538000	<200	<360	552,966
A#2-23	Soil (ug/kg)																									
	3	<82	<1	<0.82	<1.6	<0.82	<1	<1.5	<0.82	<1.1	<0.82	<0.82	<0.82	<0.94	<0.82	<0.82	<1.4	<6	<0.82	<0.82	<8.2	<1	2.1 J	<0.82	<1.7	2.1
	5	<72	<0.88	<0.72	<1.4	0.89 J	<0.90	<1.3	<0.72	<1	<0.72	<0.72	<0.72	<0.83	<0.72	<0.72	<1.2	<5.2	<0.72	<0.72	<7.2	<0.92	0.94 J	<0.72	<1.5	1.8
A#2-23	Groundwater (ug/L)																									
	7-10	<25	<0.78	<0.50	<1.7	<1.3	<0.98	<0.85	<0.81	<0.69	<0.55	<0.54	<0.81	<0.64	<0.89	<0.55	<1.1	<5.0	<0.62	<1.3	<0.75	<0.54	74.2	<1.0	<1.8	74.2
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.22	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	12.4	<0.41	<0.72	12.4

Table 1. Summary of Soil and Groudnwater Analyses from Area #2 and #3
Brenntag Southeast, Charleston, South Carolina
(revised 08/21/2021)

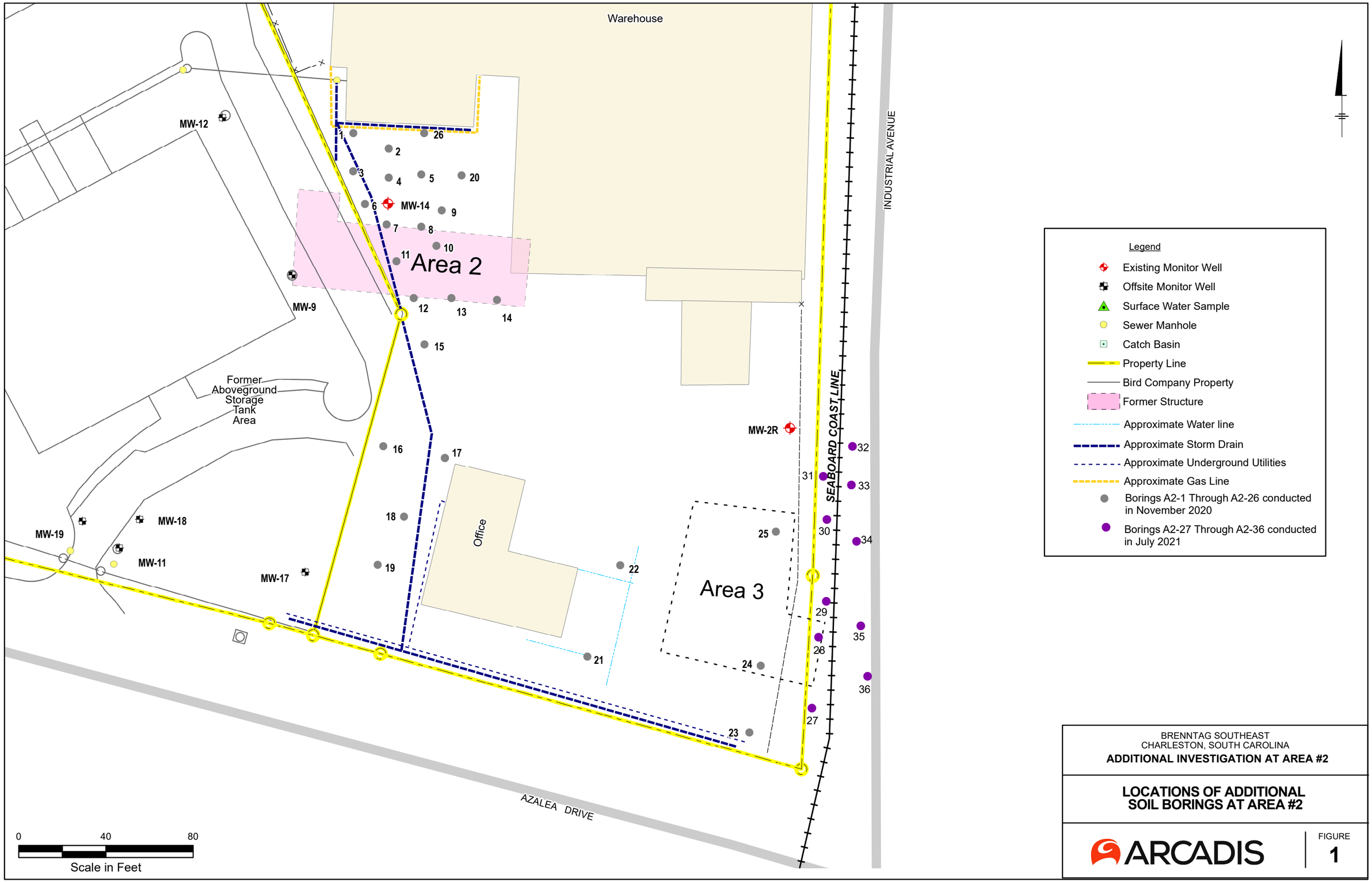
Sample ID	Depth (ft bls)	AC	Ben	CB	CH	C_2Dis	Cyhex	1,1-DCA	1,1-DCE	Cis-1,2-DCE	trans-1,2-DCE	m-DCB	o-DCB	p-DCB	EB	IPB	MCH	MEK	1,1,1-TCA	1,2,4-TB	Toluene	PCE	TCE	VC	Xylene	Total
A#2-24	Soil (ug/kg)																									
	3	<79	<0.96	<0.79	<1.6	<0.79	<0.99	<1.4	<0.79	<1.1	<0.79	<0.79	<0.79	<0.91	<0.79	<0.79	<1.3	<5.7	<0.79	<0.79	<7.9	<1	9.5	1.2 J	<1.7	10.7
	6	<70	<0.85	<0.70	<1.4	2.8 J	<0.87	<1.2	2.6 J	2090	12.2	<0.70	<0.70	<0.80	<0.70	<0.70	<1.2	6.5 J	<0.70	<0.70	<7	<0.89	4.7	165 J	<1.5	2,284
A#2-24	Groundwater (ug/L)																									
	7-10	<25	<0.78	<0.50	<1.7	<1.3	<0.98	<0.85	<0.81	191	1.4 J	<0.54	<0.81	<0.64	<0.89	<0.55	<1.1	<5.0	<0.62	<1.3	<0.75	<0.54	1.8 J	12.9	<1.8	207
	17-20	<5000	<160	<100	<330	<270	<200	<170	345 J	2810	<110	<110	<160	<130	<180	<110	<220	<1000	<120	<250	<150	331 J	316000	<200	<360	319,486
A#2-25	Soil (ug/kg)																									
	3	183	<0.80	<0.66	<1.3	1.2 J	<0.82	<1.2	<0.66	3.2 J	1.3 J	<0.66	<0.66	<0.75	1.9 J	1.6 J	<1.1	32.8	<0.66	<0.66	<6.6	<0.84	59	5.3	4.7 J	294
	5	122	<0.99	<0.81	<1.6	3 J	<1	<1.4	<0.81	3.4 J	1.1 J	<0.81	<0.81	<0.93	<0.81	<0.81	<1.4	21	<0.81	<0.81	<8.1	<1	1230	4.2	1.9 J	1,287
A#2-25	Groundwater (ug/L)																									
	7-10	<50	<1.6	<1.0	<3.3	<2.7	<2.0	<1.7	<1.6	442	7	<1.1	1.6	<1.3	<1.8	<1.1	<2.2	<10	<1.2	<2.5	<1.5	<1.1	<1.7	20.9	<3.6	470
	17-20	<10000	<310	<200	<670	<530	<390	<340	460 J	17400	1070	<220	<320	<260	<360	<220	<440	<2000	<250	<500	<300	<220	313000	<410	<720	331,930
A#2-26	Soil (ug/kg)																									
	3	<18000	<220	<180	<370	<180	<230	<320	<180	<250	<180	<180	390 J	<210	2970	<180	<310	<1300	<180	<180	<1800	<230	<180	<180	13600	16,960
	6	<90000	1590 J	<900	<1800	<900	2190 J	<1600	<900	<1200	<900	5680	73900	15000	1020000	24900	2700 J	<6600	<900	<900	503000	<1200	1390 J	<900	5440000	7,090,350
A#2-26	Groundwater (ug/L)																									
	7-10	<2000	<62	<40	<130	<110	<78	<68	<64	<55	<44	<43	611	167 J	9090	121 J	<87	<400	<50	<100	3220	<43	<69	<82	51400	64,609
	17-20	<10	1.1	<0.20	<0.67	1 J	<0.39	<0.34	<0.32	8.6	<0.22	<0.22	1.8	<0.26	46.1	0.48 J	<0.44	<2.0	<0.25	<0.50	40.7	<0.22	<0.35	<0.41	235	335
A#2-27	Soil (ug/kg)																									
	3	<62	<0.75	<0.62	<1.2	<0.62	<0.77	<1.1	<0.62	<0.85	<0.62	<0.62	<0.62	<0.71	<0.62	<0.62	<1.0	<4.5	<0.62	<0.62	<6.2	<0.79	4.3	<0.62	<1.3	11.6
	5	<79	<0.96	<0.79	<1.6	<0.79	<0.98	<1.4	<0.79	<1.1	<0.79	<0.79	<0.79	<0.90	<0.79	<0.79	<1.3	<5.7	<0.79	<0.79	<7.9	<1.0	4.7	<0.79	<1.7	17.5
A#2-27	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
A#2-28	Soil (ug/kg)																									
	3	<74	<0.90	<0.74	<1.5	<0.74	<0.92	<1.3	<0.74	36.4	<0.74	<0.74	<0.74	<0.85	<0.74	<0.74	<1.3	<5.4	<0.74	<0.74	<7.4	<0.94	36.3	1.5	<1.5	74.2
	5	<63	<0.77	<0.63	<1.3	1.8	<0.79	<1.1	39.6	31900	374	<0.63	<0.63	<0.72	<0.63	<0.63	<1.1	<4.6	<0.63	<0.63	<6.3	66.9	162000	265	2.3	194,649
A#2-28	Groundwater (ug/L)																									
	7-10	<50000	<1600	<1000	<3300	<2700	<2000	<1700	<1600	3970	<1100	<1600	<1100	<1300	<1800	<1100	<2200	<10000	<1200	<2500	<1500	<1100	27200	<2000	<3600	31,170
	17-20	<20000	<620	<400	<1300	<1100	<780	<680	<640	540	<440	<650	<430	<510	<710	<440	<870	<4000	<500	<1000	<600	<430	63200	<820	<1400	63,740
A#2-29	Soil (ug/kg)																									
	3	<70	<0.85	<0.70	<1.4	1.7	<0.87	<1.2	<0.70	542	7.8	<0.70	<0.70	<0.80	<0.70	<0.70	<1.2	<5.1	<0.70	<0.70	<7.0	<0.89	<0.70	13.5	<1.5	577
	5	<64	<0.78	<0.64	<1.3	4.5	<0.80	<1.1	<0.64	6.8	2.1	<0.64	<0.64	<0.73	<0.64	<0.64	<1.1	8.2	<0.64	<0.64	<6.4	<0.82	2	3.6	<1.3	35
A#2-29	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	4	23.7	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	55.9	<0.41	<0.72	80
A#2-30	Soil (ug/kg)																									
	3	<65	<0.80	<0.65	<1.3	<0.65	<0.82	<1.2	2	51.3	18.9	<0.65	<0.65	<0.75	<0.65	<0.65	<1.1	<4.7	<0.65	<0.65	<6.5	<0.84	353	1.6	<1.4	435
	5	<68	<0.83	<0.68	<1.4	<0.68	<0.85	<1.2	<0.68	16.1	1.6	<0.68	<0.68	<0.78	<0.68	<0.68	<1.2	<4.9	<0.68	<0.68	<6.8	<0.87	9.3	<0.68	<1.4	27
A#2-30	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	13.6	1.4	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	1.6	0.58	<0.72	17
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	0.58	<0.41	<0.72	0.6

Table 1. Summary of Soil and Groudnwater Analyses from Area #2 and #3
Brenntag Southeast, Charleston, South Carolina
(revised 08/21/2021)

Sample ID	Depth (ft bls)	AC	Ben	CB	CH	C_2Dis	Cyhex	1,1-DCA	1,1-DCE	Cis-1,2-DCE	trans-1,2-DCE	m-DCB	o-DCB	p-DCB	EB	IPB	MCH	MEK	1,1,1-TCA	1,2,4-TB	Toluene	PCE	TCE	VC	Xylene	Total
A#2-31	Soil (ug/kg)																									
	3	<60	<0.74	<0.60	<1.2	<0.60	<0.75	<1.1	<0.60	2.6	2.6	<0.60	<0.60	<0.69	<0.60	<0.60	<1.0	<4.4	<0.60	<0.60	<6.0	<0.77	27.9	<0.60	<1.3	33
	5	<67	<0.82	<0.67	<1.3	<0.67	<0.84	<1.2	<0.67	<0.92	<0.67	<0.67	<0.67	<0.77	<0.67	<0.67	<1.1	<4.9	<0.67	<0.67	<6.7	<0.86	2.6	<0.67	<1.4	3
A#2-31	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.32	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	1.8	142	1.9	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	431	3.5	<0.72	580
A#2-32	Soil (ug/kg)																									
	3	<65	<0.79	<0.65	<1.3	<0.65	<0.81	<1.1	<0.65	<0.89	<0.65	<0.65	<0.65	<0.74	<0.65	<0.65	<1.1	<4.7	<0.65	<0.65	<6.5	<0.83	<0.65	<0.65	<1.4	8
	5	<62	<0.76	<0.62	<1.2	<0.62	<0.78	<1.1	<0.62	<0.86	<0.62	<0.62	<0.62	<0.72	<0.62	<0.62	<1.1	<4.5	<0.62	<0.62	<6.2	<0.80	<0.62	<0.62	<1.3	0
A#2-32	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.32	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
A#2-33	Soil (ug/kg)																									
	3	112	<0.86	<0.70	<1.4	2.1	<0.88	<1.2	<0.70	<0.97	<0.70	<0.70	<0.70	<0.81	<0.70	<0.70	<1.2	12.4	<0.70	<0.70	<7.0	<0.90	<0.70	<0.70	<1.5	137
	5	<66	<0.81	<0.66	<1.3	<0.66	<0.83	<1.2	<0.66	<0.92	<0.66	<0.66	<0.66	<0.76	<0.66	<0.66	<1.1	<4.8	<0.66	<0.66	<6.6	<0.85	<0.66	<0.66	<1.4	9
A#2-33	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
A#2-34	Soil (ug/kg)																									
	3	97.7	<0.65	<0.53	<1.1	<0.53	<0.67	<0.95	<0.53	<0.74	<0.53	<0.53	<0.53	<0.61	<0.53	<0.53	<0.91	16.4	<0.53	<0.53	<5.3	<0.68	<0.53	<0.53	<1.1	114
	5	<72	<0.87	<0.72	<1.4	<0.72	<0.90	<1.3	<0.72	<0.99	<0.72	<0.72	<0.72	<0.82	<0.72	<0.72	<1.2	<5.2	<0.72	<0.72	<7.2	<0.92	<0.72	<0.72	<1.5	10
A#2-34	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
A#2-35	Soil (ug/kg)																									
	3	<65	<0.79	<0.65	<1.3	<0.65	<0.81	<1.1	<0.65	38.8	2	<0.65	<0.65	<0.74	<0.65	<0.65	1.4	<4.7	<0.65	<0.65	<6.5	<0.83	23.2	<0.65	<1.4	65
	5	<77	<0.94	<0.77	<1.5	<0.77	<0.97	<1.4	<0.77	<1.1	<0.77	<0.77	<0.77	<0.89	<0.77	<0.77	<1.3	<5.6	<0.77	<0.77	<7.7	<0.99	<0.77	<0.77	<1.6	0
A#2-35	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	0.68	<0.41	<0.72	0.7
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0
A#2-36	Soil (ug/kg)																									
	3	<62	<0.76	<0.62	<1.2	<0.62	<0.77	<1.1	<0.62	<0.85	<0.62	<0.62	<0.62	<0.71	<0.62	<0.62	<1.1	<4.5	<0.62	<0.62	<6.2	<0.79	<0.62	<0.62	<1.3	0
	5	78.2	<0.80	<0.65	<1.3	<0.65	<0.82	<1.2	<0.65	<0.90	<0.65	<0.65	<0.65	<0.75	<0.65	<0.65	<1.1	8.6	<0.65	<0.65	<6.5	<0.84	<0.65	<0.65	<1.4	87
A#2-36	Groundwater (ug/L)																									
	7-10	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	0.52	<0.41	<0.72	0.5
	17-20	<10	<0.31	<0.20	<0.67	<0.53	<0.39	<0.34	<0.32	<0.28	<0.22	<0.32	<0.22	<0.26	<0.36	<0.22	<0.44	<2.0	<0.25	<0.50	<0.30	<0.22	<0.35	<0.41	<0.72	0

Ac=Acetone
Ben=Benzene
C_2Dis=Carbon Disulfide
CB=Chlorobenzene
CH=Chloroethane
Cyhex=Cyclohexane
1,1-DCA =1,1-Dichloroethane
1,1-DCE=1,1-Dichloroethene
Cis-1,2-DCE=Cis-1,2-Dichloroethene
Trans-1,2-DCE=1,2-Dichloroethene
m-DCB=M-Dichlorobenzene
o-DCB=O-Dichlorobenzene
p-DCB=p-Dichlorobenzene
EB=Ethylbenzene
IPB-Isopropylbenzene
MCH=Methylcyclohexane
MEK=Methyl ethyl ketone
1,1,1-TCA=1,1,1-Trichloroethane
1,2,4-TB=1,2,4-Trichlorobenzene
PCE=Tetrachloroethylene
TCE=Trichloroethylene
VC=Vinyl Chloride
ft bls=feet below land surfce
ug/kg=micrograms per kilograms
ug/L=micrograms per liter

Figures



CITY: AUGUSTA DIV/GROUP: ENV DB: A. Saul LD: A. Saul PIC: PM: TM: TR:
Project Number: Path: C:\BIM\OneDrive - ARCADIS\GIS\Brenntag\Brenntag Charleston SC GIS\2021\Add Invest\Aug 2021 Add Investigation.mxd Date Saved: 8/21/2021 8:31:31 PM

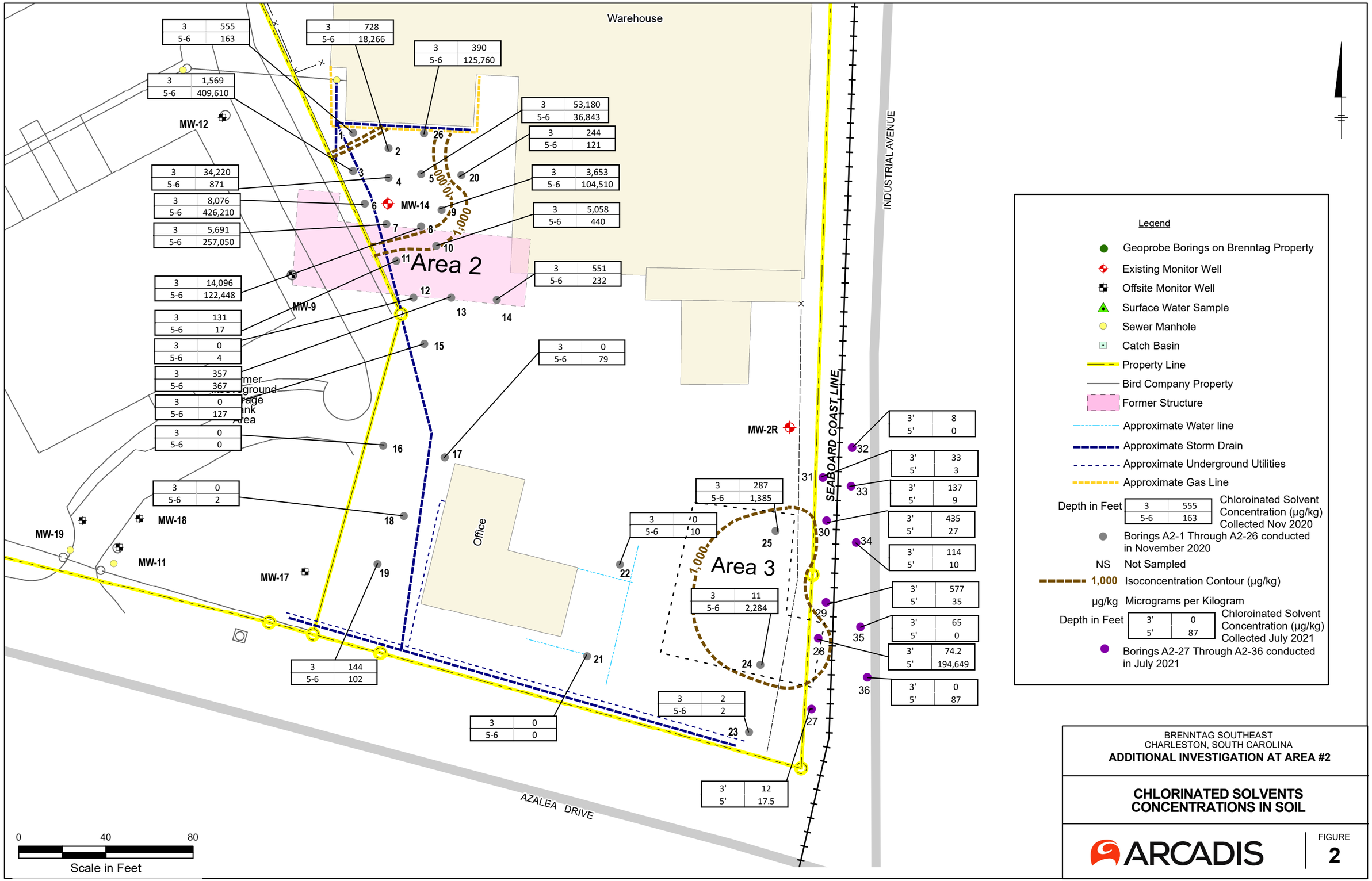
BRENNTAG SOUTHEAST
CHARLESTON, SOUTH CAROLINA

ADDITIONAL INVESTIGATION AT AREA #2

LOCATIONS OF ADDITIONAL SOIL BORINGS AT AREA #2

ARCADIS

FIGURE
1



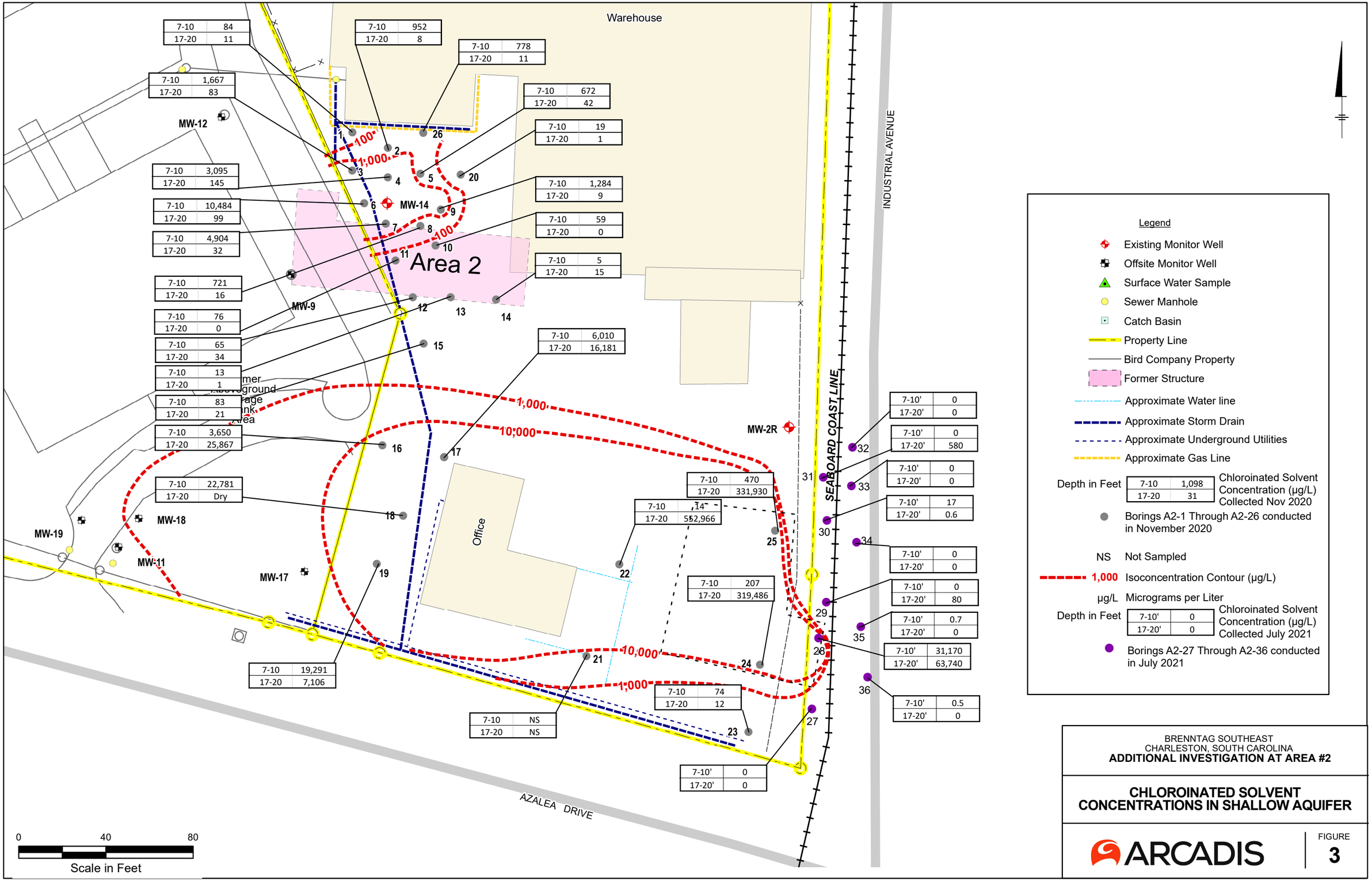
CITY: AUGUSTA DIV/GROUP: ENV DB: A Saul LD: A. Saul PIC: PM: TM: TR:
Project Number: Path: C:\BIM\OneDrive - ARCADIS\GIS\Brenntag\Brenntag Charleston SC GIS\2021\Add Invest\Aug 2021 Chlor SOIL Bird Prop4.mxd Date Saved: 8/21/2021 8:59:03 PM

BRENNTAG SOUTHEAST
CHARLESTON, SOUTH CAROLINA
ADDITIONAL INVESTIGATION AT AREA #2

CHLORINATED SOLVENTS CONCENTRATIONS IN SOIL

ARCADIS

FIGURE 2



Legend

- Existing Monitor Well
- Offsite Monitor Well
- Surface Water Sample
- Sewer Manhole
- Catch Basin
- Property Line
- Bird Company Property
- Former Structure
- Approximate Water line
- Approximate Storm Drain
- Approximate Underground Utilities
- Approximate Gas Line

Depth in Feet | 7-10 | 1,098 | 17-20 | 31 | Chloroinated Solvent Concentration (µg/L) Collected Nov 2020

Borings A2-1 Through A2-26 conducted in November 2020

NS Not Sampled

1,000 Isoconcentration Contour (µg/L)

µg/L Micrograms per Liter

Depth in Feet | 7-10' | 0 | 17-20' | 0 | Chloroinated Solvent Concentration (µg/L) Collected July 2021

Borings A2-27 Through A2-36 conducted in July 2021

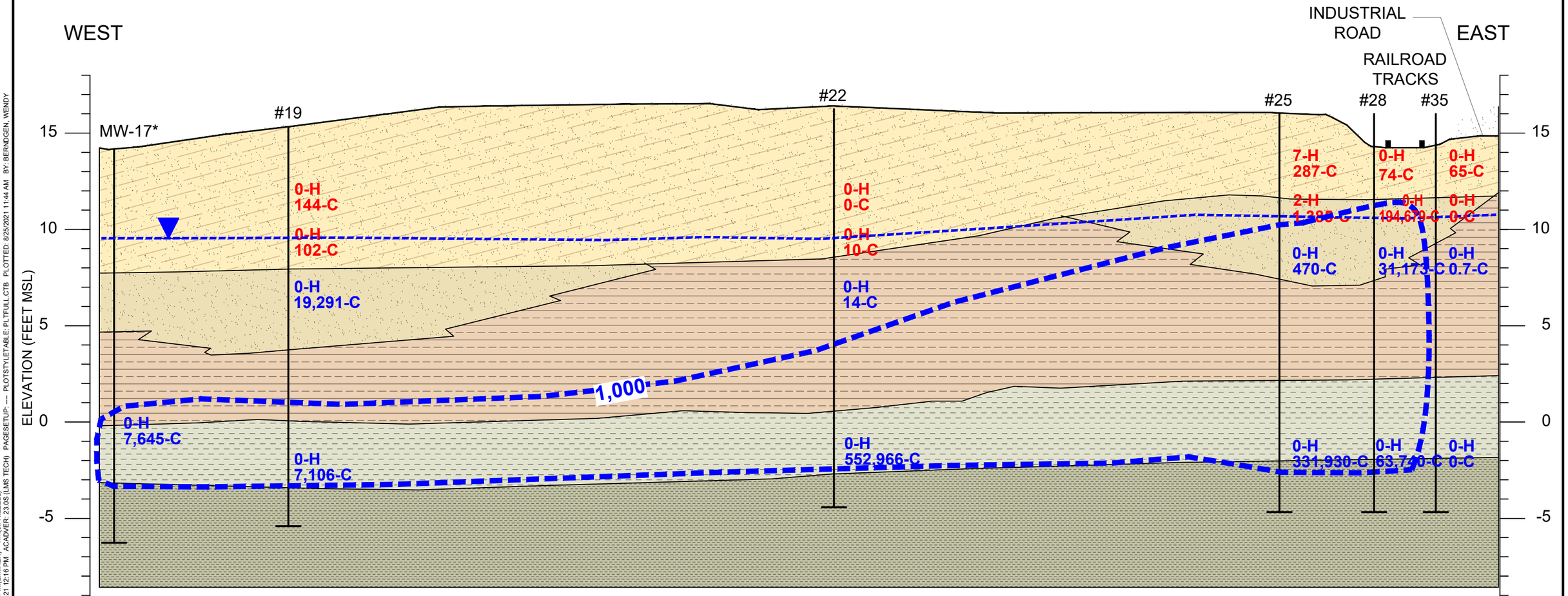
BRENNTAG SOUTHEAST
CHARLESTON, SOUTH CAROLINA
ADDITIONAL INVESTIGATION AT AREA #2

CHLOROINATED SOLVENT CONCENTRATIONS IN SHALLOW AQUIFER

ARCADIS

FIGURE 3

CITY: AUGUSTA DIV/GROUP: ENV DB: A. Saul LD: A. Saul PIC: PM: TM: TR:
Project Number: Path: C:\BIM\OneDrive - ARCADIS\GIS\Brenntag\Brenntag Charleston SC GIS\2021\Add Invest\Aug 2021 Chlor GW Bird Prop4.mxd Date Saved: 8/25/2021 11:28:53 AM



LEGEND:

MW-15 — WELL/BORING ID

APPROXIMATE GROUND SURFACE

LITHOLOGIC CONTACT

WATER LEVEL

WELL SCREEN

WELL/BORING BOTTOM

- SILTY SANDS
- SILTY CLAYS/SANDS
- SC STIFF GREEN CLAYS
- STIFF GREEN CLAYS
- TIGHT FINE GRAINED SANDS

SOIL CONCENTRATION (µg/kg)

7 H (Hydrocarbons)

287 H (Chlorinated)

GROUNDWATER CONCENTRATION (µg/L)

0 H (Hydrocarbons)

470 H (Chlorinated)

1,000 — ISOCONCENTRATION CONTOUR (mg/L)

0 5’ 10’
APPROXIMATE VERTICAL SCALE

0 25’ 50’
APPROXIMATE HORIZONTAL SCALE

BRENNTAG SOUTHEAST
CHARLESTON, SOUTH CAROLINA
ADDITIONAL INVESTIGATION AT AREA #2

AREA 1 CROSS-SECTION

ARCADIS Design & Consultancy for natural and built assets

FIGURE
4

Appendix A

Lithologic Logs

DHEC Forms

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: A#2-27 Project/No.: 30088889 Page: 1 of 1

Site Location: Brenntag Charleston, SC Drilling Started: 7/28/2021 Drilling Completed: 7/28/2021

Drilling Contractor: ARM Driller: David Felder Helper:

Drilling Fluid Used: None Drilling Method: Geoprobe

Length and Diameter of Coring Device: 5' x 3" Sampling Interval: 20 feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated Datum:

Total Depth Drilled: 20 Feet Hole Diameter: 3" Coring Device: Soil Line

Prepared By: B.Mayeux Hammer Weight: NA Hammer Drop: NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	OVM Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	4"				Grass roots with organic matter
4"	4'		4'=4.4		Silty sands 75%, density is firm, with fine grain sands, moist, dark brown
4'	6'		5'=0.0		Mainly all fine grain sands, no odors, orange to tan in colors
6'	15'		7'=5.8		Silty sands 75%, density is firm, with fine grain sands, moist, orange to tan
			10'=16.7		
			14'=5.0		
15'	18'				Mainly all fine grains, loose, 80%, gray, shell fragments, soft
18'	19'		19'=30.7		Same as above
19'	20'				Stiff clays, green, consistency is firm, minor shell fragments on top of clay

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well A#2-28 Project/No. 30088889 Page 1 of 1

Site Location Brenntag Charleston, SC

Drilling Started 7/28/2021 Drilling Completed 7/28/2021

Drilling Contractor ARM Driller David Felder Helper

Drilling Fluid Used None Drilling Method Geoprobe

Length and Diameter of Coring Device 5' x 3" Sampling Interval 20 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Total Depth Drilled 20 Feet Hole Diameter 3" Coring Device Soil Line

Prepared By B.Mayeux Hammer Weight NA Hammer Drop NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	4"				Grass roots with organic matter
4"	4.5'		4'=304		Silty sands 75%, density is firm, with fine grain sands, moist, dark brown
4.5'	10'		7'=24.4		Mainly all fine grain sands, no odors, orange to tan in colors, minor amounts of clays
10'	15'		10'=36.5		No return in sleeves, soft material-may have fine grain sands
15'	19'				Same as above-sloppy soils
19'	20'		19'=1.3		Stiff clays, green, consistency is firm, minor shell fragments on top of clay

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well A#2-29 Project/No. 30088889 Page 1 of 1

Site Location Brenntag Charleston, SC

Drilling Started 7/28/2021 Drilling Completed 7/28/2021

Drilling Contractor ARM Driller David Felder Helper

Drilling Fluid Used None Drilling Method Geoprobe

Length and Diameter of Coring Device 5' x 3" Sampling Interval 20 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Total Depth Drilled 20 Feet Hole Diameter 3" Coring Device Soil Line

Prepared By B.Mayeux Hammer Weight NA Hammer Drop NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	2'				Backfill material with rock ballets from old tracks
2'	4'		4'=6.9		Silty sands 75%, density is firm, with fine grain sands, moist, dark brown
					with clays about 20%
4'	5'				Mainly all fine grain sands, no odors, black to dark brown in colors, minor amounts of clay
5'	17'				No return in sleeves, soft material-may have fine grain sands
17'	19'		19'=6.8		Silty sands 80%, fine grain sands, density is soft, saturated, orange to tan, saturated
19'	20'				Stiff clays, green, consistency is firm, minor shell fragments on top of clay

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well A#2-30 Project/No. 30088889 Page 1 of 1

Site Location Brenntag Charleston, SC

Drilling Started 7/28/2021 Drilling Completed 7/28/2021

Drilling Contractor ARM Driller David Felder Helper

Drilling Fluid Used None Drilling Method Geoprobe

Length and Diameter of Coring Device 5' x 3" Sampling Interval 20 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Total Depth Drilled 20 Feet Hole Diameter 3" Coring Device Soil Line

Prepared By B.Mayeux Hammer Weight NA Hammer Drop NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	2'				Backfill material with rock ballets from old tracks
2'	4'		4'=0.0		Silty sands 75%, density is firm, with fine grain sands, moist, orange to brown
					with clays about 10%
4'	5'				Same as above but minor amounts of clays
5'	9'		7'=0.0		Silty sands about 80% with minor amounts of clays, density is soft, saturated,
					gray to tan
9'	13'		10'=0.0		Silty sands 80%, fine grain sands, density is soft, saturated, orange to tan, saturated
					clays approximately 15%, consistency is firm
13'	19'		19'=0.0		Silty fine grain sands 80%, density is soft, saturated, gray, shell fragments
19'	20'				Stiff clays, tan to gray, minor amounts of shell fragments on top of clay unit

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well A#2-31 Project/No. 30088889 Page 1 of 1

Site Location Brenntag Charleston, SC

Drilling Started 7/28/2021 Drilling Completed 7/28/2021

Drilling Contractor ARM Driller David Felder Helper

Drilling Fluid Used None Drilling Method Geoprobe

Length and Diameter of Coring Device 5' x 3" Sampling Interval 20 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Total Depth Drilled 20 Feet Hole Diameter 3" Coring Device Soil Line

Prepared By B.Mayeux Hammer Weight NA Hammer Drop NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	2'				Backfill material with rock ballets from old tracks
2'	3'				Silty sands 75%, density is firm, with fine grain sands, moist, orange to brown
					with clays about 10%
3'	5'		4'=0.4		Same as above but minor amounts of clays about 20%
5'	10'		6'=0.6		Same as above
10'	13'		10'=1.2		Silty sands 80%, fine grain sands, density is soft, saturated, orange to tan, saturated
					clays approximately 15%, consistency is firm
13'	19'		14'=0.0		Silty fine grain sands 80%, density is soft, saturated, gray, shell fragments
					lost some of the returns due to loose soils and shell fragments
19'	20'				Stiff clays, tan to gray, minor amounts of shell fragments on top of clay unit

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well A#2-32 Project/No. 30088889 Page 1 of 1

Site Location Brenntag Charleston, SC

Drilling Started 7/28/2021 Drilling Completed 7/28/2021

Drilling Contractor ARM Driller David Felder Helper

Drilling Fluid Used None Drilling Method Geoprobe

Length and Diameter of Coring Device 5' x 3" Sampling Interval 20 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Total Depth Drilled 20 Feet Hole Diameter 3" Coring Device Soil Line

Prepared By B.Mayeux Hammer Weight NA Hammer Drop NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	3'				Backfill material with rock ballets from old tracks with silty sands
3'	5'		4'=2.6		Silty sands 75%, density is firm, with fine grain sands, moist, orange to brown
					with clays about 10%
5'	10'		7'=4.5		Same as above
			10'=0.0		
10'	12.5'				Silty sands 80%, fine grain sands, density is soft, saturated, orange to tan, saturated
					clays approximately 20%, consistency is firm
12.5'	15'		14'=0.0		Silty fine grain sands 80%, density is soft, saturated, gray, shell fragments
					lost some of the returns due to loose soils and shell fragments
15'	19'				Lost cores
19'	20'				Stiff clays, tan some shell fragments on top of clays

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well A#2-33 Project/No. 30088889 Page 1 of 1

Site Location Brenntag Charleston, SC

Drilling Started 7/29/2021 Drilling Completed 7/29/2021

Drilling Contractor ARM Driller David Felder Helper

Drilling Fluid Used None Drilling Method Geoprobe

Length and Diameter of Coring Device 5' x 3" Sampling Interval 20 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Total Depth Drilled 20 Feet Hole Diameter 3" Coring Device Soil Line

Prepared By B.Mayeux Hammer Weight NA Hammer Drop NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	3'				Backfill material with rock ballets from old tracks with silty sands
3'	5'		4'=0.0		Silty sands 75%, density is firm, with fine grain sands, moist, orange to brown
					with clays about 10%
5'	10'		7'=0.0		Same as above
			10'=0.0		
10'	12.5'				Silty sands 80%, fine grain sands, density is soft, saturated, orange to tan, saturated
					clays approximately 20%, consistency is firm
12.5'	15'		14'=0.0		Silty fine grain sands 80%, density is soft, saturated, gray, shell fragments
					lost some of the returns due to loose soils and shell fragments
15'	19'				Lost cores
19'	20'				Stiff clays, tan some shell fragments on top of clays

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: A#2-34 | Project/No.: 30088889 | Page: 1 of 1

Site Location: Brenntag Charleston, SC | Drilling Started: 7/29/2021 | Drilling Completed: 7/29/2021

Drilling Contractor: ARM | Driller: David Felder | Helper:

Drilling Fluid Used: None | Drilling Method: Geoprobe

Length and Diameter of Coring Device: 5' x 3" | Sampling Interval: 20 feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated | Datum:

Total Depth Drilled: 20 Feet | Hole Diameter: 3" | Coring Device: Soil Line

Prepared By: B.Mayeux | Hammer Weight: NA | Hammer Drop: NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	3'				Backfill material with rock ballets from old tracks with silty sands
3'	5'		4'=0.0		Silty sands 75%, density is firm, with fine grain sands, moist, orange to brown
					with clays about 10%
5'	10'		7'=0.3		Same as above slight color change to dark red to brown
			10'=0.4		
10'	14'				No return, sloppy soils, saturated
14'	15'		14'=0.6		Silty fine grain sands 80%, density is soft, saturated, gray, shell fragments
					lost some of the returns due to loose soils and shell fragments
15'	19'				Lost cores
19'	20'		19'=0.4		Stiff clays, tan some shell fragments on top of clays

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well A#2-35 Project/No. 30088889 Page 1 of 1

Site Location Brenntag Charleston, SC

Drilling Started 7/29/2021 Drilling Completed 7/29/2021

Drilling Contractor ARM Driller David Felder Helper

Drilling Fluid Used None Drilling Method Geoprobe

Length and Diameter of Coring Device 5' x 3" Sampling Interval 20 feet

Land-Surface Elev. feet ☐ Surveyed ☐ Estimated Datum

Total Depth Drilled 20 Feet Hole Diameter 3" Coring Device Soil Line

Prepared By B.Mayeux Hammer Weight NA Hammer Drop NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	2.5'				Backfill material with rock ballets from old tracks with silty sands
2.5'	4'		4'=0.0		Silty sands 75%, density is firm, with fine grain sands, moist, orange to brown
					with clays about 10%
4'	10'		7'=0.0		Same as above slight color change to dark red to brown
			10'=0.0		small stringers of clays were observed about 6-7 ft bls
10'	13'				No return, sloppy soils, saturated
13'	15'		14'=6.8		Silty fine grain sands 80%, density is soft, saturated, gray, shell fragments
					lost some of the returns due to loose soils and shell fragments, 1/4 inch pebbles
15'	19'				Silty sands, fine grain about 80%, density soft, saturated, shell fragments
19'	20'		19'=0.0		Stiff clays, tan some shell fragments on top of clays

ARCADIS

SOIL CORE / SAMPLING LOG

Boring/Well: A#2-36 Project/No.: 30088889 Page: 1 of 1

Site Location: Brenntag Charleston, SC

Drilling Started: 7/29/2021 Drilling Completed: 7/29/2021

Drilling Contractor: ARM Driller: David Felder Helper:

Drilling Fluid Used: None Drilling Method: Geoprobe

Length and Diameter of Coring Device: 5' x 3" Sampling Interval: 20 feet

Land-Surface Elev.: feet ☐ Surveyed ☐ Estimated Datum:

Total Depth Drilled: 20 Feet Hole Diameter: 3" Coring Device: Soil Line

Prepared By: B.Mayeux Hammer Weight: NA Hammer Drop: NA ins.

Sampling Data:

Depth	Grab/Composite	Time	Laboratory Analysis
3'	Grab		VOC
5'	Grab		VOC

Soil Characterization:

Sample/Core Depth (Feet bls) From	To	Core Recovery (Feet)	PID Reading (ppm)	Blow Counts per 6 Inches	Sample/Core Description Soil type, %, Grain Size, Angularity, Grading, Consistency, Plasticity, Color, etc.
0.0	2.5'				Backfill material with rock ballets from old tracks with silty sands
2.5'	4'		4'=0.0		Silty sands 75%, density is firm, with fine grain sands, moist, orange to brown
					with clays about 10%
4'	10'		7'=0.0		Same as above slight color change to dark red to brown
			10'=0.0		small stringers of clays were observed about 6-7 ft bls
10'	15'				No return, sloppy soils, saturated
15'	19'		14'=0.0		Silty fine grain sands 80%, density is soft, saturated, gray, shell fragments
					lost some of the returns due to loose soils and shell fragments, some pebbles
	19'				Silty sands, fine grain about 80%, density soft, saturated, shell fragments
19'	20'		19'=0.0		Stiff clays, tan some shell fragments on top of clays

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRENNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: Charleston State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: **COUNTY:**
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**
A2-27

4. ABANDONMENT: ☒ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SANDS	3	16
FINE GRAIN SANDS	4	20
CLAY	1	21
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	≈ 5'-15'	
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER:
MW-12,916

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☒ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 7/29/2021
20 ft. Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.:
Type: ☐ PVC ☐ Galvanized
☐ Steel ☐ Other
In. to ft. depth
In. to ft. depth
Height: Above/Below
Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: Diam.:
Slot/Gauge: Length:
Set Between: and ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☒ No
Yield:

14. WATER QUALITY
Chemical Analysis ☒ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ft. to ft.
Effective size Uniformity coefficient

16. WELL GROUTED? ☒ Yes ☐ No
☒ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date Installed: Not Installed ☒
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Felder **CERT. NO.:** 2162
Address: (Print) ARM Environmental
P.O. Box 50285
Columbia, SC
Level: A B C D (circle one)
Telephone No.: 803 787-3784 Fax No.: 803 787-2587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Well Driller Date: 8/9/21

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert No. 1356

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRENNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: **COUNTY:**
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** A2-28

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SANDS	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	± 5'	
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12916

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 20 ft. Date Started: 7/29/2021 Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.:
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other BORING
in. to ft. depth
in. to ft. depth
Height: Above/Below Surface ft.
Weight lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN: BORING
Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft.
ft. and ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No BORING
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date Installed: Not installed ☑
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Felder CERT. NO.: 2162
Address: (Print) ARM Environmental P.O. Box 50285 Columbia, S.C.
Level: A B C D (circle one)
Telephone No.: 803 783-3314 Fax No.: 803 783-2587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Well Driller Date: 8/9/21

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert # 1356

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRENNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: **COUNTY:**
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** A2-29

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SAND	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	± 5'	
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12916

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 7/29/2021
20 ft. Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.: BOREHOLE
Type: ☐ PVC ☑ Galvanized ☐ Steel ☐ Other
_____ in. to _____ ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: BURIED Diam.: _____
Slot/Gauge: _____ Length: _____
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield: _____

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
BOREHOLE
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other _____
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: _____ ft. _____ direction
Type _____
Well Disinfected ☐ Yes ☐ No Type: _____ Amount: _____

18. PUMP: Date Installed: _____ Not Installed ☑
Mfr. Name: _____ Model No.: _____
H.P. _____ Volts _____ Length of drop pipe _____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Felder CERT. NO.: 2162
Address: (Print) AECOM Environment Level: A B C D (circle one)
P.O. Box 50285
Columbia, SC
Telephone No.: 803 787-3314 Fax No.: 803 787-0587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Date: 8/9/21
Well Driller

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert no. 1358

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRENNTAG MID-SOUTH (last) (first)
Address: 4200 Asalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: **COUNTY:**
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** A2-30

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SAND	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	± 5'	

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12916

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 7/29/2021
20 ft. Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.: Height: Above/Below
Type: ☐ PVC ☐ Galvanized Surface ft.
☐ Steel ☐ Other Weight lb./ft.
In. to ft. depth Drive Shoe? ☐ Yes ☐ No
In. to ft. depth

11. SCREEN:
Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft.
ft. and ft.
Sieve Analysis ☐ Yes (please enclose) ☐ No
NOTE: MULTIPLE SCREENS USE SECOND SHEET

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date installed: ☑ Not Installed
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Folder CERT. NO.: 2162
Address: (Print) ARM Environmental Level: A B C D (circle one)
P.O. Box 50785
Columbia, SC
Telephone No.: 803 787-3314 Fax No.: 803 787-2587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: David Folder Date: 8/2/21
Well Driller

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert # 1356

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRENNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: **COUNTY:**
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:**
AS-31

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SANDS	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	± 5'	
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12816

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 20 ft. Date Started: 7/29/2021 Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.:
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other BOREHOLE
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above/Below Surface ____ ft. Weight ____ lb./ft. Drive Shoe? ☐ Yes ☐ No

11. SCREEN: BOREHOLE
Type: Diam.:
Slot/Gauge: Length:
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No BOREHOLE
Installed from ____ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date installed: Not Installed ☑
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Feldon CERT. NO.: 2162
Address: (Print) ARM Environmental Level: A B C D (circle one)
P.O. Box 50285
Columbia, SC
Telephone No.: 803 783-3314 Fax No.: 803 783-2587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Well Driller Date: 8/9/21

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert no. 1358

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRUNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: **COUNTY:**
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** A2-32

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SAND	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	± 5'	

5. REMARKS:

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12816

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 20 ft. Date Started: 7/28/2021 Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.: Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other: BOREHOLE
in. to ft. depth
in. to ft. depth
Height: Above/Below Surface ft. Weight lb./ft. Drive Shoe? ☐ Yes ☐ No

11. SCREEN: BOREHOLE
Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft.
ft. and ft.
Sieve Analysis ☐ Yes (please enclose) ☐ No
NOTE: MULTIPLE SCREENS USE SECOND SHEET

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No BOREHOLE
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date Installed: Not Installed ☑
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Fiedler CERT. NO.: 2162
Address: (Print) ARM Environmental P.O. Box 50085 Columbia SC Level: A B C D (circle one)
Telephone No.: 803 783-3314 Fax No.: 803 783-3214

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Well Driller Date: 8/9/21

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert no. 1356

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRENNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: COUNTY:
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: A2-33

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SAND	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	~5'	
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12916

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 7/29/2021
20 ft. Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.: Height: Above/Below
Type: ☐ PVC ☐ Galvanized Surface ft.
☐ Steel ☐ Other Weight lb./ft.
in. to ft. depth Drive Shoe? ☐ Yes ☐ No
in. to ft. depth

11. SCREEN:
Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft. NOTE: MULTIPLE SCREENS
ft. and ft. USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date installed: Not Installed ☑
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Felder CERT. NO.: 2162
Address: (Print) Apex Environmental Level: A B C D (circle one)
P.O. Box 50285
Columbia SC
Telephone No.: 803 783-6314 Fax No.: 803 783-2587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Well Driller Date: 8/9/21

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert no. 1356

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRENNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: **COUNTY:**
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** A2-34

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SAND	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	~5'	
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12916

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) 20 ft. Date Started: 7/29/2021 Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.: Height: Above/Below
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other BOREHOLE Surface ft.
Weight lb./ft.
in. to ft. depth Drive Shoe? ☐ Yes ☐ No
in. to ft. depth

11. SCREEN:
Type: Diam.:
Slot/Gauge: Length:
Set Between: ft. and ft.
ft. and ft.
Sieve Analysis ☐ Yes (please enclose) ☐ No
NOTE: MULTIPLE SCREENS USE SECOND SHEET

12. STATIC WATER LEVEL ~5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
ft. after hrs. Pumping G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from BORING ft. to ft.
Effective size Uniformity Coefficient

16. WELL GROUTED? ☑ Yes ☐ No
☐ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ft. direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date Installed: Not Installed ☑
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Felder **CERT. NO.:** 2162
Address: (Print) Aqua Environmental P.O. Box 50285 Columbia SC
Level: A B C D (circle one)
Telephone No.: 803 783-3714 Fax No.: 803 783-2587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: Well Driller Date: 8/9/21

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert no. 1358

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal Information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRUNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: **COUNTY:**
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: **PUBLIC SYSTEM NUMBER:** A2-35

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SANDS	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	~5'	
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12916

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 7/29/2021
20 ft. Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.: ~~BOREHOLE~~
Type: ☐ PVC ☐ Galvanized
☐ Steel ☐ Other
____ in. to ____ ft. depth
____ in. to ____ ft. depth
Height: Above/Below
Surface ____ ft.
Weight ____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: ~~BOREHOLE~~ Diam.:
Slot/Gauge: Length:
Set Between: ____ ft. and ____ ft.
____ ft. and ____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
____ ft. after ____ hrs. Pumping ____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from ~~BORING~~ ft. to ____ ft.
Effective size ____ Uniformity Coefficient ____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other ____
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type ____
Well Disinfected ☐ Yes ☐ No Type: ____ Amount: ____

18. PUMP: Date Installed: ____ Not Installed ☑
Mfr. Name: ____ Model No.: ____
H.P. ____ Volts ____ Length of drop pipe ____ ft. Capacity ____ gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Felder CERT. NO.: 2162
Address: (Print) ATM Environmental P.O. Box 50285 Columbia SC
Level: A B C D (circle one)
Telephone No.: 803 783-3314 Fax No.: 803 783-2587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: David Felder Date: 8/9/21
Well Driller

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert no. 1356

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Water Well Record
Bureau of Water
2600 Bull Street, Columbia, SC 29201-1708; (803) 898-4300

Note: Personal information provided on this document is subject to public scrutiny or release.

1. WELL OWNER INFORMATION:
Name: BRUNTAG MID-SOUTH (last) (first)
Address: 4200 Azalea Drive
City: CHARLESTON State: S.C. Zip: 29405
Telephone: Work: 843-744-7421 Home:

2. LOCATION OF WELL: COUNTY:
Name:
Street Address: SAME AS ABOVE
City: Zip:
Latitude: Longitude:

3. PUBLIC SYSTEM NAME: PUBLIC SYSTEM NUMBER: A2-36

4. ABANDONMENT: ☑ Yes ☐ No
Give Details Below
Grouted Depth: from 0 ft. to 20 ft.

Formation Description	*Thickness of Stratum	Depth to Bottom of Stratum
SILTY SANDS	13	13
SILTY CLAYEY SAND	3	16
FINE GRAIN SAND	3	19
CLAY		20'
*Indicate Water Bearing Zones (Use a 2nd sheet if needed)	± 5'	
5. REMARKS:		

6. TYPE: ☐ Mud Rotary ☐ Jetted ☒ Bored
☐ Dug ☐ Air Rotary ☐ Driven
☐ Cable tool ☐ Other

7. PERMIT NUMBER: MW-12916

8. USE:
☐ Residential ☐ Public Supply ☐ Process
☐ Irrigation ☐ Air Conditioning ☐ Emergency
☑ Test Well ☐ Monitor Well ☐ Replacement

9. WELL DEPTH (completed) Date Started: 7/29/2021
20 ft. Date Completed: 7/29/2021

10. CASING: ☐ Threaded ☐ Welded
Diam.:
Type: ☐ PVC ☐ Galvanized ☐ Steel ☐ Other
_____ in. to 20 ft. depth
_____ in. to _____ ft. depth
Height: Above/Below Surface _____ ft.
Weight _____ lb./ft.
Drive Shoe? ☐ Yes ☐ No

11. SCREEN:
Type: _____ Diam.:
Slot/Gauge: _____ Length:
Set Between: _____ ft. and _____ ft.
_____ ft. and _____ ft.
NOTE: MULTIPLE SCREENS USE SECOND SHEET
Sieve Analysis ☐ Yes (please enclose) ☐ No

12. STATIC WATER LEVEL 5' ft. below land surface after 24 hours

13. PUMPING LEVEL Below Land Surface.
_____ ft. after _____ hrs. Pumping _____ G.P.M.
Pumping Test: ☐ Yes (please enclose) ☑ No
Yield:

14. WATER QUALITY
Chemical Analysis ☑ Yes ☐ No Bacterial Analysis ☐ Yes ☐ No
Please enclose lab results.

15. ARTIFICIAL FILTER (filter pack) ☐ Yes ☐ No
Installed from _____ ft. to _____ ft.
Effective size _____ Uniformity Coefficient _____

16. WELL GROUTED? ☑ Yes ☐ No
☑ Neat Cement ☐ Bentonite ☐ Bentonite/Cement ☐ Other
Depth: From 0 ft. to 20 ft.

17. NEAREST SOURCE OF POSSIBLE CONTAMINATION: ____ ft. ____ direction
Type
Well Disinfected ☐ Yes ☐ No Type: Amount:

18. PUMP: Date Installed: Not Installed ☑
Mfr. Name: Model No.:
H.P. Volts Length of drop pipe ft. Capacity gpm
TYPE: ☐ Submersible ☐ Jet (shallow) ☐ Turbine
☐ Jet (deep) ☐ Reciprocating ☐ Centrifugal

19. WELL DRILLER: David Felder CERT. NO.: 2162
Address: (Print) Apex Environmental P.O. Box 50055 Columbia, SC
Level: A B C D (circle one)
Telephone No.: 803 783-3314 Fax No.: 803 787-8587

20. WATER WELL DRILLER'S CERTIFICATION: This well was drilled under my direction and this report is true to the best of my knowledge and belief.

Signed: _____ Well Driller Date: 8/9/21

If D Level Driller, provide supervising driller's name:
Andrew Wilson, cert no. 1358

DHEC 1903 (08/2017)

COPY 1 MAIL TO SCDHEC, COPY 2 TO WELL OWNER, COPY 3 TO WELL DRILLER

Appendix B

Analytical Reports for Soil and Water

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: FA87682

Sampling Dates: 07/28/21 - 07/29/21

Report to:

ARCADIS Geraghty & Miller

jbeckner@arcadis-us.com

ATTN: Jeff Beckner

Total number of pages in report: 54

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, UT, VT, WA, WV

Sections: 1 2 3 4

Table of Contents

Sample Summary

ARCADIS Geraghty & Miller

Job No: FA87682

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							
FA87682-1	07/28/21	13:30	CL	07/30/21	SO	Soil	A2-27 (3')
FA87682-2	07/28/21	13:35	CL	07/30/21	SO	Soil	A2-27 (5')
FA87682-3	07/28/21	14:05	CL	07/30/21	SO	Soil	A2-28 (3')
FA87682-4	07/28/21	14:10	CL	07/30/21	SO	Soil	A2-28 (5')
FA87682-5	07/28/21	15:05	CL	07/30/21	SO	Soil	A2-29 (3')
FA87682-6	07/28/21	15:10	CL	07/30/21	SO	Soil	A2-29 (5')
FA87682-7	07/28/21	16:00	CL	07/30/21	SO	Soil	A2-30 (3')
FA87682-8	07/28/21	16:05	CL	07/30/21	SO	Soil	A2-30 (5')
FA87682-9	07/28/21	16:35	CL	07/30/21	SO	Soil	A2-31 (3')
FA87682-10	07/28/21	16:40	CL	07/30/21	SO	Soil	A2-31 (5')
FA87682-11	07/28/21	17:25	CL	07/30/21	SO	Soil	A2-32 (3')
FA87682-12	07/28/21	17:30	CL	07/30/21	SO	Soil	A2-32 (5')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

ARCADIS Geraghty & Miller

Job No: FA87682

Brenntag; Charleston, SC
Project No: SC000204.0011.00001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA87682-13	07/29/21	08:25	CL	07/30/21	SO	Soil	A2-33 (3')
FA87682-14	07/29/21	08:30	CL	07/30/21	SO	Soil	A2-33 (5')
FA87682-15	07/29/21	08:55	CL	07/30/21	SO	Soil	A2-34 (3')
FA87682-16	07/29/21	09:00	CL	07/30/21	SO	Soil	A2-34 (5')
FA87682-17	07/29/21	09:40	CL	07/30/21	SO	Soil	A2-35 (3')
FA87682-18	07/29/21	09:45	CL	07/30/21	SO	Soil	A2-35 (5')
FA87682-19	07/29/21	10:20	CL	07/30/21	SO	Soil	A2-36 (3')
FA87682-20	07/29/21	10:25	CL	07/30/21	SO	Soil	A2-36 (5')
FA87682-21	07/28/21	00:00	CL	07/30/21	AQ	Trip Blank Soil	TRIP BLANK-01

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: FA87682
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 07/28/21 thru 07/29/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA87682-1	**A2-27 (3')**					
Methylene Chloride [a]		7.3 J	12	6.8	ug/kg	SW846 8260D
Trichloroethylene		4.3	3.1	0.62	ug/kg	SW846 8260D
FA87682-2	**A2-27 (5')**					
Methylene Chloride [b]		12.8 JB	16	8.7	ug/kg	SW846 8260D
Trichloroethylene		4.7	3.9	0.79	ug/kg	SW846 8260D
FA87682-3	**A2-28 (3')**					
cis-1,2-Dichloroethylene		36.4	3.7	1.0	ug/kg	SW846 8260D
Trichloroethylene		36.3	3.7	0.74	ug/kg	SW846 8260D
Vinyl Chloride		1.5 J	3.7	0.74	ug/kg	SW846 8260D
FA87682-4	**A2-28 (5')**					
Carbon Disulfide		1.8 J	3.1	0.63	ug/kg	SW846 8260D
1,1-Dichloroethylene		39.6	3.1	0.63	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		31900	8200	2300	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene [c]		374 E	3.1	0.63	ug/kg	SW846 8260D
Tetrachloroethylene		66.9	3.1	0.81	ug/kg	SW846 8260D
Trichloroethylene		162000	8200	1600	ug/kg	SW846 8260D
Vinyl Chloride [c]		265 E	3.1	0.63	ug/kg	SW846 8260D
Xylene (total)		2.3 J	9.4	1.3	ug/kg	SW846 8260D
FA87682-5	**A2-29 (3')**					
Carbon Disulfide		1.7 J	3.5	0.70	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		542	230	65	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene		7.8	3.5	0.70	ug/kg	SW846 8260D
Methylene Chloride [b]		12.3 JB	14	7.7	ug/kg	SW846 8260D
Vinyl Chloride		13.5	3.5	0.70	ug/kg	SW846 8260D
FA87682-6	**A2-29 (5')**					
2-Butanone (MEK)		8.2 J	16	4.6	ug/kg	SW846 8260D
Carbon Disulfide		4.5	3.2	0.64	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		6.8	3.2	0.88	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene		2.1 J	3.2	0.64	ug/kg	SW846 8260D
Methylene Chloride [b]		7.3 JB	13	7.0	ug/kg	SW846 8260D
Trichloroethylene		2.0 J	3.2	0.64	ug/kg	SW846 8260D
Vinyl Chloride		3.6	3.2	0.64	ug/kg	SW846 8260D

Summary of Hits

Job Number: FA87682
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 07/28/21 thru 07/29/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA87682-7	**A2-30 (3')**					
1,1-Dichloroethylene		2.0 J	3.3	0.65	ug/kg	SW846 8260D
cis-1,2-Dichloroethylene		51.3	3.3	0.90	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene		18.9	3.3	0.65	ug/kg	SW846 8260D
Methylene Chloride [a]		8.3 J	13	7.2	ug/kg	SW846 8260D
Trichloroethylene		353	330	66	ug/kg	SW846 8260D
Vinyl Chloride		1.6 J	3.3	0.65	ug/kg	SW846 8260D
FA87682-8	**A2-30 (5')**					
cis-1,2-Dichloroethylene		16.1	3.4	0.94	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene		1.6 J	3.4	0.68	ug/kg	SW846 8260D
Trichloroethylene		9.3	3.4	0.68	ug/kg	SW846 8260D
FA87682-9	**A2-31 (3')**					
cis-1,2-Dichloroethylene		2.6 J	3.0	0.83	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene		2.6 J	3.0	0.60	ug/kg	SW846 8260D
Trichloroethylene		27.9	3.0	0.60	ug/kg	SW846 8260D
FA87682-10	**A2-31 (5')**					
Trichloroethylene		2.6 J	3.4	0.67	ug/kg	SW846 8260D
FA87682-11	**A2-32 (3')**					
Methylene Chloride [d]		7.6 J	13	7.1	ug/kg	SW846 8260D
FA87682-12	**A2-32 (5')**					
No hits reported in this sample.						
FA87682-13	**A2-33 (3')**					
Acetone		112 J	140	70	ug/kg	SW846 8260D
2-Butanone (MEK)		12.4 J	18	5.1	ug/kg	SW846 8260D
Carbon Disulfide		2.1 J	3.5	0.70	ug/kg	SW846 8260D
Methylene Chloride [b]		10.9 JB	14	7.7	ug/kg	SW846 8260D
FA87682-14	**A2-33 (5')**					
Methylene Chloride [b]		8.6 JB	13	7.3	ug/kg	SW846 8260D

Summary of Hits

Job Number: FA87682
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 07/28/21 thru 07/29/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA87682-15	**A2-34 (3')**					
Acetone		97.7 J	110	53	ug/kg	SW846 8260D
2-Butanone (MEK)		16.4	13	3.9	ug/kg	SW846 8260D
FA87682-16	**A2-34 (5')**					
Methylene Chloride [b]		9.9 JB	14	7.9	ug/kg	SW846 8260D
FA87682-17	**A2-35 (3')**					
cis-1,2-Dichloroethylene		38.8	3.2	0.89	ug/kg	SW846 8260D
trans-1,2-Dichloroethylene		2.0 J	3.2	0.65	ug/kg	SW846 8260D
Methylcyclohexane		1.4 J	3.2	1.1	ug/kg	SW846 8260D
Trichloroethylene		23.2	3.2	0.65	ug/kg	SW846 8260D
FA87682-18	**A2-35 (5')**					
No hits reported in this sample.						
FA87682-19	**A2-36 (3')**					
No hits reported in this sample.						
FA87682-20	**A2-36 (5')**					
Acetone		78.2 J	130	65	ug/kg	SW846 8260D
2-Butanone (MEK)		8.6 J	16	4.8	ug/kg	SW846 8260D
FA87682-21	**TRIP BLANK-01**					
No hits reported in this sample.						

(a) Suspected laboratory contaminant.
(b) Suspected laboratory contaminant. Associated CCV and BS recovery outside control limits high.
(c) Compound was below calibration range in higher dilution.
(d) Internal standard response(s) outside method criteria due to sample matrix interference; associated analyte(s) ND. Suspected laboratory contaminant.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	A2-27 (3')		
Lab Sample ID:	FA87682-1	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	85.9
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102103.D	1	08/03/21 17:37	SP	n/a	n/a	VF3651
Run #2							

	Initial Weight	Final Volume
Run #1	9.45 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	120	62	ug/kg	
71-43-2	Benzene	ND	3.1	0.75	ug/kg	
75-27-4	Bromodichloromethane	ND	3.1	0.62	ug/kg	
75-25-2	Bromoform	ND	3.1	0.62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	15	4.5	ug/kg	
75-15-0	Carbon Disulfide	ND	3.1	0.62	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.1	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	3.1	0.62	ug/kg	
75-00-3	Chloroethane	ND	3.1	1.2	ug/kg	
67-66-3	Chloroform	ND	3.1	0.82	ug/kg	
110-82-7	Cyclohexane	ND	3.1	0.77	ug/kg	
124-48-1	Dibromochloromethane	ND	3.1	0.62	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.1	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.1	0.62	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.1	1.2	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.1	0.62	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.1	0.62	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.1	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.1	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.1	0.62	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.1	0.62	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.1	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.1	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.1	0.62	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	0.62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	0.62	ug/kg	
100-41-4	Ethylbenzene	ND	3.1	0.62	ug/kg	
76-13-1	Freon 113	ND	3.1	0.81	ug/kg	
591-78-6	2-Hexanone	ND	15	4.6	ug/kg	
98-82-8	Isopropylbenzene	ND	3.1	0.62	ug/kg	
79-20-9	Methyl Acetate	ND	15	5.5	ug/kg	
74-83-9	Methyl Bromide	ND	3.1	1.2	ug/kg	

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:	A2-27 (3')		
Lab Sample ID:	FA87682-1	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	85.9
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.1	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	3.1	1.0	ug/kg	
75-09-2	Methylene Chloride [a]	7.3	12	6.8	ug/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	15	4.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.1	0.62	ug/kg	
100-42-5	Styrene	ND	3.1	0.62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	0.62	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.1	0.79	ug/kg	
108-88-3	Toluene	ND	12	6.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.1	0.62	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.1	0.62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.1	0.62	ug/kg	
79-01-6	Trichloroethylene	4.3	3.1	0.62	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.1	1.2	ug/kg	
75-01-4	Vinyl Chloride	ND	3.1	0.62	ug/kg	
1330-20-7	Xylene (total)	ND	9.2	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		75-124%
17060-07-0	1,2-Dichloroethane-D4	105%		72-135%
2037-26-5	Toluene-D8	102%		75-126%
460-00-4	4-Bromofluorobenzene	118%		71-133%

(a) Suspected laboratory contaminant.

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:	A2-27 (5')		
Lab Sample ID:	FA87682-2	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	73.3
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102143.D	1	08/05/21 12:22	SP	n/a	n/a	VF3653
Run #2 [a]	F0102104.D	1	08/03/21 18:01	SP	n/a	n/a	VF3651

	Initial Weight	Final Volume
Run #1	8.67 g	5.0 ml
Run #2	8.67 g	5.0 ml

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	160	79	ug/kg	
71-43-2	Benzene	ND	3.9	0.96	ug/kg	
75-27-4	Bromodichloromethane	ND	3.9	0.79	ug/kg	
75-25-2	Bromoform	ND	3.9	0.79	ug/kg	
78-93-3	2-Butanone (MEK)	ND	20	5.7	ug/kg	
75-15-0	Carbon Disulfide	ND	3.9	0.79	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.9	0.80	ug/kg	
108-90-7	Chlorobenzene	ND	3.9	0.79	ug/kg	
75-00-3	Chloroethane [b]	ND	3.9	1.6	ug/kg	
67-66-3	Chloroform	ND	3.9	1.0	ug/kg	
110-82-7	Cyclohexane	ND	3.9	0.98	ug/kg	
124-48-1	Dibromochloromethane	ND	3.9	0.79	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.9	0.79	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.9	1.6	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.9	0.79	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.9	0.79	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.9	0.90	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.9	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.9	0.79	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.9	0.79	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.9	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.9	0.79	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.9	0.79	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.9	0.79	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.9	0.79	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.79	ug/kg	
76-13-1	Freon 113	ND	3.9	1.0	ug/kg	
591-78-6	2-Hexanone	ND	20	5.9	ug/kg	
98-82-8	Isopropylbenzene	ND	3.9	0.79	ug/kg	
79-20-9	Methyl Acetate	ND	20	7.0	ug/kg	
74-83-9	Methyl Bromide	ND	3.9	1.6	ug/kg	

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:	A2-27 (5')		
Lab Sample ID:	FA87682-2	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	73.3
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.9	1.6	ug/kg	
108-87-2	Methylcyclohexane	ND	3.9	1.3	ug/kg	
75-09-2	Methylene Chloride [c]	12.8	16	8.7	ug/kg	JB
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	20	5.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.9	0.79	ug/kg	
100-42-5	Styrene	ND	3.9	0.79	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.9	0.79	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.9	1.0	ug/kg	
108-88-3	Toluene	ND	16	7.9	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.9	0.79	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.9	0.79	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.9	0.79	ug/kg	
79-01-6	Trichloroethylene	4.7	3.9	0.79	ug/kg	
75-69-4	Trichlorofluoromethane [b]	ND	3.9	1.6	ug/kg	
75-01-4	Vinyl Chloride	ND	3.9	0.79	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	112%	111%	75-124%
17060-07-0	1,2-Dichloroethane-D4	113%	111%	72-135%
2037-26-5	Toluene-D8	100%	101%	75-126%
460-00-4	4-Bromofluorobenzene	98%	107%	71-133%

(a) Confirmation run for internal standard areas.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Suspected laboratory contaminant. Associated CCV and BS recovery outside control limits high.

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:	A2-28 (3')		
Lab Sample ID:	FA87682-3	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	87.5
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102105.D	1	08/03/21 18:25	SP	n/a	n/a	VF3651
Run #2							

	Initial Weight	Final Volume
Run #1	7.75 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	150	74	ug/kg	
71-43-2	Benzene	ND	3.7	0.90	ug/kg	
75-27-4	Bromodichloromethane	ND	3.7	0.74	ug/kg	
75-25-2	Bromoform	ND	3.7	0.74	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.4	ug/kg	
75-15-0	Carbon Disulfide	ND	3.7	0.74	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.7	0.75	ug/kg	
108-90-7	Chlorobenzene	ND	3.7	0.74	ug/kg	
75-00-3	Chloroethane	ND	3.7	1.5	ug/kg	
67-66-3	Chloroform	ND	3.7	0.98	ug/kg	
110-82-7	Cyclohexane	ND	3.7	0.92	ug/kg	
124-48-1	Dibromochloromethane	ND	3.7	0.74	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.7	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.7	0.74	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.7	1.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.7	0.74	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.7	0.74	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.7	0.85	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.7	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.7	0.74	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.7	0.74	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	36.4	3.7	1.0	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.7	0.74	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.7	0.74	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.7	0.74	ug/kg	
100-41-4	Ethylbenzene	ND	3.7	0.74	ug/kg	
76-13-1	Freon 113	ND	3.7	0.97	ug/kg	
591-78-6	2-Hexanone	ND	18	5.5	ug/kg	
98-82-8	Isopropylbenzene	ND	3.7	0.74	ug/kg	
79-20-9	Methyl Acetate	ND	18	6.6	ug/kg	
74-83-9	Methyl Bromide	ND	3.7	1.5	ug/kg	

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:	A2-28 (3')		
Lab Sample ID:	FA87682-3	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	87.5
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.7	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	3.7	1.3	ug/kg	
75-09-2	Methylene Chloride	ND	15	8.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.7	0.74	ug/kg	
100-42-5	Styrene	ND	3.7	0.74	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.7	0.74	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.7	0.94	ug/kg	
108-88-3	Toluene	ND	15	7.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.7	0.74	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.7	0.74	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.7	0.74	ug/kg	
79-01-6	Trichloroethylene	36.3	3.7	0.74	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.7	1.5	ug/kg	
75-01-4	Vinyl Chloride	1.5	3.7	0.74	ug/kg	J
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		75-124%
17060-07-0	1,2-Dichloroethane-D4	108%		72-135%
2037-26-5	Toluene-D8	102%		75-126%
460-00-4	4-Bromofluorobenzene	112%		71-133%

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:	A2-28 (5')		
Lab Sample ID:	FA87682-4	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	81.3
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102106.D	1	08/03/21 18:49	SP	n/a	n/a	VF3651
Run #2	F0102144.D	1	08/05/21 12:46	SP	n/a	n/a	VF3653

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.77 g	5.0 ml	
Run #2	10.4 g	5.0 ml	2.5 ul

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	63	ug/kg	
71-43-2	Benzene	ND	3.1	0.77	ug/kg	
75-27-4	Bromodichloromethane	ND	3.1	0.63	ug/kg	
75-25-2	Bromoform	ND	3.1	0.63	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.6	ug/kg	
75-15-0	Carbon Disulfide	1.8	3.1	0.63	ug/kg	J
56-23-5	Carbon Tetrachloride	ND	3.1	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	3.1	0.63	ug/kg	
75-00-3	Chloroethane	ND	3.1	1.3	ug/kg	
67-66-3	Chloroform	ND	3.1	0.84	ug/kg	
110-82-7	Cyclohexane	ND	3.1	0.79	ug/kg	
124-48-1	Dibromochloromethane	ND	3.1	0.63	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.1	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.1	0.63	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.1	1.3	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.1	0.63	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.1	0.63	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.1	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.1	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.1	0.63	ug/kg	
75-35-4	1,1-Dichloroethylene	39.6	3.1	0.63	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	31900 [a]	8200	2300	ug/kg	
156-60-5	trans-1,2-Dichloroethylene [b]	374	3.1	0.63	ug/kg	E
78-87-5	1,2-Dichloropropane	ND	3.1	0.63	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	0.63	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	0.63	ug/kg	
100-41-4	Ethylbenzene	ND	3.1	0.63	ug/kg	
76-13-1	Freon 113	ND	3.1	0.83	ug/kg	
591-78-6	2-Hexanone	ND	16	4.7	ug/kg	
98-82-8	Isopropylbenzene	ND	3.1	0.63	ug/kg	
79-20-9	Methyl Acetate	ND	16	5.6	ug/kg	
74-83-9	Methyl Bromide	ND	3.1	1.3	ug/kg	

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:	A2-28 (5')		
Lab Sample ID:	FA87682-4	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	81.3
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.1	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	3.1	1.1	ug/kg	
75-09-2	Methylene Chloride	ND	13	6.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.1	0.63	ug/kg	
100-42-5	Styrene	ND	3.1	0.63	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	0.63	ug/kg	
127-18-4	Tetrachloroethylene	66.9	3.1	0.81	ug/kg	
108-88-3	Toluene	ND	13	6.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.1	0.63	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.1	0.63	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.1	0.63	ug/kg	
79-01-6	Trichloroethylene	162000 [a]	8200	1600	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.1	1.3	ug/kg	
75-01-4	Vinyl Chloride [b]	265	3.1	0.63	ug/kg	E
1330-20-7	Xylene (total)	2.3	9.4	1.3	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	116%	75-124%
17060-07-0	1,2-Dichloroethane-D4	98%	113%	72-135%
2037-26-5	Toluene-D8	98%	98%	75-126%
460-00-4	4-Bromofluorobenzene	99%	96%	71-133%

(a) Result is from Run# 2
(b) Compound was below calibration range in higher dilution.

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:	A2-29 (3')		
Lab Sample ID:	FA87682-5	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	80.8
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102145.D	1	08/05/21 13:10	SP	n/a	n/a	VF3653
Run #2	F0102146.D	1	08/05/21 13:33	SP	n/a	n/a	VF3653
Run #3 [a]	F0102107.D	1	08/03/21 19:12	SP	n/a	n/a	VF3651

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	8.87 g	5.0 ml	
Run #2	8.87 g	5.0 ml	100 ul
Run #3	11.1 g	5.0 ml	

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	140	70	ug/kg	
71-43-2	Benzene	ND	3.5	0.85	ug/kg	
75-27-4	Bromodichloromethane	ND	3.5	0.70	ug/kg	
75-25-2	Bromoform	ND	3.5	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	5.1	ug/kg	
75-15-0	Carbon Disulfide	1.7	3.5	0.70	ug/kg	J
56-23-5	Carbon Tetrachloride	ND	3.5	0.71	ug/kg	
108-90-7	Chlorobenzene	ND	3.5	0.70	ug/kg	
75-00-3	Chloroethane [b]	ND	3.5	1.4	ug/kg	
67-66-3	Chloroform	ND	3.5	0.93	ug/kg	
110-82-7	Cyclohexane	ND	3.5	0.87	ug/kg	
124-48-1	Dibromochloromethane	ND	3.5	0.70	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.5	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.5	0.70	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.5	1.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.5	0.70	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.5	0.70	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.5	0.80	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.5	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.5	0.70	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.5	0.70	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	542 [c]	230	65	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	7.8	3.5	0.70	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.5	0.70	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.5	0.70	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.5	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	3.5	0.70	ug/kg	
76-13-1	Freon 113	ND	3.5	0.92	ug/kg	
591-78-6	2-Hexanone	ND	17	5.2	ug/kg	
98-82-8	Isopropylbenzene	ND	3.5	0.70	ug/kg	

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:	A2-29 (3')		
Lab Sample ID:	FA87682-5	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	80.8
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
79-20-9	Methyl Acetate	ND	17	6.2	ug/kg	
74-83-9	Methyl Bromide	ND	3.5	1.4	ug/kg	
74-87-3	Methyl Chloride	ND	3.5	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	3.5	1.2	ug/kg	
75-09-2	Methylene Chloride [d]	12.3	14	7.7	ug/kg	JB
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.2	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.5	0.70	ug/kg	
100-42-5	Styrene	ND	3.5	0.70	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.5	0.70	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.5	0.89	ug/kg	
108-88-3	Toluene	ND	14	7.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.5	0.70	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.5	0.70	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.5	0.70	ug/kg	
79-01-6	Trichloroethylene	ND	3.5	0.70	ug/kg	
75-69-4	Trichlorofluoromethane [b]	ND	3.5	1.4	ug/kg	
75-01-4	Vinyl Chloride	13.5	3.5	0.70	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Run# 3	Limits
1868-53-7	Dibromofluoromethane	105%	107%	101%	75-124%
17060-07-0	1,2-Dichloroethane-D4	106%	107%	105%	72-135%
2037-26-5	Toluene-D8	96%	97%	99%	75-126%
460-00-4	4-Bromofluorobenzene	98%	94%	94%	71-133%

(a) Confirmation run.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Result is from Run# 2
(d) Suspected laboratory contaminant. Associated CCV and BS recovery outside control limits high.

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:	A2-29 (5')		
Lab Sample ID:	FA87682-6	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.8
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102147.D	1	08/05/21 13:57	SP	n/a	n/a	VF3653
Run #2 [a]	F0102108.D	1	08/03/21 19:36	SP	n/a	n/a	VF3651

	Initial Weight	Final Volume
Run #1	9.45 g	5.0 ml
Run #2	10.9 g	5.0 ml

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	64	ug/kg	
71-43-2	Benzene	ND	3.2	0.78	ug/kg	
75-27-4	Bromodichloromethane	ND	3.2	0.64	ug/kg	
75-25-2	Bromoform	ND	3.2	0.64	ug/kg	
78-93-3	2-Butanone (MEK)	8.2	16	4.6	ug/kg	J
75-15-0	Carbon Disulfide	4.5	3.2	0.64	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.2	0.65	ug/kg	
108-90-7	Chlorobenzene	ND	3.2	0.64	ug/kg	
75-00-3	Chloroethane [b]	ND	3.2	1.3	ug/kg	
67-66-3	Chloroform	ND	3.2	0.85	ug/kg	
110-82-7	Cyclohexane	ND	3.2	0.80	ug/kg	
124-48-1	Dibromochloromethane	ND	3.2	0.64	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.2	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.2	0.64	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.2	1.3	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.2	0.64	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.2	0.64	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.2	0.73	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.2	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.2	0.64	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.2	0.64	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	6.8	3.2	0.88	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	2.1	3.2	0.64	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	3.2	0.64	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.2	0.64	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.2	0.64	ug/kg	
100-41-4	Ethylbenzene	ND	3.2	0.64	ug/kg	
76-13-1	Freon 113	ND	3.2	0.84	ug/kg	
591-78-6	2-Hexanone	ND	16	4.8	ug/kg	
98-82-8	Isopropylbenzene	ND	3.2	0.64	ug/kg	
79-20-9	Methyl Acetate	ND	16	5.7	ug/kg	
74-83-9	Methyl Bromide	ND	3.2	1.3	ug/kg	

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:	A2-29 (5')		
Lab Sample ID:	FA87682-6	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.8
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.2	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	3.2	1.1	ug/kg	
75-09-2	Methylene Chloride [c]	7.3	13	7.0	ug/kg	JB
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.2	0.64	ug/kg	
100-42-5	Styrene	ND	3.2	0.64	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.2	0.64	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.2	0.82	ug/kg	
108-88-3	Toluene	ND	13	6.4	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.2	0.64	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.2	0.64	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.2	0.64	ug/kg	
79-01-6	Trichloroethylene	2.0	3.2	0.64	ug/kg	J
75-69-4	Trichlorofluoromethane [b]	ND	3.2	1.3	ug/kg	
75-01-4	Vinyl Chloride	3.6	3.2	0.64	ug/kg	
1330-20-7	Xylene (total)	ND	9.6	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%	105%	75-124%
17060-07-0	1,2-Dichloroethane-D4	108%	106%	72-135%
2037-26-5	Toluene-D8	98%	96%	75-126%
460-00-4	4-Bromofluorobenzene	94%	96%	71-133%

(a) Confirmation run.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Suspected laboratory contaminant. Associated CCV and BS recovery outside control limits high.

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:	A2-30 (3')		
Lab Sample ID:	FA87682-7	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	71.2
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102109.D	1	08/03/21 20:00	SP	n/a	n/a	VF3651
Run #2	F0102148.D	1	08/05/21 14:21	SP	n/a	n/a	VF3653

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.8 g	5.0 ml	
Run #2	7.64 g	5.0 ml	100 ul

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	65	ug/kg	
71-43-2	Benzene	ND	3.3	0.80	ug/kg	
75-27-4	Bromodichloromethane	ND	3.3	0.65	ug/kg	
75-25-2	Bromoform	ND	3.3	0.65	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.7	ug/kg	
75-15-0	Carbon Disulfide	ND	3.3	0.65	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.3	0.67	ug/kg	
108-90-7	Chlorobenzene	ND	3.3	0.65	ug/kg	
75-00-3	Chloroethane	ND	3.3	1.3	ug/kg	
67-66-3	Chloroform	ND	3.3	0.87	ug/kg	
110-82-7	Cyclohexane	ND	3.3	0.82	ug/kg	
124-48-1	Dibromochloromethane	ND	3.3	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.3	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.3	0.65	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.3	1.3	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.3	0.65	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.3	0.65	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.3	0.75	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.3	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.3	0.65	ug/kg	
75-35-4	1,1-Dichloroethylene	2.0	3.3	0.65	ug/kg	J
156-59-2	cis-1,2-Dichloroethylene	51.3	3.3	0.90	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	18.9	3.3	0.65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.3	0.65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.65	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.65	ug/kg	
100-41-4	Ethylbenzene	ND	3.3	0.65	ug/kg	
76-13-1	Freon 113	ND	3.3	0.86	ug/kg	
591-78-6	2-Hexanone	ND	16	4.9	ug/kg	
98-82-8	Isopropylbenzene	ND	3.3	0.65	ug/kg	
79-20-9	Methyl Acetate	ND	16	5.8	ug/kg	
74-83-9	Methyl Bromide	ND	3.3	1.3	ug/kg	

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:	A2-30 (3')		
Lab Sample ID:	FA87682-7	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	71.2
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.3	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	3.3	1.1	ug/kg	
75-09-2	Methylene Chloride [a]	8.3	13	7.2	ug/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.3	0.65	ug/kg	
100-42-5	Styrene	ND	3.3	0.65	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.3	0.65	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.3	0.84	ug/kg	
108-88-3	Toluene	ND	13	6.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.3	0.65	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.3	0.65	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.3	0.65	ug/kg	
79-01-6	Trichloroethylene	353 [b]	330	66	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.3	1.3	ug/kg	
75-01-4	Vinyl Chloride	1.6	3.3	0.65	ug/kg	J
1330-20-7	Xylene (total)	ND	9.8	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%	111%	75-124%
17060-07-0	1,2-Dichloroethane-D4	104%	109%	72-135%
2037-26-5	Toluene-D8	96%	95%	75-126%
460-00-4	4-Bromofluorobenzene	92%	93%	71-133%

(a) Suspected laboratory contaminant.
(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:	A2-30 (5')		
Lab Sample ID:	FA87682-8	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	81.6
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102149.D	1	08/05/21 14:45	SP	n/a	n/a	VF3653
Run #2 [a]	F0102110.D	1	08/03/21 20:23	SP	n/a	n/a	VF3651

	Initial Weight	Final Volume
Run #1	9.00 g	5.0 ml
Run #2	9.99 g	5.0 ml

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	140	68	ug/kg	
71-43-2	Benzene	ND	3.4	0.83	ug/kg	
75-27-4	Bromodichloromethane	ND	3.4	0.68	ug/kg	
75-25-2	Bromoform	ND	3.4	0.68	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	4.9	ug/kg	
75-15-0	Carbon Disulfide	ND	3.4	0.68	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.4	0.69	ug/kg	
108-90-7	Chlorobenzene	ND	3.4	0.68	ug/kg	
75-00-3	Chloroethane [b]	ND	3.4	1.4	ug/kg	
67-66-3	Chloroform	ND	3.4	0.91	ug/kg	
110-82-7	Cyclohexane	ND	3.4	0.85	ug/kg	
124-48-1	Dibromochloromethane	ND	3.4	0.68	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.4	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.4	0.68	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.4	1.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.4	0.68	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.4	0.68	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.4	0.78	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.4	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.4	0.68	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.4	0.68	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	16.1	3.4	0.94	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	1.6	3.4	0.68	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	3.4	0.68	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.4	0.68	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.4	0.68	ug/kg	
100-41-4	Ethylbenzene	ND	3.4	0.68	ug/kg	
76-13-1	Freon 113	ND	3.4	0.90	ug/kg	
591-78-6	2-Hexanone	ND	17	5.1	ug/kg	
98-82-8	Isopropylbenzene	ND	3.4	0.68	ug/kg	
79-20-9	Methyl Acetate	ND	17	6.1	ug/kg	
74-83-9	Methyl Bromide	ND	3.4	1.4	ug/kg	

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:	A2-30 (5')		
Lab Sample ID:	FA87682-8	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	81.6
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.4	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	3.4	1.2	ug/kg	
75-09-2	Methylene Chloride [c]	ND	14	7.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.1	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.4	0.68	ug/kg	
100-42-5	Styrene	ND	3.4	0.68	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.4	0.68	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.4	0.87	ug/kg	
108-88-3	Toluene	ND	14	6.8	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.4	0.68	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.4	0.68	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.4	0.68	ug/kg	
79-01-6	Trichloroethylene	9.3	3.4	0.68	ug/kg	
75-69-4	Trichlorofluoromethane [b]	ND	3.4	1.4	ug/kg	
75-01-4	Vinyl Chloride	ND	3.4	0.68	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	85%	94%	75-124%
17060-07-0	1,2-Dichloroethane-D4	113%	105%	72-135%
2037-26-5	Toluene-D8	95%	99%	75-126%
460-00-4	4-Bromofluorobenzene	97%	95%	71-133%

(a) Confirmation run.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV and BS recovery outside 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:	A2-31 (3')		
Lab Sample ID:	FA87682-9	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102150.D	1	08/05/21 15:09	SP	n/a	n/a	VF3653
Run #2 [a]	F0102111.D	1	08/03/21 20:47	SP	n/a	n/a	VF3651

	Initial Weight	Final Volume
Run #1	10.1 g	5.0 ml
Run #2	9.08 g	5.0 ml

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	120	60	ug/kg	
71-43-2	Benzene	ND	3.0	0.74	ug/kg	
75-27-4	Bromodichloromethane	ND	3.0	0.60	ug/kg	
75-25-2	Bromoform	ND	3.0	0.60	ug/kg	
78-93-3	2-Butanone (MEK)	ND	15	4.4	ug/kg	
75-15-0	Carbon Disulfide	ND	3.0	0.60	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.0	0.61	ug/kg	
108-90-7	Chlorobenzene	ND	3.0	0.60	ug/kg	
75-00-3	Chloroethane [b]	ND	3.0	1.2	ug/kg	
67-66-3	Chloroform	ND	3.0	0.80	ug/kg	
110-82-7	Cyclohexane	ND	3.0	0.75	ug/kg	
124-48-1	Dibromochloromethane	ND	3.0	0.60	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.0	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.0	0.60	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.0	1.2	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.0	0.60	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.0	0.60	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.0	0.69	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.0	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.0	0.60	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.0	0.60	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	2.6	3.0	0.83	ug/kg	J
156-60-5	trans-1,2-Dichloroethylene	2.6	3.0	0.60	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	3.0	0.60	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.0	0.60	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.0	0.60	ug/kg	
100-41-4	Ethylbenzene	ND	3.0	0.60	ug/kg	
76-13-1	Freon 113	ND	3.0	0.80	ug/kg	
591-78-6	2-Hexanone	ND	15	4.5	ug/kg	
98-82-8	Isopropylbenzene	ND	3.0	0.60	ug/kg	
79-20-9	Methyl Acetate	ND	15	5.4	ug/kg	
74-83-9	Methyl Bromide	ND	3.0	1.2	ug/kg	

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:	A2-31 (3')		
Lab Sample ID:	FA87682-9	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.0	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	3.0	1.0	ug/kg	
75-09-2	Methylene Chloride [c]	ND	12	6.6	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	15	4.5	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.0	0.60	ug/kg	
100-42-5	Styrene	ND	3.0	0.60	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.0	0.60	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.0	0.77	ug/kg	
108-88-3	Toluene	ND	12	6.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.0	0.60	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.0	0.60	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.0	0.60	ug/kg	
79-01-6	Trichloroethylene	27.9	3.0	0.60	ug/kg	
75-69-4	Trichlorofluoromethane [b]	ND	3.0	1.2	ug/kg	
75-01-4	Vinyl Chloride	ND	3.0	0.60	ug/kg	
1330-20-7	Xylene (total)	ND	9.0	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	89%	103%	75-124%
17060-07-0	1,2-Dichloroethane-D4	112%	109%	72-135%
2037-26-5	Toluene-D8	96%	100%	75-126%
460-00-4	4-Bromofluorobenzene	94%	94%	71-133%

(a) Confirmation run.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV and BS recovery outside 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:	A2-31 (5')		
Lab Sample ID:	FA87682-10	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	79.7
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102112.D	1	08/03/21 21:11	SP	n/a	n/a	VF3651
Run #2							

	Initial Weight	Final Volume
Run #1	9.36 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	67	ug/kg	
71-43-2	Benzene	ND	3.4	0.82	ug/kg	
75-27-4	Bromodichloromethane	ND	3.4	0.67	ug/kg	
75-25-2	Bromoform	ND	3.4	0.67	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	4.9	ug/kg	
75-15-0	Carbon Disulfide	ND	3.4	0.67	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.4	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	3.4	0.67	ug/kg	
75-00-3	Chloroethane	ND	3.4	1.3	ug/kg	
67-66-3	Chloroform	ND	3.4	0.89	ug/kg	
110-82-7	Cyclohexane	ND	3.4	0.84	ug/kg	
124-48-1	Dibromochloromethane	ND	3.4	0.67	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.4	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.4	0.67	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.4	1.3	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.4	0.67	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.4	0.67	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.4	0.77	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.4	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.4	0.67	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.4	0.67	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.4	0.92	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.4	0.67	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.4	0.67	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.4	0.67	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.4	0.67	ug/kg	
100-41-4	Ethylbenzene	ND	3.4	0.67	ug/kg	
76-13-1	Freon 113	ND	3.4	0.88	ug/kg	
591-78-6	2-Hexanone	ND	17	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	3.4	0.67	ug/kg	
79-20-9	Methyl Acetate	ND	17	6.0	ug/kg	
74-83-9	Methyl Bromide	ND	3.4	1.3	ug/kg	

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:	A2-31 (5')		
Lab Sample ID:	FA87682-10	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	79.7
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.4	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	3.4	1.1	ug/kg	
75-09-2	Methylene Chloride	ND	13	7.4	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.4	0.67	ug/kg	
100-42-5	Styrene	ND	3.4	0.67	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.4	0.67	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.4	0.86	ug/kg	
108-88-3	Toluene	ND	13	6.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.4	0.67	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.4	0.67	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.4	0.67	ug/kg	
79-01-6	Trichloroethylene	2.6	3.4	0.67	ug/kg	J
75-69-4	Trichlorofluoromethane	ND	3.4	1.3	ug/kg	
75-01-4	Vinyl Chloride	ND	3.4	0.67	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		75-124%
17060-07-0	1,2-Dichloroethane-D4	107%		72-135%
2037-26-5	Toluene-D8	97%		75-126%
460-00-4	4-Bromofluorobenzene	91%		71-133%

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:	A2-32 (3')		
Lab Sample ID:	FA87682-11	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	87.3
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	F0102113.D	1	08/03/21 21:35	SP	n/a	n/a	VF3651
Run #2							

	Initial Weight	Final Volume
Run #1	8.85 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	65	ug/kg	
71-43-2	Benzene	ND	3.2	0.79	ug/kg	
75-27-4	Bromodichloromethane	ND	3.2	0.65	ug/kg	
75-25-2	Bromoform	ND	3.2	0.65	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.7	ug/kg	
75-15-0	Carbon Disulfide	ND	3.2	0.65	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.2	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	3.2	0.65	ug/kg	
75-00-3	Chloroethane	ND	3.2	1.3	ug/kg	
67-66-3	Chloroform	ND	3.2	0.86	ug/kg	
110-82-7	Cyclohexane	ND	3.2	0.81	ug/kg	
124-48-1	Dibromochloromethane	ND	3.2	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.2	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.2	0.65	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.2	1.3	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.2	0.65	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.2	0.65	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.2	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.2	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.2	0.65	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.2	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.2	0.89	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.2	0.65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.2	0.65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.2	0.65	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.2	0.65	ug/kg	
100-41-4	Ethylbenzene	ND	3.2	0.65	ug/kg	
76-13-1	Freon 113	ND	3.2	0.85	ug/kg	
591-78-6	2-Hexanone	ND	16	4.9	ug/kg	
98-82-8	Isopropylbenzene	ND	3.2	0.65	ug/kg	
79-20-9	Methyl Acetate	ND	16	5.8	ug/kg	
74-83-9	Methyl Bromide	ND	3.2	1.3	ug/kg	

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:	A2-32 (3')		
Lab Sample ID:	FA87682-11	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	87.3
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.2	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	3.2	1.1	ug/kg	
75-09-2	Methylene Chloride [b]	7.6	13	7.1	ug/kg	J
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.2	0.65	ug/kg	
100-42-5	Styrene	ND	3.2	0.65	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.2	0.65	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.2	0.83	ug/kg	
108-88-3	Toluene	ND	13	6.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.2	0.65	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.2	0.65	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.2	0.65	ug/kg	
79-01-6	Trichloroethylene	ND	3.2	0.65	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.2	1.3	ug/kg	
75-01-4	Vinyl Chloride	ND	3.2	0.65	ug/kg	
1330-20-7	Xylene (total)	ND	9.7	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	119%		75-124%
17060-07-0	1,2-Dichloroethane-D4	109%		72-135%
2037-26-5	Toluene-D8	110%		75-126%
460-00-4	4-Bromofluorobenzene	133%		71-133%

(a) Internal standard response(s) outside method criteria due to sample matrix interference; associated analyte(s) ND.
(b) Suspected laboratory contaminant.

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:	A2-32 (5')		
Lab Sample ID:	FA87682-12	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	85.7
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102114.D	1	08/03/21 21:59	SP	n/a	n/a	VF3651
Run #2							

	Initial Weight	Final Volume
Run #1	9.37 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	120	62	ug/kg	
71-43-2	Benzene	ND	3.1	0.76	ug/kg	
75-27-4	Bromodichloromethane	ND	3.1	0.62	ug/kg	
75-25-2	Bromoform	ND	3.1	0.62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.5	ug/kg	
75-15-0	Carbon Disulfide	ND	3.1	0.62	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.1	0.64	ug/kg	
108-90-7	Chlorobenzene	ND	3.1	0.62	ug/kg	
75-00-3	Chloroethane	ND	3.1	1.2	ug/kg	
67-66-3	Chloroform	ND	3.1	0.83	ug/kg	
110-82-7	Cyclohexane	ND	3.1	0.78	ug/kg	
124-48-1	Dibromochloromethane	ND	3.1	0.62	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.1	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.1	0.62	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.1	1.2	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.1	0.62	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.1	0.62	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.1	0.72	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.1	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.1	0.62	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.1	0.62	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.1	0.86	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.1	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.1	0.62	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	0.62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	0.62	ug/kg	
100-41-4	Ethylbenzene	ND	3.1	0.62	ug/kg	
76-13-1	Freon 113	ND	3.1	0.82	ug/kg	
591-78-6	2-Hexanone	ND	16	4.7	ug/kg	
98-82-8	Isopropylbenzene	ND	3.1	0.62	ug/kg	
79-20-9	Methyl Acetate	ND	16	5.5	ug/kg	
74-83-9	Methyl Bromide	ND	3.1	1.2	ug/kg	

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:	A2-32 (5')		
Lab Sample ID:	FA87682-12	**Date Sampled:**	07/28/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	85.7
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.1	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	3.1	1.1	ug/kg	
75-09-2	Methylene Chloride	ND	12	6.8	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.7	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.1	0.62	ug/kg	
100-42-5	Styrene	ND	3.1	0.62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	0.62	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.1	0.80	ug/kg	
108-88-3	Toluene	ND	12	6.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.1	0.62	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.1	0.62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.1	0.62	ug/kg	
79-01-6	Trichloroethylene	ND	3.1	0.62	ug/kg	
75-69-4	Trichlorofluoromethane	ND	3.1	1.2	ug/kg	
75-01-4	Vinyl Chloride	ND	3.1	0.62	ug/kg	
1330-20-7	Xylene (total)	ND	9.3	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%		75-124%
17060-07-0	1,2-Dichloroethane-D4	112%		72-135%
2037-26-5	Toluene-D8	101%		75-126%
460-00-4	4-Bromofluorobenzene	107%		71-133%

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:	A2-33 (3')		
Lab Sample ID:	FA87682-13	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	90.3
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102151.D	1	08/05/21 15:49	SP	n/a	n/a	VF3653
Run #2							

	Initial Weight	Final Volume
Run #1	7.86 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	112	140	70	ug/kg	J
71-43-2	Benzene	ND	3.5	0.86	ug/kg	
75-27-4	Bromodichloromethane	ND	3.5	0.70	ug/kg	
75-25-2	Bromoform	ND	3.5	0.70	ug/kg	
78-93-3	2-Butanone (MEK)	12.4	18	5.1	ug/kg	J
75-15-0	Carbon Disulfide	2.1	3.5	0.70	ug/kg	J
56-23-5	Carbon Tetrachloride	ND	3.5	0.72	ug/kg	
108-90-7	Chlorobenzene	ND	3.5	0.70	ug/kg	
75-00-3	Chloroethane [a]	ND	3.5	1.4	ug/kg	
67-66-3	Chloroform	ND	3.5	0.94	ug/kg	
110-82-7	Cyclohexane	ND	3.5	0.88	ug/kg	
124-48-1	Dibromochloromethane	ND	3.5	0.70	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.5	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.5	0.70	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.5	1.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.5	0.70	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.5	0.70	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.5	0.81	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.5	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.5	0.70	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.5	0.70	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.5	0.97	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.5	0.70	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.5	0.70	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.5	0.70	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.5	0.70	ug/kg	
100-41-4	Ethylbenzene	ND	3.5	0.70	ug/kg	
76-13-1	Freon 113	ND	3.5	0.93	ug/kg	
591-78-6	2-Hexanone	ND	18	5.3	ug/kg	
98-82-8	Isopropylbenzene	ND	3.5	0.70	ug/kg	
79-20-9	Methyl Acetate	ND	18	6.3	ug/kg	
74-83-9	Methyl Bromide	ND	3.5	1.4	ug/kg	

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:	A2-33 (3')		
Lab Sample ID:	FA87682-13	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	90.3
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.5	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	3.5	1.2	ug/kg	
75-09-2	Methylene Chloride [b]	10.9	14	7.7	ug/kg	JB
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.3	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.5	0.70	ug/kg	
100-42-5	Styrene	ND	3.5	0.70	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.5	0.70	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.5	0.90	ug/kg	
108-88-3	Toluene	ND	14	7.0	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.5	0.70	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.5	0.70	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.5	0.70	ug/kg	
79-01-6	Trichloroethylene	ND	3.5	0.70	ug/kg	
75-69-4	Trichlorofluoromethane [a]	ND	3.5	1.4	ug/kg	
75-01-4	Vinyl Chloride	ND	3.5	0.70	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	119%		75-124%
17060-07-0	1,2-Dichloroethane-D4	118%		72-135%
2037-26-5	Toluene-D8	101%		75-126%
460-00-4	4-Bromofluorobenzene	104%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Suspected laboratory contaminant. Associated CCV and BS recovery outside control limits high.

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:	A2-33 (5')		
Lab Sample ID:	FA87682-14	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102152.D	1	08/05/21 16:13	SP	n/a	n/a	VF3653
Run #2							

	Initial Weight	Final Volume
Run #1	9.19 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	66	ug/kg	
71-43-2	Benzene	ND	3.3	0.81	ug/kg	
75-27-4	Bromodichloromethane	ND	3.3	0.66	ug/kg	
75-25-2	Bromoform	ND	3.3	0.66	ug/kg	
78-93-3	2-Butanone (MEK)	ND	17	4.8	ug/kg	
75-15-0	Carbon Disulfide	ND	3.3	0.66	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.3	0.68	ug/kg	
108-90-7	Chlorobenzene	ND	3.3	0.66	ug/kg	
75-00-3	Chloroethane [a]	ND	3.3	1.3	ug/kg	
67-66-3	Chloroform	ND	3.3	0.88	ug/kg	
110-82-7	Cyclohexane	ND	3.3	0.83	ug/kg	
124-48-1	Dibromochloromethane	ND	3.3	0.66	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.3	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.3	0.66	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.3	1.3	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.3	0.66	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.3	0.66	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.3	0.76	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.3	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.3	0.66	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.3	0.66	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.3	0.92	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.3	0.66	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.3	0.66	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.66	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.66	ug/kg	
100-41-4	Ethylbenzene	ND	3.3	0.66	ug/kg	
76-13-1	Freon 113	ND	3.3	0.88	ug/kg	
591-78-6	2-Hexanone	ND	17	5.0	ug/kg	
98-82-8	Isopropylbenzene	ND	3.3	0.66	ug/kg	
79-20-9	Methyl Acetate	ND	17	5.9	ug/kg	
74-83-9	Methyl Bromide	ND	3.3	1.3	ug/kg	

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:	A2-33 (5')		
Lab Sample ID:	FA87682-14	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.3	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	3.3	1.1	ug/kg	
75-09-2	Methylene Chloride [b]	8.6	13	7.3	ug/kg	JB
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	17	5.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.3	0.66	ug/kg	
100-42-5	Styrene	ND	3.3	0.66	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.3	0.66	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.3	0.85	ug/kg	
108-88-3	Toluene	ND	13	6.6	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.3	0.66	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.3	0.66	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.3	0.66	ug/kg	
79-01-6	Trichloroethylene	ND	3.3	0.66	ug/kg	
75-69-4	Trichlorofluoromethane [a]	ND	3.3	1.3	ug/kg	
75-01-4	Vinyl Chloride	ND	3.3	0.66	ug/kg	
1330-20-7	Xylene (total)	ND	10	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		75-124%
17060-07-0	1,2-Dichloroethane-D4	109%		72-135%
2037-26-5	Toluene-D8	97%		75-126%
460-00-4	4-Bromofluorobenzene	98%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Suspected laboratory contaminant. Associated CCV and BS recovery outside control limits high.

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:	A2-34 (3')		
Lab Sample ID:	FA87682-15	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	92.9
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102153.D	1	08/05/21 16:38	SP	n/a	n/a	VF3653
Run #2							

	Initial Weight	Final Volume
Run #1	10.1 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	97.7	110	53	ug/kg	J
71-43-2	Benzene	ND	2.7	0.65	ug/kg	
75-27-4	Bromodichloromethane	ND	2.7	0.53	ug/kg	
75-25-2	Bromoform	ND	2.7	0.53	ug/kg	
78-93-3	2-Butanone (MEK)	16.4	13	3.9	ug/kg	
75-15-0	Carbon Disulfide	ND	2.7	0.53	ug/kg	
56-23-5	Carbon Tetrachloride	ND	2.7	0.54	ug/kg	
108-90-7	Chlorobenzene	ND	2.7	0.53	ug/kg	
75-00-3	Chloroethane [a]	ND	2.7	1.1	ug/kg	
67-66-3	Chloroform	ND	2.7	0.71	ug/kg	
110-82-7	Cyclohexane	ND	2.7	0.67	ug/kg	
124-48-1	Dibromochloromethane	ND	2.7	0.53	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.7	1.0	ug/kg	
106-93-4	1,2-Dibromoethane	ND	2.7	0.53	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	2.7	1.1	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	2.7	0.53	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	2.7	0.53	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	2.7	0.61	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.7	0.95	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.7	0.53	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	2.7	0.53	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	2.7	0.74	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	2.7	0.53	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.7	0.53	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.7	0.53	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.7	0.53	ug/kg	
100-41-4	Ethylbenzene	ND	2.7	0.53	ug/kg	
76-13-1	Freon 113	ND	2.7	0.70	ug/kg	
591-78-6	2-Hexanone	ND	13	4.0	ug/kg	
98-82-8	Isopropylbenzene	ND	2.7	0.53	ug/kg	
79-20-9	Methyl Acetate	ND	13	4.8	ug/kg	
74-83-9	Methyl Bromide	ND	2.7	1.1	ug/kg	

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:	A2-34 (3')		
Lab Sample ID:	FA87682-15	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	92.9
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	2.7	1.1	ug/kg	
108-87-2	Methylcyclohexane	ND	2.7	0.91	ug/kg	
75-09-2	Methylene Chloride [b]	ND	11	5.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	13	4.0	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	2.7	0.53	ug/kg	
100-42-5	Styrene	ND	2.7	0.53	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.7	0.53	ug/kg	
127-18-4	Tetrachloroethylene	ND	2.7	0.68	ug/kg	
108-88-3	Toluene	ND	11	5.3	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	2.7	0.53	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.7	0.53	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.7	0.53	ug/kg	
79-01-6	Trichloroethylene	ND	2.7	0.53	ug/kg	
75-69-4	Trichlorofluoromethane [a]	ND	2.7	1.1	ug/kg	
75-01-4	Vinyl Chloride	ND	2.7	0.53	ug/kg	
1330-20-7	Xylene (total)	ND	8.0	1.1	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%		75-124%
17060-07-0	1,2-Dichloroethane-D4	112%		72-135%
2037-26-5	Toluene-D8	98%		75-126%
460-00-4	4-Bromofluorobenzene	109%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV and BS recovery outside 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:	A2-34 (5')		
Lab Sample ID:	FA87682-16	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	81.5
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102154.D	1	08/05/21 17:03	SP	n/a	n/a	VF3653
Run #2							

	Initial Weight	Final Volume
Run #1	8.56 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	140	72	ug/kg	
71-43-2	Benzene	ND	3.6	0.87	ug/kg	
75-27-4	Bromodichloromethane	ND	3.6	0.72	ug/kg	
75-25-2	Bromoform	ND	3.6	0.72	ug/kg	
78-93-3	2-Butanone (MEK)	ND	18	5.2	ug/kg	
75-15-0	Carbon Disulfide	ND	3.6	0.72	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.6	0.73	ug/kg	
108-90-7	Chlorobenzene	ND	3.6	0.72	ug/kg	
75-00-3	Chloroethane [a]	ND	3.6	1.4	ug/kg	
67-66-3	Chloroform	ND	3.6	0.95	ug/kg	
110-82-7	Cyclohexane	ND	3.6	0.90	ug/kg	
124-48-1	Dibromochloromethane	ND	3.6	0.72	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.6	1.4	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.6	0.72	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.6	1.4	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.6	0.72	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.6	0.72	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.6	0.82	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.6	1.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.6	0.72	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.6	0.72	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.6	0.99	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.6	0.72	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.6	0.72	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.6	0.72	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.6	0.72	ug/kg	
100-41-4	Ethylbenzene	ND	3.6	0.72	ug/kg	
76-13-1	Freon 113	ND	3.6	0.95	ug/kg	
591-78-6	2-Hexanone	ND	18	5.4	ug/kg	
98-82-8	Isopropylbenzene	ND	3.6	0.72	ug/kg	
79-20-9	Methyl Acetate	ND	18	6.4	ug/kg	
74-83-9	Methyl Bromide	ND	3.6	1.4	ug/kg	

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:	A2-34 (5')		
Lab Sample ID:	FA87682-16	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	81.5
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.6	1.4	ug/kg	
108-87-2	Methylcyclohexane	ND	3.6	1.2	ug/kg	
75-09-2	Methylene Chloride [b]	9.9	14	7.9	ug/kg	JB
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	18	5.4	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.6	0.72	ug/kg	
100-42-5	Styrene	ND	3.6	0.72	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.6	0.72	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.6	0.92	ug/kg	
108-88-3	Toluene	ND	14	7.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.6	0.72	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.6	0.72	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.6	0.72	ug/kg	
79-01-6	Trichloroethylene	ND	3.6	0.72	ug/kg	
75-69-4	Trichlorofluoromethane [a]	ND	3.6	1.4	ug/kg	
75-01-4	Vinyl Chloride	ND	3.6	0.72	ug/kg	
1330-20-7	Xylene (total)	ND	11	1.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		75-124%
17060-07-0	1,2-Dichloroethane-D4	112%		72-135%
2037-26-5	Toluene-D8	94%		75-126%
460-00-4	4-Bromofluorobenzene	98%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Suspected laboratory contaminant. Associated CCV and BS recovery outside control limits high.

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:	A2-35 (3')		
Lab Sample ID:	FA87682-17	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	93.7
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102155.D	1	08/05/21 17:28	SP	n/a	n/a	VF3653
Run #2							

	Initial Weight	Final Volume
Run #1	8.27 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	130	65	ug/kg	
71-43-2	Benzene	ND	3.2	0.79	ug/kg	
75-27-4	Bromodichloromethane	ND	3.2	0.65	ug/kg	
75-25-2	Bromoform	ND	3.2	0.65	ug/kg	
78-93-3	2-Butanone (MEK)	ND	16	4.7	ug/kg	
75-15-0	Carbon Disulfide	ND	3.2	0.65	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.2	0.66	ug/kg	
108-90-7	Chlorobenzene	ND	3.2	0.65	ug/kg	
75-00-3	Chloroethane [a]	ND	3.2	1.3	ug/kg	
67-66-3	Chloroform	ND	3.2	0.86	ug/kg	
110-82-7	Cyclohexane	ND	3.2	0.81	ug/kg	
124-48-1	Dibromochloromethane	ND	3.2	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.2	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.2	0.65	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.2	1.3	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.2	0.65	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.2	0.65	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.2	0.74	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.2	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.2	0.65	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.2	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	38.8	3.2	0.89	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	2.0	3.2	0.65	ug/kg	J
78-87-5	1,2-Dichloropropane	ND	3.2	0.65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.2	0.65	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.2	0.65	ug/kg	
100-41-4	Ethylbenzene	ND	3.2	0.65	ug/kg	
76-13-1	Freon 113	ND	3.2	0.85	ug/kg	
591-78-6	2-Hexanone	ND	16	4.8	ug/kg	
98-82-8	Isopropylbenzene	ND	3.2	0.65	ug/kg	
79-20-9	Methyl Acetate	ND	16	5.7	ug/kg	
74-83-9	Methyl Bromide	ND	3.2	1.3	ug/kg	

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:	A2-35 (3')		
Lab Sample ID:	FA87682-17	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	93.7
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.2	1.3	ug/kg	
108-87-2	Methylcyclohexane	1.4	3.2	1.1	ug/kg	J
75-09-2	Methylene Chloride [b]	ND	13	7.1	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.2	0.65	ug/kg	
100-42-5	Styrene	ND	3.2	0.65	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.2	0.65	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.2	0.83	ug/kg	
108-88-3	Toluene	ND	13	6.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.2	0.65	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.2	0.65	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.2	0.65	ug/kg	
79-01-6	Trichloroethylene	23.2	3.2	0.65	ug/kg	
75-69-4	Trichlorofluoromethane [a]	ND	3.2	1.3	ug/kg	
75-01-4	Vinyl Chloride	ND	3.2	0.65	ug/kg	
1330-20-7	Xylene (total)	ND	9.7	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	108%		75-124%
17060-07-0	1,2-Dichloroethane-D4	114%		72-135%
2037-26-5	Toluene-D8	104%		75-126%
460-00-4	4-Bromofluorobenzene	125%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV and BS recovery outside 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:	A2-35 (5')		
Lab Sample ID:	FA87682-18	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102156.D	1	08/05/21 17:52	SP	n/a	n/a	VF3653
Run #2							

	Initial Weight	Final Volume
Run #1	7.88 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	150	77	ug/kg	
71-43-2	Benzene	ND	3.9	0.94	ug/kg	
75-27-4	Bromodichloromethane	ND	3.9	0.77	ug/kg	
75-25-2	Bromoform	ND	3.9	0.77	ug/kg	
78-93-3	2-Butanone (MEK)	ND	19	5.6	ug/kg	
75-15-0	Carbon Disulfide	ND	3.9	0.77	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.9	0.79	ug/kg	
108-90-7	Chlorobenzene	ND	3.9	0.77	ug/kg	
75-00-3	Chloroethane [a]	ND	3.9	1.5	ug/kg	
67-66-3	Chloroform	ND	3.9	1.0	ug/kg	
110-82-7	Cyclohexane	ND	3.9	0.97	ug/kg	
124-48-1	Dibromochloromethane	ND	3.9	0.77	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.9	1.5	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.9	0.77	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.9	1.5	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.9	0.77	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.9	0.77	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.9	0.89	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.9	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.9	0.77	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.9	0.77	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.9	1.1	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.9	0.77	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.9	0.77	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.9	0.77	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.9	0.77	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.77	ug/kg	
76-13-1	Freon 113	ND	3.9	1.0	ug/kg	
591-78-6	2-Hexanone	ND	19	5.8	ug/kg	
98-82-8	Isopropylbenzene	ND	3.9	0.77	ug/kg	
79-20-9	Methyl Acetate	ND	19	6.9	ug/kg	
74-83-9	Methyl Bromide	ND	3.9	1.5	ug/kg	

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:	A2-35 (5')		
Lab Sample ID:	FA87682-18	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.0
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.9	1.5	ug/kg	
108-87-2	Methylcyclohexane	ND	3.9	1.3	ug/kg	
75-09-2	Methylene Chloride [b]	ND	15	8.5	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	19	5.8	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.9	0.77	ug/kg	
100-42-5	Styrene	ND	3.9	0.77	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.9	0.77	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.9	0.99	ug/kg	
108-88-3	Toluene	ND	15	7.7	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.9	0.77	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.9	0.77	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.9	0.77	ug/kg	
79-01-6	Trichloroethylene	ND	3.9	0.77	ug/kg	
75-69-4	Trichlorofluoromethane [a]	ND	3.9	1.5	ug/kg	
75-01-4	Vinyl Chloride	ND	3.9	0.77	ug/kg	
1330-20-7	Xylene (total)	ND	12	1.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		75-124%
17060-07-0	1,2-Dichloroethane-D4	116%		72-135%
2037-26-5	Toluene-D8	96%		75-126%
460-00-4	4-Bromofluorobenzene	95%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV and BS recovery outside 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:	A2-36 (3')		
Lab Sample ID:	FA87682-19	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	94.2
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102157.D	1	08/05/21 18:16	SP	n/a	n/a	VF3653
Run #2							

	Initial Weight	Final Volume
Run #1	8.57 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	ND	120	62	ug/kg	
71-43-2	Benzene	ND	3.1	0.76	ug/kg	
75-27-4	Bromodichloromethane	ND	3.1	0.62	ug/kg	
75-25-2	Bromoform	ND	3.1	0.62	ug/kg	
78-93-3	2-Butanone (MEK)	ND	15	4.5	ug/kg	
75-15-0	Carbon Disulfide	ND	3.1	0.62	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.1	0.63	ug/kg	
108-90-7	Chlorobenzene	ND	3.1	0.62	ug/kg	
75-00-3	Chloroethane [a]	ND	3.1	1.2	ug/kg	
67-66-3	Chloroform	ND	3.1	0.82	ug/kg	
110-82-7	Cyclohexane	ND	3.1	0.77	ug/kg	
124-48-1	Dibromochloromethane	ND	3.1	0.62	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.1	1.2	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.1	0.62	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.1	1.2	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.1	0.62	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.1	0.62	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.1	0.71	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.1	1.1	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.1	0.62	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.1	0.62	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.1	0.85	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.1	0.62	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.1	0.62	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.1	0.62	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.1	0.62	ug/kg	
100-41-4	Ethylbenzene	ND	3.1	0.62	ug/kg	
76-13-1	Freon 113	ND	3.1	0.82	ug/kg	
591-78-6	2-Hexanone	ND	15	4.6	ug/kg	
98-82-8	Isopropylbenzene	ND	3.1	0.62	ug/kg	
79-20-9	Methyl Acetate	ND	15	5.5	ug/kg	
74-83-9	Methyl Bromide	ND	3.1	1.2	ug/kg	

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:	A2-36 (3')		
Lab Sample ID:	FA87682-19	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	94.2
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.1	1.2	ug/kg	
108-87-2	Methylcyclohexane	ND	3.1	1.1	ug/kg	
75-09-2	Methylene Chloride [b]	ND	12	6.8	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	15	4.6	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.1	0.62	ug/kg	
100-42-5	Styrene	ND	3.1	0.62	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.1	0.62	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.1	0.79	ug/kg	
108-88-3	Toluene	ND	12	6.2	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.1	0.62	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.1	0.62	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.1	0.62	ug/kg	
79-01-6	Trichloroethylene	ND	3.1	0.62	ug/kg	
75-69-4	Trichlorofluoromethane [a]	ND	3.1	1.2	ug/kg	
75-01-4	Vinyl Chloride	ND	3.1	0.62	ug/kg	
1330-20-7	Xylene (total)	ND	9.3	1.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	110%		75-124%
17060-07-0	1,2-Dichloroethane-D4	118%		72-135%
2037-26-5	Toluene-D8	96%		75-126%
460-00-4	4-Bromofluorobenzene	102%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV and BS recovery outside 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:	A2-36 (5')		
Lab Sample ID:	FA87682-20	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.8
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	F0102158.D	1	08/05/21 18:40	SP	n/a	n/a	VF3653
Run #2							

	Initial Weight	Final Volume
Run #1	9.22 g	5.0 ml
Run #2		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
67-64-1	Acetone	78.2	130	65	ug/kg	J
71-43-2	Benzene	ND	3.3	0.80	ug/kg	
75-27-4	Bromodichloromethane	ND	3.3	0.65	ug/kg	
75-25-2	Bromoform	ND	3.3	0.65	ug/kg	
78-93-3	2-Butanone (MEK)	8.6	16	4.8	ug/kg	J
75-15-0	Carbon Disulfide	ND	3.3	0.65	ug/kg	
56-23-5	Carbon Tetrachloride	ND	3.3	0.67	ug/kg	
108-90-7	Chlorobenzene	ND	3.3	0.65	ug/kg	
75-00-3	Chloroethane [a]	ND	3.3	1.3	ug/kg	
67-66-3	Chloroform	ND	3.3	0.87	ug/kg	
110-82-7	Cyclohexane	ND	3.3	0.82	ug/kg	
124-48-1	Dibromochloromethane	ND	3.3	0.65	ug/kg	
96-12-8	1,2-Dibromo-3-chloropropane	ND	3.3	1.3	ug/kg	
106-93-4	1,2-Dibromoethane	ND	3.3	0.65	ug/kg	
75-71-8	Dichlorodifluoromethane	ND	3.3	1.3	ug/kg	
95-50-1	1,2-Dichlorobenzene	ND	3.3	0.65	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	3.3	0.65	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	3.3	0.75	ug/kg	
75-34-3	1,1-Dichloroethane	ND	3.3	1.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	3.3	0.65	ug/kg	
75-35-4	1,1-Dichloroethylene	ND	3.3	0.65	ug/kg	
156-59-2	cis-1,2-Dichloroethylene	ND	3.3	0.90	ug/kg	
156-60-5	trans-1,2-Dichloroethylene	ND	3.3	0.65	ug/kg	
78-87-5	1,2-Dichloropropane	ND	3.3	0.65	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	3.3	0.65	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	3.3	0.65	ug/kg	
100-41-4	Ethylbenzene	ND	3.3	0.65	ug/kg	
76-13-1	Freon 113	ND	3.3	0.86	ug/kg	
591-78-6	2-Hexanone	ND	16	4.9	ug/kg	
98-82-8	Isopropylbenzene	ND	3.3	0.65	ug/kg	
79-20-9	Methyl Acetate	ND	16	5.8	ug/kg	
74-83-9	Methyl Bromide	ND	3.3	1.3	ug/kg	

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:	A2-36 (5')		
Lab Sample ID:	FA87682-20	**Date Sampled:**	07/29/21
Matrix:	SO - Soil	**Date Received:**	07/30/21
Method:	SW846 8260D	**Percent Solids:**	82.8
Project:	Brenntag; Charleston, SC		

VOA TCL 4.2 List

CAS No.	Compound	Result	RL	MDL	Units	Q
74-87-3	Methyl Chloride	ND	3.3	1.3	ug/kg	
108-87-2	Methylcyclohexane	ND	3.3	1.1	ug/kg	
75-09-2	Methylene Chloride [b]	ND	13	7.2	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	16	4.9	ug/kg	
1634-04-4	Methyl Tert Butyl Ether	ND	3.3	0.65	ug/kg	
100-42-5	Styrene	ND	3.3	0.65	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	3.3	0.65	ug/kg	
127-18-4	Tetrachloroethylene	ND	3.3	0.84	ug/kg	
108-88-3	Toluene	ND	13	6.5	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	3.3	0.65	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	3.3	0.65	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	3.3	0.65	ug/kg	
79-01-6	Trichloroethylene	ND	3.3	0.65	ug/kg	
75-69-4	Trichlorofluoromethane [a]	ND	3.3	1.3	ug/kg	
75-01-4	Vinyl Chloride	ND	3.3	0.65	ug/kg	
1330-20-7	Xylene (total)	ND	9.8	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		75-124%
17060-07-0	1,2-Dichloroethane-D4	115%		72-135%
2037-26-5	Toluene-D8	93%		75-126%
460-00-4	4-Bromofluorobenzene	96%		71-133%

(a) Associated CCV outside of control limits high, sample was ND.
(b) Associated CCV and BS recovery outside 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:	TRIP BLANK-01		
Lab Sample ID:	FA87682-21	**Date Sampled:**	07/28/21
Matrix:	AQ - Trip Blank Soil	**Date Received:**	07/30/21
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]	I70292.D	1	08/11/21 13:30	SO	n/a	n/a	VI2279
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	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 [b]	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:	TRIP BLANK-01		
Lab Sample ID:	FA87682-21	**Date Sampled:**	07/28/21
Matrix:	AQ - Trip Blank Soil	**Date Received:**	07/30/21
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	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	107%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Sample analyzed beyond hold time; reported results are considered minimum values.
(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

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

FA87682

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order #

Send Results to:

Contact & Company Name: CHARLES UPWSON ARCADIS
Telephone: 706-823-4421
Address: 1450 Greene St Ste 220
Fax:
City: Augusta State: GA Zip: 30901
E-mail Address: Charles.Upwson@Arcadis.com
Project Name/Location (City, State): Brunswick Charles Upwson
Project #: 30099999 T=5
Sampler's Printed Name: Charles Upwson
Sampler's Signature: CB Lam

	Preservative	Filtered (✓)	# of Containers	Container Information
	F		4	9

PARAMETER ANALYSIS & METHOD

8260 VOC SOIL KIT MeOH

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: MeOH
G. Other: _____
H. Other: _____

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: SOIL KIT
10. Other: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

	Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix		REMARKS
1	A2-27 (3')	7/28/21	1330		X	SO	4	
2	A2-27 (5')	7/28/21	1335		X	SO	4	
3	A2-28 (3')	7/28/21	1405		X	SO	4	
4	A2-28 (5')	7/28/21	1410		X	SO	4	
5	A2-29 (3')	7/28/21	1505		X	SO	4	
6	A2-29 (5')	7/28/21	1510		X	SO	4	
7	A2-30 (3')	7/28/21	1600		X	SO	4	
8	A2-30 (5')	7/28/21	1605		X	SO	4	
9	A2-31 (3')	7/28/21	1635		X	SO	4	
10	A2-31 (5')	7/28/21	1640		X	SO	4	
11	A2-32 (3')	7/28/21	1725		X	SO	4	
12	A2-32 (5')	7/28/21	1730		X	SO	4	
13	A2-33 (3')	7/29/21	0825		X	SO	4	
14	A2-33 (5')	7/29/21	0835		X	SO	4	

INITIAL ASSESSMENT SP
LABEL VERIFICATION

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Charles Upwson	Printed Name:	Printed Name:	Printed Name: Carlos G Delgado
☒ Cooler packed with ice (✓)		Signature: CB Lam	Signature:	Signature:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	Firm: ARCADIS	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 7/29/21 1130	Date/Time:	Date/Time:	Date/Time: 7/30/21 930

20730826 CofC AR Form 08.27.2015

4,8-1121

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

FA87682: Chain of Custody
Page 1 of 3

FA87682

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 2 of 2

Lab Work Order #

Send Results to:

Contact & Company Name: CHARLES LAWSON ARCADIS

Telephone: 706-929-4421

Address: 1450 Greene St Ste 220

Fax:

City: AUGUSTA State: GA Zip: 30901

E-mail Address: Charles.Lawson@arcadis.com

Project Name/Location (City, State): Brandy Channelview S.C

Project #: 30099999 T=5

Sampler's Printed Name: Bryan Mayeux

Sampler's Signature:

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD: 8260 VOC SOIL KIT / MeOH	REMARKS
15 A2-34 (3')	7/29/21	0855		X	SO			4		4	
16 A2-34 (5')	7/29/21	0900		X	SO			4		4	
17 A2-35 (3')	7/29/21	0940		X	SO			4		4	
18 A2-35 (5')	7/29/21	0945		X	SO			4		4	
19 A2-36 (3')	7/29/21	1020		X	SO			4		4	
20 A2-36 (5')	7/29/21	1025		X	SO			4		4	
21 TRIP BLANK -01	-	-		X	W			2		2	Trip Blank

Keys

Preservation Key: A. H_2SO_4 B. HCL C. HNO_3 D. NaOH E. None F. Other: MeOH G. Other: _____ H. Other: _____

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: Soil kit 10. Other: _____

Matrix Key: SO - Soil SE - Sediment NL - NAPL/Oil W - Water SL - Sludge SW - Sample Wipe T - Tissue A - Air Other: _____

ITIAL ASSESSMENT
...BEL VERIFICATION

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS	Cooler Custody Seal (✓)	Printed Name: Bryan Mayeux	Printed Name:	Printed Name:	Printed Name: Carlos G Delgado
☒ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature:	Signature:	Signature:	Signature:
Specify Turnaround Requirements:	Sample Receipt:	Firm: ARCADIS	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 7/29/21 1130	Date/Time:	Date/Time:	Date/Time: 7-30-21 0930

20730826 CofC AR Form 08.27.2015 48-181

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

SGS Sample Receipt Summary

Job Number: FA87682 **Client:** ARCADIS **Project:** 30088889

Date / Time Received: 7/30/2021 9:30:00 AM **Delivery Method:** FED EX **Airbill #'s:**

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (4.8);

Cooler Temps (Corrected) °C: Cooler 1: (5.0);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☐		☐	☑
2. Trip Blank listed on COC	☐		☐	☑

	W	or	S	N/A
3. Type Of TB Received	☐		☐	☑

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☐		☐	☑
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

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 FROZEN@ 7/30/2021 1130

SM001
Rev. Date 05/24/17

Technician: CARLOSD Date: 7/30/2021 9:30:00 AM Reviewer: _____ Date: _____

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: FA87729

Sampling Dates: 07/29/21 - 07/30/21

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: 73

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, UT, VT, WA, WV

Sections: 1 2 3 4 5

Table of Contents

SGS North America Inc.

Sample Summary

ARCADIS Geraghty & Miller

Job No: FA87729

Brenntag; Charleston, SC
Project No: SC000204.0011.00001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
This report contains results reported as ND = Not detected. The following applies: Organics ND = Not detected above the MDL							
FA87729-1	07/29/21	17:30	CL	07/31/21	AQ	Ground Water	A2-27 (7-10)
FA87729-2	07/29/21	17:50	CL	07/31/21	AQ	Ground Water	A2-27 (17-20)
FA87729-3	07/30/21	08:55	CL	07/31/21	AQ	Ground Water	A2-28 (7-10)
FA87729-4	07/30/21	09:10	CL	07/31/21	AQ	Ground Water	A2-28 (17-20)
FA87729-5	07/30/21	09:40	CL	07/31/21	AQ	Ground Water	A2-29 (7-10)
FA87729-6	07/30/21	10:00	CL	07/31/21	AQ	Ground Water	A2-29 (17-20)
FA87729-7	07/30/21	10:20	CL	07/31/21	AQ	Ground Water	A2-30 (7-10)
FA87729-8	07/30/21	10:40	CL	07/31/21	AQ	Ground Water	A2-30 (17-20)
FA87729-9	07/30/21	11:05	CL	07/31/21	AQ	Ground Water	A2-31 (7-10)
FA87729-10	07/30/21	11:25	CL	07/31/21	AQ	Ground Water	A2-31 (17-20)
FA87729-11	07/29/21	15:00	CL	07/31/21	AQ	Ground Water	A2-32 (7-10)
FA87729-12	07/29/21	15:20	CL	07/31/21	AQ	Ground Water	A2-32 (17-20)

Sample Summary
(continued)

ARCADIS Geraghty & Miller

Job No: FA87729

Brenntag; Charleston, SC
Project No: SC000204.0011.00001

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
FA87729-13	07/29/21	15:45	CL	07/31/21	AQ	Ground Water	A2-33 (7-10)
FA87729-14	07/29/21	16:00	CL	07/31/21	AQ	Ground Water	A2-33 (17-20)
FA87729-15	07/29/21	16:20	CL	07/31/21	AQ	Ground Water	A2-34 (7-10)
FA87729-16	07/29/21	16:40	CL	07/31/21	AQ	Ground Water	A2-34 (17-20)
FA87729-17	07/29/21	14:15	CL	07/31/21	AQ	Ground Water	A2-35 (7-10)
FA87729-18	07/29/21	14:40	CL	07/31/21	AQ	Ground Water	A2-35 (17-20)
FA87729-19	07/29/21	13:55	CL	07/31/21	AQ	Ground Water	A2-36 (7-10)
FA87729-20	07/29/21	13:55	CL	07/31/21	AQ	Ground Water	A2-36 (17-20)
FA87729-21	07/29/21	00:00	CL	07/31/21	AQ	Trip Blank Water	TRIP BLANK

Summary of Hits

Job Number: FA87729
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 07/29/21 thru 07/30/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA87729-1	**A2-27 (7-10)**					
No hits reported in this sample.						
FA87729-2	**A2-27 (17-20)**					
No hits reported in this sample.						
FA87729-3	**A2-28 (7-10)**					
cis-1,2-Dichloroethylene [a]		3970	500	140	ug/l	SW846 8260D
Trichloroethylene [a]		27200	500	170	ug/l	SW846 8260D
FA87729-4	**A2-28 (17-20)**					
cis-1,2-Dichloroethylene [a]		540 J	1000	280	ug/l	SW846 8260D
Trichloroethylene [a]		63200	1000	350	ug/l	SW846 8260D
FA87729-5	**A2-29 (7-10)**					
No hits reported in this sample.						
FA87729-6	**A2-29 (17-20)**					
1,1-Dichloroethylene		4.0	1.0	0.32	ug/l	SW846 8260D
cis-1,2-Dichloroethylene		23.7	1.0	0.28	ug/l	SW846 8260D
Trichloroethylene		55.9	1.0	0.35	ug/l	SW846 8260D
FA87729-7	**A2-30 (7-10)**					
cis-1,2-Dichloroethylene		13.6	1.0	0.28	ug/l	SW846 8260D
trans-1,2-Dichloroethylene		1.4	1.0	0.22	ug/l	SW846 8260D
Trichloroethylene		1.6	1.0	0.35	ug/l	SW846 8260D
Vinyl Chloride		0.58 J	1.0	0.41	ug/l	SW846 8260D
FA87729-8	**A2-30 (17-20)**					
Trichloroethylene		0.58 J	1.0	0.35	ug/l	SW846 8260D
FA87729-9	**A2-31 (7-10)**					
No hits reported in this sample.						

Summary of Hits

Job Number: FA87729
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 07/29/21 thru 07/30/21

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
FA87729-10	**A2-31 (17-20)**					
1,1-Dichloroethylene		1.8	1.0	0.32	ug/l	SW846 8260D
cis-1,2-Dichloroethylene [a]		142	20	5.5	ug/l	SW846 8260D
trans-1,2-Dichloroethylene		1.9	1.0	0.22	ug/l	SW846 8260D
Trichloroethylene [a]		431	20	6.9	ug/l	SW846 8260D
Vinyl Chloride		3.5	1.0	0.41	ug/l	SW846 8260D
FA87729-11	**A2-32 (7-10)**					
No hits reported in this sample.						
FA87729-12	**A2-32 (17-20)**					
No hits reported in this sample.						
FA87729-13	**A2-33 (7-10)**					
No hits reported in this sample.						
FA87729-14	**A2-33 (17-20)**					
No hits reported in this sample.						
FA87729-15	**A2-34 (7-10)**					
No hits reported in this sample.						
FA87729-16	**A2-34 (17-20)**					
No hits reported in this sample.						
FA87729-17	**A2-35 (7-10)**					
Trichloroethylene		0.68 J	1.0	0.35	ug/l	SW846 8260D
FA87729-18	**A2-35 (17-20)**					
No hits reported in this sample.						
FA87729-19	**A2-36 (7-10)**					
Trichloroethylene		0.52 J	1.0	0.35	ug/l	SW846 8260D

Summary of Hits

Job Number: FA87729
Account: ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC
Collected: 07/29/21 thru 07/30/21

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

FA87729-20 A2-36 (17-20)

No hits reported in this sample.

FA87729-21 TRIP BLANK

No hits reported in this sample.

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	A2-27 (7-10)		
Lab Sample ID:	FA87729-1	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80645.D	1	08/12/21 14:29	SO	n/a	n/a	VP3283
Run #2 [a]	P80676.D	1	08/13/21 15:10	SO	n/a	n/a	VP3284

	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	ND	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [b]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [b]	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 [b]	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 [c]	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 [b]	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 [d]	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:	A2-27 (7-10)		
Lab Sample ID:	FA87729-1	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [e]	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 [f]	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	96%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	101%	79-125%
2037-26-5	Toluene-D8	100%	101%	85-112%
460-00-4	4-Bromofluorobenzene	102%	100%	83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.
(b) Associated BS recovery outside control limits low.
(c) Associated CCV outside of control limits high, sample was ND.
(d) Associated CCV outside of control limits low.
(e) Result is from Run# 2
(f) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-27 (17-20)		
Lab Sample ID:	FA87729-2	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80646.D	1	08/12/21 14:53	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-27 (17-20)		
Lab Sample ID:	FA87729-2	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-28 (7-10)		
Lab Sample ID:	FA87729-3	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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]	P80687.D	500	08/13/21 19:35	SO	n/a	n/a	VP3284
Run #2	P80647.D	5000	08/12/21 15:17	SO	n/a	n/a	VP3283

	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	ND [b]	130000	50000	ug/l	
71-43-2	Benzene	ND [b]	5000	1600	ug/l	
75-27-4	Bromodichloromethane [c]	ND [b]	5000	1200	ug/l	
75-25-2	Bromoform [c]	ND [b]	5000	2000	ug/l	
78-93-3	2-Butanone (MEK)	ND [b]	25000	10000	ug/l	
75-15-0	Carbon Disulfide [c]	ND [b]	10000	2700	ug/l	
56-23-5	Carbon Tetrachloride	ND [b]	5000	1800	ug/l	
108-90-7	Chlorobenzene	ND [b]	5000	1000	ug/l	
75-00-3	Chloroethane [d]	ND [b]	10000	3300	ug/l	
67-66-3	Chloroform	ND [b]	5000	1500	ug/l	
110-82-7	Cyclohexane	ND [b]	5000	2000	ug/l	
124-48-1	Dibromochloromethane [c]	ND [b]	5000	1400	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND [b]	25000	5200	ug/l	
106-93-4	1,2-Dibromoethane	ND [b]	10000	1400	ug/l	
75-71-8	Dichlorodifluoromethane	ND [b]	10000	2500	ug/l	
95-50-1	1,2-Dichlorobenzene	ND [b]	5000	1600	ug/l	
541-73-1	1,3-Dichlorobenzene	ND [b]	5000	1100	ug/l	
106-46-7	1,4-Dichlorobenzene	ND [b]	5000	1300	ug/l	
75-34-3	1,1-Dichloroethane	ND [b]	5000	1700	ug/l	
107-06-2	1,2-Dichloroethane	ND [b]	5000	1600	ug/l	
75-35-4	1,1-Dichloroethylene	ND [b]	5000	1600	ug/l	
156-59-2	cis-1,2-Dichloroethylene	3970	500	140	ug/l	
156-60-5	trans-1,2-Dichloroethylene	ND [b]	5000	1100	ug/l	
78-87-5	1,2-Dichloropropane	ND [b]	5000	2100	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND [b]	5000	1500	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND [b]	5000	1100	ug/l	
100-41-4	Ethylbenzene	ND [b]	5000	1800	ug/l	
76-13-1	Freon 113	ND [b]	5000	2400	ug/l	
591-78-6	2-Hexanone	ND [b]	50000	10000	ug/l	
98-82-8	Isopropylbenzene	ND [b]	5000	1100	ug/l	
79-20-9	Methyl Acetate	ND [b]	100000	25000	ug/l	
74-83-9	Methyl Bromide [e]	ND [b]	25000	10000	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:	A2-28 (7-10)		
Lab Sample ID:	FA87729-3	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [b]	10000	2500	ug/l	
108-87-2	Methylcyclohexane	ND [b]	5000	2200	ug/l	
75-09-2	Methylene Chloride	ND [b]	25000	10000	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND [b]	25000	5000	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND [b]	5000	1100	ug/l	
100-42-5	Styrene	ND [b]	5000	1100	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND [b]	5000	1500	ug/l	
127-18-4	Tetrachloroethylene	ND [b]	5000	1100	ug/l	
108-88-3	Toluene	ND [b]	5000	1500	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND [b]	10000	2500	ug/l	
71-55-6	1,1,1-Trichloroethane	ND [b]	5000	1200	ug/l	
79-00-5	1,1,2-Trichloroethane	ND [b]	5000	2300	ug/l	
79-01-6	Trichloroethylene	27200	500	170	ug/l	
75-69-4	Trichlorofluoromethane [f]	ND [b]	10000	2500	ug/l	
75-01-4	Vinyl Chloride	ND [b]	5000	2000	ug/l	
1330-20-7	Xylene (total)	ND [b]	15000	3600	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	93%	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	104%	79-125%
2037-26-5	Toluene-D8	103%	102%	85-112%
460-00-4	4-Bromofluorobenzene	100%	101%	83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.
(b) Result is from Run# 2
(c) Associated BS recovery outside control limits low.
(d) Associated CCV outside of control limits high, sample was ND.
(e) Associated CCV outside of control limits low.
(f) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-28 (17-20)		
Lab Sample ID:	FA87729-4	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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]	P80688.D	1000	08/13/21 19:58	SO	n/a	n/a	VP3284
Run #2	P80648.D	2000	08/12/21 15:41	SO	n/a	n/a	VP3283

	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	ND [b]	50000	20000	ug/l	
71-43-2	Benzene	ND [b]	2000	620	ug/l	
75-27-4	Bromodichloromethane [c]	ND [b]	2000	480	ug/l	
75-25-2	Bromoform [c]	ND [b]	2000	810	ug/l	
78-93-3	2-Butanone (MEK)	ND [b]	10000	4000	ug/l	
75-15-0	Carbon Disulfide [c]	ND [b]	4000	1100	ug/l	
56-23-5	Carbon Tetrachloride	ND [b]	2000	710	ug/l	
108-90-7	Chlorobenzene	ND [b]	2000	400	ug/l	
75-00-3	Chloroethane [d]	ND [b]	4000	1300	ug/l	
67-66-3	Chloroform	ND [b]	2000	600	ug/l	
110-82-7	Cyclohexane	ND [b]	2000	780	ug/l	
124-48-1	Dibromochloromethane [c]	ND [b]	2000	550	ug/l	
96-12-8	1,2-Dibromo-3-chloropropane	ND [b]	10000	2100	ug/l	
106-93-4	1,2-Dibromoethane	ND [b]	4000	550	ug/l	
75-71-8	Dichlorodifluoromethane	ND [b]	4000	1000	ug/l	
95-50-1	1,2-Dichlorobenzene	ND [b]	2000	650	ug/l	
541-73-1	1,3-Dichlorobenzene	ND [b]	2000	430	ug/l	
106-46-7	1,4-Dichlorobenzene	ND [b]	2000	510	ug/l	
75-34-3	1,1-Dichloroethane	ND [b]	2000	680	ug/l	
107-06-2	1,2-Dichloroethane	ND [b]	2000	620	ug/l	
75-35-4	1,1-Dichloroethylene	ND [b]	2000	640	ug/l	
156-59-2	cis-1,2-Dichloroethylene	540	1000	280	ug/l	J
156-60-5	trans-1,2-Dichloroethylene	ND [b]	2000	440	ug/l	
78-87-5	1,2-Dichloropropane	ND [b]	2000	850	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND [b]	2000	580	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND [b]	2000	430	ug/l	
100-41-4	Ethylbenzene	ND [b]	2000	710	ug/l	
76-13-1	Freon 113	ND [b]	2000	960	ug/l	
591-78-6	2-Hexanone	ND [b]	20000	4000	ug/l	
98-82-8	Isopropylbenzene	ND [b]	2000	440	ug/l	
79-20-9	Methyl Acetate	ND [b]	40000	10000	ug/l	
74-83-9	Methyl Bromide [e]	ND [b]	10000	4000	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:	A2-28 (17-20)		
Lab Sample ID:	FA87729-4	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [b]	4000	1000	ug/l	
108-87-2	Methylcyclohexane	ND [b]	2000	870	ug/l	
75-09-2	Methylene Chloride	ND [b]	10000	4000	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND [b]	10000	2000	ug/l	
1634-04-4	Methyl Tert Butyl Ether	ND [b]	2000	460	ug/l	
100-42-5	Styrene	ND [b]	2000	440	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND [b]	2000	600	ug/l	
127-18-4	Tetrachloroethylene	ND [b]	2000	430	ug/l	
108-88-3	Toluene	ND [b]	2000	600	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND [b]	4000	1000	ug/l	
71-55-6	1,1,1-Trichloroethane	ND [b]	2000	500	ug/l	
79-00-5	1,1,2-Trichloroethane	ND [b]	2000	930	ug/l	
79-01-6	Trichloroethylene	63200	1000	350	ug/l	
75-69-4	Trichlorofluoromethane [f]	ND [b]	4000	1000	ug/l	
75-01-4	Vinyl Chloride	ND [b]	2000	820	ug/l	
1330-20-7	Xylene (total)	ND [b]	6000	1400	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	94%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	103%	79-125%
2037-26-5	Toluene-D8	102%	101%	85-112%
460-00-4	4-Bromofluorobenzene	100%	100%	83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.
(b) Result is from Run# 2
(c) Associated BS recovery outside control limits low.
(d) Associated CCV outside of control limits high, sample was ND.
(e) Associated CCV outside of control limits low.
(f) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-29 (7-10)		
Lab Sample ID:	FA87729-5	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80649.D	1	08/12/21 16:05	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-29 (7-10)		
Lab Sample ID:	FA87729-5	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	101%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-29 (17-20)		
Lab Sample ID:	FA87729-6	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80650.D	1	08/12/21 16:29	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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	4.0	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	23.7	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 [c]	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:	A2-29 (17-20)		
Lab Sample ID:	FA87729-6	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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	55.9	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane [d]	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	97%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-30 (7-10)		
Lab Sample ID:	FA87729-7	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80651.D	1	08/12/21 16:54	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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	13.6	1.0	0.28	ug/l	
156-60-5	trans-1,2-Dichloroethylene	1.4	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 [c]	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:	A2-30 (7-10)		
Lab Sample ID:	FA87729-7	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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	1.6	1.0	0.35	ug/l	
75-69-4	Trichlorofluoromethane [d]	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	0.58	1.0	0.41	ug/l	J
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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	103%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-30 (17-20)		
Lab Sample ID:	FA87729-8	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5E30097.D	1	08/13/21 17:09	CV	n/a	n/a	V5E1378
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 [a]	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 [b]	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	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:	A2-30 (17-20)		
Lab Sample ID:	FA87729-8	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [b]	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	0.58	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	93%		83-118%
17060-07-0	1,2-Dichloroethane-D4	96%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Associated CCV outside of control limits low.
(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:	A2-31 (7-10)		
Lab Sample ID:	FA87729-9	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5E30098.D	1	08/13/21 17:32	CV	n/a	n/a	V5E1378
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 [a]	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 [b]	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	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:	A2-31 (7-10)		
Lab Sample ID:	FA87729-9	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [b]	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	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	106%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	108%		83-118%

(a) Associated CCV outside of control limits low.
(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:	A2-31 (17-20)		
Lab Sample ID:	FA87729-10	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	5E30099.D	1	08/13/21 17:55	CV	n/a	n/a	V5E1378
Run #2 [a]	5E30176.D	20	08/17/21 15:30	LV	n/a	n/a	V5E1381

	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 [b]	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 [c]	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	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	1.8	1.0	0.32	ug/l	
156-59-2	cis-1,2-Dichloroethylene	142 [d]	20	5.5	ug/l	
156-60-5	trans-1,2-Dichloroethylene	1.9	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:	A2-31 (17-20)		
Lab Sample ID:	FA87729-10	**Date Sampled:**	07/30/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [c]	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	431 [d]	20	6.9	ug/l	
75-69-4	Trichlorofluoromethane	ND	2.0	0.50	ug/l	
75-01-4	Vinyl Chloride	3.5	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	97%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	113%	79-125%
2037-26-5	Toluene-D8	99%	105%	85-112%
460-00-4	4-Bromofluorobenzene	109%	112%	83-118%

(a) Sample re-analyzed beyond hold time; reported results are considered minimum values.
(b) Associated CCV outside of control limits low.
(c) Associated CCV outside of control limits high, sample was ND.
(d) 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:	A2-32 (7-10)		
Lab Sample ID:	FA87729-11	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80652.D	1	08/12/21 17:18	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-32 (7-10)		
Lab Sample ID:	FA87729-11	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	105%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	98%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-32 (17-20)		
Lab Sample ID:	FA87729-12	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80653.D	1	08/12/21 17:42	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-32 (17-20)		
Lab Sample ID:	FA87729-12	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	103%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-33 (7-10)		
Lab Sample ID:	FA87729-13	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80654.D	1	08/12/21 18:06	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-33 (7-10)		
Lab Sample ID:	FA87729-13	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-33 (17-20)		
Lab Sample ID:	FA87729-14	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80655.D	1	08/12/21 18:30	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-33 (17-20)		
Lab Sample ID:	FA87729-14	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	98%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-34 (7-10)		
Lab Sample ID:	FA87729-15	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80656.D	1	08/12/21 18:54	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-34 (7-10)		
Lab Sample ID:	FA87729-15	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	101%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-34 (17-20)		
Lab Sample ID:	FA87729-16	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80657.D	1	08/12/21 19:18	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-34 (17-20)		
Lab Sample ID:	FA87729-16	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	104%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-35 (7-10)		
Lab Sample ID:	FA87729-17	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80658.D	1	08/12/21 19:42	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-35 (7-10)		
Lab Sample ID:	FA87729-17	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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	0.68	1.0	0.35	ug/l	J
75-69-4	Trichlorofluoromethane [d]	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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	99%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-35 (17-20)		
Lab Sample ID:	FA87729-18	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80659.D	1	08/12/21 20:06	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-35 (17-20)		
Lab Sample ID:	FA87729-18	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	96%		83-118%
17060-07-0	1,2-Dichloroethane-D4	104%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-36 (7-10)		
Lab Sample ID:	FA87729-19	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80660.D	1	08/12/21 20:30	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-36 (7-10)		
Lab Sample ID:	FA87729-19	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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	0.52	1.0	0.35	ug/l	J
75-69-4	Trichlorofluoromethane [d]	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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	101%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	A2-36 (17-20)		
Lab Sample ID:	FA87729-20	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80661.D	1	08/12/21 20:54	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	A2-36 (17-20)		
Lab Sample ID:	FA87729-20	**Date Sampled:**	07/29/21
Matrix:	AQ - Ground Water	**Date Received:**	07/31/21
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 [d]	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	95%		83-118%
17060-07-0	1,2-Dichloroethane-D4	102%		79-125%
2037-26-5	Toluene-D8	100%		85-112%
460-00-4	4-Bromofluorobenzene	100%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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:	TRIP BLANK		
Lab Sample ID:	FA87729-21	**Date Sampled:**	07/29/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/31/21
Method:	SW846 8260D	**Percent Solids:**	n/a
Project:	Brenntag; Charleston, SC		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	P80642.D	1	08/12/21 13:17	SO	n/a	n/a	VP3283
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	25	10	ug/l	
71-43-2	Benzene	ND	1.0	0.31	ug/l	
75-27-4	Bromodichloromethane [a]	ND	1.0	0.24	ug/l	
75-25-2	Bromoform [a]	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 [a]	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 [b]	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 [a]	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 [c]	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:	TRIP BLANK		
Lab Sample ID:	FA87729-21	**Date Sampled:**	07/29/21
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/31/21
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 [d]	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	94%		83-118%
17060-07-0	1,2-Dichloroethane-D4	98%		79-125%
2037-26-5	Toluene-D8	102%		85-112%
460-00-4	4-Bromofluorobenzene	102%		83-118%

(a) Associated BS recovery outside control limits low.
(b) Associated CCV outside of control limits high, sample was ND.
(c) Associated CCV outside of control limits low.
(d) Associated Initial Calibration outside control limits (%RSD > 15%).

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

FA87729

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

Page 1 of 2

Lab Work Order #

Send Results to:

Contact & Company Name: Charles Lawson ARCADIS
Telephone: 706-829-4421
Address: 1450 Greene St Ste 220
Fax:
City: Augusta State: GA Zip: 30901
E-mail Address: Charles.Lawson@Arcadis.com
Project Name/Location (City, State): Brenntag Charleston SC
Project #: 30099999 T=5
Sampler's Printed Name: Charles Lawson
Sampler's Signature: CB Lawson

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD: 8260 VOC 40 mL VIAL HCL 4oC
						B		3	1	
1 A2-27 (7-10)	7/29/21	1730		X	W					X
2 A2-27 (17-20)	7/29/21	1750		X	W					X
3 A2-28 (7-10)	7/30/21	0855		X	W					X
4 A2-28 (17-20)	7/30/21	0910		X	W					X
5 A2-29 (7-10)	7/30/21	0940		X	W					X
6 A2-29 (17-20)	7/30/21	1000		X	W					X
7 A2-30 (7-10)	7/30/21	1020		X	W					X
8 A2-30 (17-20)	7/30/21	1040		X	W					X
9 A2-31 (7-10)	7/30/21	1105		X	W					X
10 A2-31 (17-20)	7/30/21	1125		X	W					X
11 A2-32 (7-10)	7/29/21	1500		X	W					X
12 A2-32 (17-20)	7/29/21	1520		X	W					X
13 A2-33 (7-10)	7/29/21	1545		X	W					X
14 A2-33 (17-20)	7/29/21	1600		X	W					X

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

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: _____

Matrix Key:
SO - Soil
SE - Sediment
NL - NAPL/Oil
W - Water
SL - Sludge
SW - Sample Wipe
T - Tissue
A - Air
Other: _____

REMARKS

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

INITIAL ASSESSMENT
LABEL VERIFICATION

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS	Cooler Custody Seal (✓) ☐ Intact ☐ Not Intact	Printed Name: Charles Lawson	Printed Name:	Printed Name:	Printed Name: Carlos G Delgado
☑ Cooler packed with ice (✓)		Signature: CB Lawson	Signature:	Signature:	Signature: Carlos G Delgado
Specify Turnaround Requirements:	Sample Receipt:	Firm: ARCADIS	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp: 1,2	Date/Time: 7/30/21 1300	Date/Time:	Date/Time:	Date/Time: 7/31/21 1130

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

FA87729: Chain of Custody
Page 1 of 3

ARCADIS

ID#:

CHAIN OF CUSTODY & LABORATORY ANALYSIS REQUEST FORM

FA87729

Page 2 of 2

Lab Work Order #

Send Results to:

Contact & Company Name: CHARLES WATSON ARCADIS

Telephone: 706-922-4421

Address: 1450 Greene St Ste 220

Fax:

City: AUGUSTA State: GA Zip: 30901

E-mail Address: Charles.Watson@Arcadis.com

Project Name/Location (City, State): Brunswick Charleston, SC

Project #: 30099999 T=5

Sampler's Printed Name: Charles Watson

Sampler's Signature: CB Jam

Sample ID	Collection Date	Collection Time	Type (✓) Comp	Type (✓) Grab	Matrix	Preservative	Filtered (✓)	# of Containers	Container Information	PARAMETER ANALYSIS & METHOD	REMARKS
						B		3	1	8260D VOC 40 mL VOA V/HCl	
15 AZ-34 (7-10)	7/29/21	1620		X	W			3		X	
16 AZ-34 (17-20)	7/29/21	1640		X	W			3		X	
17 AZ-35 (7-10)	7/29/21	1415		X	W			3		X	
18 AZ-35 (17-20)	7/29/21	1440		X	W			3		X	
19 AZ-36 (7-10)	7/29/21	1335		X	W			3		X	
20 AZ-36 (17-20)	7/29/21	1355		X	W			3		X	
21 TRIP BLANK-01	—	—		—	W			2		X	

Keys

Preservation Key:
A. H_2SO_4
B. HCL
C. HNO_3
D. NaOH
E. None
F. Other: _____
G. Other: _____
H. Other: _____

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: _____

Matrix Key:
SO - Soil
W - Water
T - Tissue
SE - Sediment
SL - Sludge
A - Air
NL - NAPL/Oil
SW - Sample Wipe
Other: _____

Special Instructions/Comments:

☐ Special QA/QC Instructions(✓):

Laboratory Information and Receipt		Relinquished By	Received By	Relinquished By	Laboratory Received By
Lab Name: SGS	Cooler Custody Seal (✓)	Printed Name: Charles Watson	Printed Name:	Printed Name:	Printed Name: Carlos G Delgado
☑ Cooler packed with ice (✓)	☐ Intact ☐ Not Intact	Signature: CB Jam	Signature:	Signature:	Signature: Carlos G Delgado
Specify Turnaround Requirements:	Sample Receipt:	Firm: ARCADIS	Firm/Courier:	Firm/Courier:	Firm: SGS
Shipping Tracking #:	Condition/Cooler Temp: _____	Date/Time: 7/30/21 1300	Date/Time:	Date/Time:	Date/Time: 7-31-21 1130

20730826 CofC AR Form 08.27.2015

Distribution: WHITE – Laboratory returns with results YELLOW – Lab copy PINK – Retained by Arcadis

SGS Sample Receipt Summary

Job Number: FA87729 **Client:** ARCADIS **Project:** 30088889 T=5

Date / Time Received: 7/31/2021 11:30:00 AM **Delivery Method:** FED EX **Airbill #'s:** 506145085385

Therm ID: IR 1; **Therm CF:** 0.2; **# of Coolers:** 1

Cooler Temps (Raw Measured) °C: Cooler 1: (1.2);

Cooler Temps (Corrected) °C: Cooler 1: (1.4);

Cooler Information	Y	or	N
1. Custody Seals Present	☑		☐
2. Custody Seals Intact	☑		☐
3. Temp criteria achieved	☑		☐
4. Cooler temp verification	IR Gun		
5. Cooler media	Ice (Bag)		

Trip Blank Information	Y	or	N	N/A
1. Trip Blank present / cooler	☑		☐	☐
2. Trip Blank listed on COC	☑		☐	☐

	W	or	S	N/A
3. Type Of TB Received	☑		☐	☐

Sample Information	Y	or	N	N/A
1. Sample labels present on bottles	☑		☐	
2. Samples preserved properly	☑		☐	
3. Sufficient volume/containers recvd for analysis:	☑		☐	
4. Condition of sample	Intact			
5. Sample recvd within HT	☑		☐	
6. Dates/Times/IDs on COC match Sample Label	☑		☐	
7. VOCs have headspace	☑		☐	☐
8. Bottles received for unspecified tests	☐		☑	
9. Compositing instructions clear	☐		☐	☑
10. Voa Soil Kits/Jars received past 48hrs?	☐		☐	☑
11. % Solids Jar received?	☐		☐	☑
12. Residual Chlorine Present?	☐		☐	☑

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 SAMPLES #11, #12, #14, #20 #21 HAVE ALL VIALS CONTAINING HEADSPACE.

IDS FOR THESE SAMPLES:
SAMPLE #11 ID: "A2-32 (7-10)"
SAMPLE #12 ID: "A2-32 (17-20)"
SAMPLE #14 ID: "A2-33 (17-20)"
SAMPLE #20 ID: "A2-36 (17-20)"

SM001
Rev. Date 05/24/17

Technician: CARLOSD Date: 7/31/2021 11:30:00 A Reviewer: _____ Date: _____

FA87729: Chain of Custody
Page 3 of 3

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: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP3283-MB	P80641.D	1	08/12/21	SO	n/a	n/a	VP3283

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-2, FA87729-3, FA87729-4, FA87729-5, FA87729-6, FA87729-7, FA87729-11, FA87729-12, FA87729-13, FA87729-14, FA87729-15, FA87729-16, FA87729-17, FA87729-18, FA87729-19, FA87729-20, FA87729-21

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: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP3283-MB	P80641.D	1	08/12/21	SO	n/a	n/a	VP3283

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-2, FA87729-3, FA87729-4, FA87729-5, FA87729-6, FA87729-7, FA87729-11, FA87729-12, FA87729-13, FA87729-14, FA87729-15, FA87729-16, FA87729-17, FA87729-18, FA87729-19, FA87729-20, FA87729-21

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	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Method Blank Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1378-MB	5E30083.D	1	08/13/21	CV	n/a	n/a	V5E1378

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-8, FA87729-9, FA87729-10

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: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1378-MB	5E30083.D	1	08/13/21	CV	n/a	n/a	V5E1378

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-8, FA87729-9, FA87729-10

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	95%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	79-125%
2037-26-5	Toluene-D8	102%	85-112%
460-00-4	4-Bromofluorobenzene	106%	83-118%

Method Blank Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP3284-MB	P80670.D	1	08/13/21	SO	n/a	n/a	VP3284

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-3, FA87729-4

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
127-18-4	Tetrachloroethylene	ND	1.0	0.22	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	79-125%
2037-26-5	Toluene-D8	103%	85-112%
460-00-4	4-Bromofluorobenzene	101%	83-118%

Method Blank Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1381-MB	5E30167.D	1	08/17/21	LV	n/a	n/a	V5E1381

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-10

CAS No.	Compound	Result	RL	MDL	Units	Q
156-59-2	cis-1,2-Dichloroethylene	ND	1.0	0.28	ug/l	
79-01-6	Trichloroethylene	ND	1.0	0.35	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	109%	79-125%
2037-26-5	Toluene-D8	104%	85-112%
460-00-4	4-Bromofluorobenzene	109%	83-118%

Blank Spike Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP3283-BS	P80639.D	1	08/12/21	SO	n/a	n/a	VP3283

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-2, FA87729-3, FA87729-4, FA87729-5, FA87729-6, FA87729-7, FA87729-11, FA87729-12, FA87729-13, FA87729-14, FA87729-15, FA87729-16, FA87729-17, FA87729-18, FA87729-19, FA87729-20, FA87729-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	105	84	50-147
71-43-2	Benzene	25	23.2	93	81-122
75-27-4	Bromodichloromethane	25	17.7	71*	79-123
75-25-2	Bromoform	25	15.7	63*	66-123
78-93-3	2-Butanone (MEK)	125	104	83	56-143
75-15-0	Carbon Disulfide	25	15.3	61*	66-148
56-23-5	Carbon Tetrachloride	25	19.9	80	76-136
108-90-7	Chlorobenzene	25	22.1	88	82-124
75-00-3	Chloroethane	25	27.7	111	62-144
67-66-3	Chloroform	25	21.0	84	80-124
110-82-7	Cyclohexane	25	19.0	76	73-138
124-48-1	Dibromochloromethane	25	17.1	68*	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	17.4	70	64-123
106-93-4	1,2-Dibromoethane	25	20.2	81	75-120
75-71-8	Dichlorodifluoromethane	25	17.1	68	42-167
95-50-1	1,2-Dichlorobenzene	25	22.1	88	82-124
541-73-1	1,3-Dichlorobenzene	25	22.3	89	84-125
106-46-7	1,4-Dichlorobenzene	25	22.3	89	78-120
75-34-3	1,1-Dichloroethane	25	23.2	93	81-122
107-06-2	1,2-Dichloroethane	25	21.6	86	75-125
75-35-4	1,1-Dichloroethylene	25	26.0	104	78-137
156-59-2	cis-1,2-Dichloroethylene	25	21.5	86	78-120
156-60-5	trans-1,2-Dichloroethylene	25	22.3	89	76-127
78-87-5	1,2-Dichloropropane	25	21.3	85	76-124
10061-01-5	cis-1,3-Dichloropropene	25	18.9	76	75-118
10061-02-6	trans-1,3-Dichloropropene	25	20.5	82	80-120
100-41-4	Ethylbenzene	25	21.7	87	81-121
76-13-1	Freon 113	25	21.1	84	72-134
591-78-6	2-Hexanone	125	118	94	61-129
98-82-8	Isopropylbenzene	25	21.8	87	83-132
79-20-9	Methyl Acetate	125	106	85	65-126
74-83-9	Methyl Bromide	25	16.7	67	59-143
74-87-3	Methyl Chloride	25	18.5	74	50-159
108-87-2	Methylcyclohexane	25	20.4	82	76-129
75-09-2	Methylene Chloride	25	18.1	72	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	108	86	66-122

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP3283-BS	P80639.D	1	08/12/21	SO	n/a	n/a	VP3283

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-2, FA87729-3, FA87729-4, FA87729-5, FA87729-6, FA87729-7, FA87729-11, FA87729-12, FA87729-13, FA87729-14, FA87729-15, FA87729-16, FA87729-17, FA87729-18, FA87729-19, FA87729-20, FA87729-21

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	25	18.6	74	72-117
100-42-5	Styrene	25	20.6	82	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	20.3	81	72-120
127-18-4	Tetrachloroethylene	25	22.0	88	76-135
108-88-3	Toluene	25	20.6	82	80-120
120-82-1	1,2,4-Trichlorobenzene	25	20.5	82	73-129
71-55-6	1,1,1-Trichloroethane	25	21.5	86	75-130
79-00-5	1,1,2-Trichloroethane	25	20.7	83	76-119
79-01-6	Trichloroethylene	25	21.2	85	81-126
75-69-4	Trichlorofluoromethane	25	26.7	107	71-156
75-01-4	Vinyl Chloride	25	22.0	88	69-159
1330-20-7	Xylene (total)	75	65.5	87	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	100%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VP3284-BS	P80667.D	1	08/13/21	SO	n/a	n/a	VP3284

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-3, FA87729-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
156-59-2	cis-1,2-Dichloroethylene	25	23.1	92	78-120
127-18-4	Tetrachloroethylene	25	23.2	93	76-135
79-01-6	Trichloroethylene	25	22.5	90	81-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	103%	79-125%
2037-26-5	Toluene-D8	99%	85-112%
460-00-4	4-Bromofluorobenzene	98%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1378-BS	5E30093.D	1	08/13/21	CV	n/a	n/a	V5E1378

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-8, FA87729-9, FA87729-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
67-64-1	Acetone	125	85.2	68	50-147
71-43-2	Benzene	25	25.8	103	81-122
75-27-4	Bromodichloromethane	25	24.8	99	79-123
75-25-2	Bromoform	25	22.2	89	66-123
78-93-3	2-Butanone (MEK)	125	101	81	56-143
75-15-0	Carbon Disulfide	25	21.0	84	66-148
56-23-5	Carbon Tetrachloride	25	26.3	105	76-136
108-90-7	Chlorobenzene	25	24.6	98	82-124
75-00-3	Chloroethane	25	19.4	78	62-144
67-66-3	Chloroform	25	24.3	97	80-124
110-82-7	Cyclohexane	25	27.3	109	73-138
124-48-1	Dibromochloromethane	25	23.0	92	78-122
96-12-8	1,2-Dibromo-3-chloropropane	25	19.9	80	64-123
106-93-4	1,2-Dibromoethane	25	23.7	95	75-120
75-71-8	Dichlorodifluoromethane	25	18.6	74	42-167
95-50-1	1,2-Dichlorobenzene	25	24.6	98	82-124
541-73-1	1,3-Dichlorobenzene	25	25.6	102	84-125
106-46-7	1,4-Dichlorobenzene	25	24.2	97	78-120
75-34-3	1,1-Dichloroethane	25	27.0	108	81-122
107-06-2	1,2-Dichloroethane	25	24.4	98	75-125
75-35-4	1,1-Dichloroethylene	25	27.3	109	78-137
156-59-2	cis-1,2-Dichloroethylene	25	26.2	105	78-120
156-60-5	trans-1,2-Dichloroethylene	25	26.8	107	76-127
78-87-5	1,2-Dichloropropane	25	26.2	105	76-124
10061-01-5	cis-1,3-Dichloropropene	25	27.9	112	75-118
10061-02-6	trans-1,3-Dichloropropene	25	25.3	101	80-120
100-41-4	Ethylbenzene	25	25.7	103	81-121
76-13-1	Freon 113	25	23.6	94	72-134
591-78-6	2-Hexanone	125	91.6	73	61-129
98-82-8	Isopropylbenzene	25	27.3	109	83-132
79-20-9	Methyl Acetate	125	86.4	69	65-126
74-83-9	Methyl Bromide	25	19.7	79	59-143
74-87-3	Methyl Chloride	25	21.4	86	50-159
108-87-2	Methylcyclohexane	25	29.6	118	76-129
75-09-2	Methylene Chloride	25	22.7	91	69-135
108-10-1	4-Methyl-2-pentanone (MIBK)	125	106	85	66-122

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1378-BS	5E30093.D	1	08/13/21	CV	n/a	n/a	V5E1378

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-8, FA87729-9, FA87729-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
1634-04-4	Methyl Tert Butyl Ether	25	22.0	88	72-117
100-42-5	Styrene	25	25.2	101	78-119
79-34-5	1,1,2,2-Tetrachloroethane	25	21.4	86	72-120
127-18-4	Tetrachloroethylene	25	25.9	104	76-135
108-88-3	Toluene	25	25.1	100	80-120
120-82-1	1,2,4-Trichlorobenzene	25	23.6	94	73-129
71-55-6	1,1,1-Trichloroethane	25	25.1	100	75-130
79-00-5	1,1,2-Trichloroethane	25	23.9	96	76-119
79-01-6	Trichloroethylene	25	26.0	104	81-126
75-69-4	Trichlorofluoromethane	25	23.8	95	71-156
75-01-4	Vinyl Chloride	25	21.2	85	69-159
1330-20-7	Xylene (total)	75	80.4	107	80-126

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	97%	83-118%
17060-07-0	1,2-Dichloroethane-D4	99%	79-125%
2037-26-5	Toluene-D8	101%	85-112%
460-00-4	4-Bromofluorobenzene	103%	83-118%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V5E1381-BS	5E30168.D	1	08/17/21	LV	n/a	n/a	V5E1381

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-10

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
156-59-2	cis-1,2-Dichloroethylene	25	25.7	103	78-120
79-01-6	Trichloroethylene	25	25.5	102	81-126

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

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA87717-10MS	P80662.D	50	08/12/21	SO	n/a	n/a	VP3283
FA87717-10MSD	P80663.D	50	08/12/21	SO	n/a	n/a	VP3283
FA87717-10	P80643.D	50	08/12/21	SO	n/a	n/a	VP3283

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-2, FA87729-3, FA87729-4, FA87729-5, FA87729-6, FA87729-7, FA87729-11, FA87729-12, FA87729-13, FA87729-14, FA87729-15, FA87729-16, FA87729-17, FA87729-18, FA87729-19, FA87729-20, FA87729-21

CAS No.	Compound	FA87717-10 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		6250	5510	88	6250	5510	88	0	50-147/21
71-43-2	Benzene	ND		1250	1240	99	1250	1260	101	2	81-122/14
75-27-4	Bromodichloromethane	ND		1250	941	75*	1250	992	79	5	79-123/19
75-25-2	Bromoform	ND		1250	780	62*	1250	807	65*	3	66-123/21
78-93-3	2-Butanone (MEK)	ND		6250	5740	92	6250	5730	92	0	56-143/18
75-15-0	Carbon Disulfide	ND		1250	751	60*	1250	808	65*	7	66-148/23
56-23-5	Carbon Tetrachloride	ND		1250	1040	83	1250	1060	85	2	76-136/23
108-90-7	Chlorobenzene	ND		1250	1180	94	1250	1180	94	0	82-124/14
75-00-3	Chloroethane	ND		1250	1740	139	1250	1580	126	10	62-144/20
67-66-3	Chloroform	ND		1250	1140	91	1250	1140	91	0	80-124/15
110-82-7	Cyclohexane	ND		1250	977	78	1250	1020	82	4	73-138/18
124-48-1	Dibromochloromethane	ND		1250	899	72*	1250	926	74*	3	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		1250	886	71	1250	931	74	5	64-123/18
106-93-4	1,2-Dibromoethane	ND		1250	1050	84	1250	1070	86	2	75-120/13
75-71-8	Dichlorodifluoromethane	ND		1250	789	63	1250	806	64	2	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		1250	1180	94	1250	1200	96	2	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		1250	1220	98	1250	1220	98	0	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		1250	1180	94	1250	1180	94	0	78-120/15
75-34-3	1,1-Dichloroethane	ND		1250	1230	98	1250	1250	100	2	81-122/15
107-06-2	1,2-Dichloroethane	ND		1250	1130	90	1250	1160	93	3	75-125/14
75-35-4	1,1-Dichloroethylene	ND		1250	1480	118	1250	1490	119	1	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		1250	1130	90	1250	1190	95	5	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		1250	1150	92	1250	1180	94	3	76-127/17
78-87-5	1,2-Dichloropropane	ND		1250	1150	92	1250	1160	93	1	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		1250	965	77	1250	977	78	1	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		1250	1020	82	1250	1060	85	4	80-120/22
100-41-4	Ethylbenzene	1710		1250	3270	125*	1250	3260	124*	0	81-121/14
76-13-1	Freon 113	ND		1250	1150	92	1250	1160	93	1	72-134/20
591-78-6	2-Hexanone	ND		6250	6550	105	6250	6540	105	0	61-129/18
98-82-8	Isopropylbenzene	45.8	J	1250	1200	92	1250	1220	94	2	83-132/15
79-20-9	Methyl Acetate	ND		6250	5870	94	6250	5920	95	1	65-126/18
74-83-9	Methyl Bromide	ND		1250	839	67	1250	978	78	15	59-143/19
74-87-3	Methyl Chloride	ND		1250	909	73	1250	929	74	2	50-159/19
108-87-2	Methylcyclohexane	ND		1250	1020	82	1250	1040	83	2	76-129/17
75-09-2	Methylene Chloride	ND		1250	1040	83	1250	1040	83	0	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		6250	5870	94	6250	5900	94	1	66-122/16

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA87717-10MS	P80662.D	50	08/12/21	SO	n/a	n/a	VP3283
FA87717-10MSD	P80663.D	50	08/12/21	SO	n/a	n/a	VP3283
FA87717-10	P80643.D	50	08/12/21	SO	n/a	n/a	VP3283

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-2, FA87729-3, FA87729-4, FA87729-5, FA87729-6, FA87729-7, FA87729-11, FA87729-12, FA87729-13, FA87729-14, FA87729-15, FA87729-16, FA87729-17, FA87729-18, FA87729-19, FA87729-20, FA87729-21

CAS No.	Compound	FA87717-10 ug/l	Q	Spike 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		1250	976	78	1250	1010	81	3	72-117/14
100-42-5	Styrene	ND		1250	1060	85	1250	1090	87	3	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		1250	1140	91	1250	1120	90	2	72-120/14
127-18-4	Tetrachloroethylene	ND		1250	1170	94	1250	1180	94	1	76-135/16
108-88-3	Toluene	ND		1250	1090	87	1250	1100	88	1	80-120/14
120-82-1	1,2,4-Trichlorobenzene	ND		1250	1050	84	1250	1080	86	3	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		1250	1130	90	1250	1160	93	3	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		1250	1100	88	1250	1160	93	5	76-119/14
79-01-6	Trichloroethylene	ND		1250	1100	88	1250	1140	91	4	81-126/15
75-69-4	Trichlorofluoromethane	ND		1250	1650	132	1250	1620	130	2	71-156/21
75-01-4	Vinyl Chloride	ND		1250	1030	82	1250	1060	85	3	69-159/18
1330-20-7	Xylene (total)	3840		3750	7490	97	3750	7500	98	0	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA87717-10	Limits
1868-53-7	Dibromofluoromethane	98%	100%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	100%	104%	104%	79-125%
2037-26-5	Toluene-D8	99%	99%	102%	85-112%
460-00-4	4-Bromofluorobenzene	100%	99%	102%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA87784-1MS	5E30094.D	1	08/13/21	CV	n/a	n/a	V5E1378
FA87784-1MSD	5E30095.D	1	08/13/21	CV	n/a	n/a	V5E1378
FA87784-1	5E30088.D	1	08/13/21	CV	n/a	n/a	V5E1378

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-8, FA87729-9, FA87729-10

CAS No.	Compound	FA87784-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
67-64-1	Acetone	ND		125	86.6	69	125	58.8	47*	38*	50-147/21
71-43-2	Benzene	ND		25	26.2	105	25	23.9	96	9	81-122/14
75-27-4	Bromodichloromethane	ND		25	25.2	101	25	22.4	90	12	79-123/19
75-25-2	Bromoform	ND		25	22.0	88	25	19.7	79	11	66-123/21
78-93-3	2-Butanone (MEK)	ND		125	99.0	79	125	70.1	56	34*	56-143/18
75-15-0	Carbon Disulfide	ND		25	19.1	76	25	17.8	71	7	66-148/23
56-23-5	Carbon Tetrachloride	ND		25	27.7	111	25	26.0	104	6	76-136/23
108-90-7	Chlorobenzene	ND		25	25.3	101	25	23.1	92	9	82-124/14
75-00-3	Chloroethane	ND		25	20.5	82	25	21.7	87	6	62-144/20
67-66-3	Chloroform	ND		25	24.6	98	25	22.2	89	10	80-124/15
110-82-7	Cyclohexane	ND		25	27.9	112	25	26.0	104	7	73-138/18
124-48-1	Dibromochloromethane	ND		25	23.1	92	25	20.9	84	10	78-122/19
96-12-8	1,2-Dibromo-3-chloropropane	ND		25	19.9	80	25	18.0	72	10	64-123/18
106-93-4	1,2-Dibromoethane	ND		25	24.1	96	25	21.9	88	10	75-120/13
75-71-8	Dichlorodifluoromethane	ND		25	19.4	78	25	19.3	77	1	42-167/19
95-50-1	1,2-Dichlorobenzene	ND		25	25.8	103	25	23.5	94	9	82-124/14
541-73-1	1,3-Dichlorobenzene	ND		25	26.6	106	25	24.3	97	9	84-125/14
106-46-7	1,4-Dichlorobenzene	ND		25	25.0	100	25	22.8	91	9	78-120/15
75-34-3	1,1-Dichloroethane	ND		25	27.2	109	25	24.9	100	9	81-122/15
107-06-2	1,2-Dichloroethane	ND		25	24.3	97	25	20.7	83	16*	75-125/14
75-35-4	1,1-Dichloroethylene	ND		25	28.5	114	25	26.4	106	8	78-137/18
156-59-2	cis-1,2-Dichloroethylene	ND		25	27.0	108	25	24.9	100	8	78-120/15
156-60-5	trans-1,2-Dichloroethylene	ND		25	27.3	109	25	24.9	100	9	76-127/17
78-87-5	1,2-Dichloropropane	ND		25	26.7	107	25	23.5	94	13	76-124/14
10061-01-5	cis-1,3-Dichloropropene	ND		25	28.4	114	25	26.4	106	7	75-118/23
10061-02-6	trans-1,3-Dichloropropene	ND		25	24.3	97	25	22.2	89	9	80-120/22
100-41-4	Ethylbenzene	ND		25	25.9	104	25	23.8	95	8	81-121/14
76-13-1	Freon 113	ND		25	25.5	102	25	23.8	95	7	72-134/20
591-78-6	2-Hexanone	ND		125	96.1	77	125	98.7	79	3	61-129/18
98-82-8	Isopropylbenzene	ND		25	28.4	114	25	25.8	103	10	83-132/15
79-20-9	Methyl Acetate	ND		125	92.4	74	125	71.0	57*	26*	65-126/18
74-83-9	Methyl Bromide	ND		25	19.9	80	25	20.9	84	5	59-143/19
74-87-3	Methyl Chloride	ND		25	21.6	86	25	20.4	82	6	50-159/19
108-87-2	Methylcyclohexane	ND		25	30.4	122	25	28.2	113	8	76-129/17
75-09-2	Methylene Chloride	ND		25	22.6	90	25	20.7	83	9	69-135/16
108-10-1	4-Methyl-2-pentanone (MIBK)	ND		125	102	82	125	99.3	79	3	66-122/16

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA87784-1MS	5E30094.D	1	08/13/21	CV	n/a	n/a	V5E1378
FA87784-1MSD	5E30095.D	1	08/13/21	CV	n/a	n/a	V5E1378
FA87784-1	5E30088.D	1	08/13/21	CV	n/a	n/a	V5E1378

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-8, FA87729-9, FA87729-10

CAS No.	Compound	FA87784-1 ug/l	Q	Spike 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		25	23.0	92	25	20.5	82	11	72-117/14
100-42-5	Styrene	ND		25	25.7	103	25	23.4	94	9	78-119/23
79-34-5	1,1,2,2-Tetrachloroethane	ND		25	21.5	86	25	19.0	76	12	72-120/14
127-18-4	Tetrachloroethylene	ND		25	25.8	103	25	24.4	98	6	76-135/16
108-88-3	Toluene	ND		25	25.3	101	25	23.3	93	8	80-120/14
120-82-1	1,2,4-Trichlorobenzene	ND		25	26.3	105	25	23.8	95	10	73-129/20
71-55-6	1,1,1-Trichloroethane	ND		25	26.5	106	25	24.7	99	7	75-130/16
79-00-5	1,1,2-Trichloroethane	ND		25	24.1	96	25	22.0	88	9	76-119/14
79-01-6	Trichloroethylene	ND		25	26.1	104	25	24.5	98	6	81-126/15
75-69-4	Trichlorofluoromethane	ND		25	25.7	103	25	26.0	104	1	71-156/21
75-01-4	Vinyl Chloride	ND		25	22.4	90	25	22.6	90	1	69-159/18
1330-20-7	Xylene (total)	ND		75	82.2	110	75	74.8	100	9	80-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA87784-1	Limits
1868-53-7	Dibromofluoromethane	98%	96%	99%	83-118%
17060-07-0	1,2-Dichloroethane-D4	98%	93%	107%	79-125%
2037-26-5	Toluene-D8	100%	101%	105%	85-112%
460-00-4	4-Bromofluorobenzene	102%	103%	108%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA87820-2MS	P80689.D	1	08/13/21	SO	n/a	n/a	VP3284
FA87820-2MSD	P80690.D	1	08/13/21	SO	n/a	n/a	VP3284
FA87820-2	P80678.D	1	08/13/21	SO	n/a	n/a	VP3284

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-1, FA87729-3, FA87729-4

CAS No.	Compound	FA87820-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
156-59-2	cis-1,2-Dichloroethylene	ND		25	23.1	92	25	24.7	99	7	78-120/15
127-18-4	Tetrachloroethylene	ND		25	22.0	88	25	22.4	90	2	76-135/16
79-01-6	Trichloroethylene	ND		25	23.0	92	25	23.4	94	2	81-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA87820-2	Limits
1868-53-7	Dibromofluoromethane	99%	100%	96%	83-118%
17060-07-0	1,2-Dichloroethane-D4	102%	106%	104%	79-125%
2037-26-5	Toluene-D8	98%	98%	99%	85-112%
460-00-4	4-Bromofluorobenzene	98%	100%	101%	83-118%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: FA87729
Account: ARCGMSCA ARCADIS Geraghty & Miller
Project: Brenntag; Charleston, SC

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
FA87901-1MS	5E30189.D	1	08/17/21	LV	n/a	n/a	V5E1381
FA87901-1MSD	5E30190.D	1	08/17/21	LV	n/a	n/a	V5E1381
FA87901-1	5E30177.D	1	08/17/21	LV	n/a	n/a	V5E1381

The QC reported here applies to the following samples: **Method:** SW846 8260D

FA87729-10

CAS No.	Compound	FA87901-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
156-59-2	cis-1,2-Dichloroethylene	ND		25	25.8	103	25	26.2	105	2	78-120/15
79-01-6	Trichloroethylene	ND		25	26.2	105	25	25.4	102	3	81-126/15

CAS No.	Surrogate Recoveries	MS	MSD	FA87901-1	Limits
1868-53-7	Dibromofluoromethane	96%	99%	100%	83-118%
17060-07-0	1,2-Dichloroethane-D4	104%	103%	113%	79-125%
2037-26-5	Toluene-D8	100%	101%	105%	85-112%
460-00-4	4-Bromofluorobenzene	105%	105%	112%	83-118%

* = Outside of Control Limits.