Geosyntec consultants

11811 N. Tatum Blvd. Suite P-186
Phoenix, Arizona 85028
PH 602.513.5812
www.geosyntec.com

8 March 2022

Jocelyn Clark, P.E.
Physical Scientist
Land, Chemicals and Redevelopment Division – RCRA Branch
U.S. Environmental Protection Agency – Region 9
775 Hawthorne Street, LND-4-2
San Francisco, CA 94105

Subject: Fourth Quarter 2021 Groundwater Monitoring Results
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Attached please find results for the Fourth Quarter 2021 groundwater monitoring event conducted by Geosyntec Consultants, Inc. (Geosyntec) on behalf of Nammo Defense Systems Inc. (NDS) at the former Thermal Treatment Unit (TTU) at the NDS facility in Mesa, Arizona. Tables of results provided in Attachment 1 include the following: groundwater well network (Table 1), groundwater elevation measurements (Table 2), observed concentrations of volatile organic compounds (VOCs) (Table 3), and observed concentrations of perchlorate (Table 4). Figures provided in Attachment 2 include a site location map (Figure 1), groundwater elevation and contours (Figure 2), perchlorate isoconcentration contours (Figure 3), isoconcentration contours for 1,1-dichloroethene and trichloroethene (Figure 4), and time-series plots of groundwater elevations and select VOC concentrations (Figures 5-1 through 5-26). Results from the Washington National Primate Research Center well PF-2, located on Salt River Pima-Maricopa Indian Community property, did not exceed the perchlorate concentration limit of 6.4 µg/L and the trigger level of 3.2 µg/L[1].

Geosyntec prepared a Tier 1A data validation of the laboratory results according to United States Environmental Protection Agency guidance and the laboratory results are qualified

[1] Haley&Aldrich, 2015. Contingency Plan for Exceeding Perchlorate Concentration Limits at the Primate Facility Well No. 2 (Revision 2). Former Thermal Treatment Unit, Nammo Talley, Inc. Mesa, Arizona. October 27.

as usable for meeting project objectives. A data validation memorandum is provided in Attachment 3. The data validation report determined that the data is usable for supporting the project objectives. Field notes including field-measured water quality parameters (temperature, specific conductivity, dissolved oxygen, pH, and oxidative-reductive potential) are provided in Attachment 4. Laboratory reports are provided in Attachment 5.

If you have any questions about this report, please contact either Angel Soto (JSoto@Nammo.us) with NDS, or Fabrizio Mascioni (FMascioni@Geosyntec.com) with Geosyntec.

Sincerely,

Fabrizio Mascioni, R.G. 65652 (AZ)
Senior Geologist

Tory Luttermoser
Senior Staff Professional

Attachments: Attachment 1 – Tables
Attachment 2 – Figures
Attachment 3 – Data Validation Memorandum
Attachment 4 – Field Notes
Attachment 5 – Laboratory Analytical Reports

cc: Angel Soto, Nammo Defense Systems Inc.
Christopher Horan, Salt River Pima-Maricopa Indian Community
Carol Hibbard, Salt River Pima-Maricopa Indian Community
Kyle Johnson, Arizona Department of Environmental Quality
William Frier, U.S. Environmental Protection Agency

ATTACHMENT 1

TABLES

TABLE 1:
FORMER THERMAL TREATMENT UNIT
2021 GROUNDWATER WELL NETWORK
NAMMO DEFENSE SYSTEMS INC.
MESA, ARIZONA
MARCH 2022

Geosyntec consultants

Well Identification	Latitude	Longitude	Measuring Point Elevation (ft asml)	ADWR Number	Well Type/Use	Well Name/ Owner	Well Owner Information	Well Const	Well Diameter (in)	Screen Interval (ft bgs)	Casing Depth (ft bgs)	Boring Depth (ft bgs)
Plume Monitoring Wells												
TTU-3	33 29 57.98	-111 43 00.91	1308.03	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85279	PVC	4	78.1-138.1	143.6	180
TTU-4	33 30 01.65	-111 42 59.09	1305.12	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85280	PVC	4	39.5-99.5	104.9	180
TTU-5	33 29 52.48	-111 42 58.40	1314.93	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85281	PVC	4	59.5-164.5	169.5	174
TTU-6	33 29 57.57	-111 43 04.79	1300.84	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	110-175	180	185
TTU-7	33 29 57.85	-111 43 05.18	1301.84	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	Steel Open Borehole	8.5 8	282-410	282 None	410
TTU-8	33 30 01.91	-111 43 05.31	1310.23	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	135-185	190	204
TTU-9A	33 30 04.61	-111 42 51.19	1318.04	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	24-99	104	105
TTU-10	33 29 54.60	-111 43 07.90	1302.42	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	115-180	185	204
TTU-12	33 29 56.03	-111 42 58.38	1312.21	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	Steel Open Borehole	5.5 5	30-180	30 None	180
TTU-13	33 29 58.99	-111 42 56.85	1310.79	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85283	Steel Open Borehole	5.5 5	30-80	30 None	80
TTU-14	33 29 57.20	-111 42 57.46	1316.80	N/A	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85284	Steel Open Borehole	5.5 5	45-100	45 None	100
TTU-15	33 29 56.78	-111 42 47.03	1350.85	55-228014	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85285	Steel Open Borehole	5 4.5	10-100	10 None	100
TTU-16	33 29 56.18	-111 42 49.59	1338.55	55-231730	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85286	Steel Open Borehole	8 8	20-95.6	20 None	95.6
TTU-17	33 29 58.61	-111 42 45.69	1347.49	55-231735	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85287	Steel Open Borehole	8 8	20-101	20 None	101
TTU-18	33 29 47.20	-111 42 58.10	1320.25	55-231737	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	Steel Open Borehole	8 8	21-140	21 None	140
TTU-20	33 29 55.17	-111 42 51.58	1336.90	55-232968	Monitoring	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	PVC	4	25-95	95	100

TABLE 1:
FORMER THERMAL TREATMENT UNIT
2021 GROUNDWATER WELL NETWORK
NAMMO DEFENSE SYSTEMS INC.
MESA, ARIZONA
MARCH 2022

Geosyntec consultants

Well Identification	Latitude	Longitude	Measuring Point Elevation (ft asml)	ADWR Number	Well Type/Use	Well Name/ Owner	Well Owner Information	Well Const	Well Diameter (in)	Screen Interval (ft bgs)	Casing Depth (ft bgs)	Boring Depth (ft bgs)
Extraction and Injection Wells												
TTU-1	33 29 59.14	-111 42 56.27	1312.73	55-914440	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85277	PVC	4	30-70	75	200
TTU-2	33 29 55.85	-111 42 57.85	1314.44	N/A	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85278	PVC	4	49.4-179.6	185	187.5
TTU-11	33 29 55.28	-111 42 51.47	1339.20	55-918534	Extraction/ Injection [1]	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85282	PVC	4	24.1-89.1	94	136
TTU-19	33 29 55.25	-111 42 51.50	1336.81	55-232969	Monitoring/ Injection [2]	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	PVC	4	25-95	95	96
TTU-EX-1	33 29 58.42	-111 42 52.55	1321.69	55-231733	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85288	Steel	8	19-110.7	19	110.7
								Open Borehole	8		None	
TTU-EX-2	33 29 57.61	-111 42 53.79	1316.40	55-231734	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85289	Steel	8	20-110	20	110
								Open Borehole	8		None	
TTU-EX-3	33 29 56.29	-111 42 54.12	1316.85	55-231731	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85290	Steel	8	20-101.45	20	111
								Open Borehole	8		None	
TTU-EX-4	33 29 55.46	-111 42 54.39	1319.96	55-231732	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85291	Steel	8	20-110.7	20	110.7
								Open Borehole	8		None	
TTU-EX-5	33 29 54.68	-111 42 54.62	1319.50	55-231736	Extraction	Nammo Defense Systems Inc.	P.O. Box 34299 Mesa, AZ 85292	Steel	8	20-110.8	20	110.8
								Open Borehole	8		None	
Production Wells												
PF-1	33 29 56.60	-111 43 09.75	1295.99	N/A	Production	University of Washington	4202 N Higley Rd Mesa, AZ 85215	Unknown	Unknown	Unknown	Unknown	Unknown
PF-2	33 29 56.65	-111 43 09.96	1296.35	N/A	Production	University of Washington	4202 N Higley Rd Mesa, AZ 85215	Steel	6 5/8	300-400	400	400

Abbreviations:

ft amsl = feet above mean sea level (NAVD88)
ADWR = Arizona Department of Water Resources
Const = construction
in = inches
N/A = Not applicable
PVC = polyvinyl chloride
ft bgs = feet below ground surface
TTU = Thermal Treatment Unit
EX = Extraction
PF = Primate Facility

Notes:

(1) - TTU-11 was converted from an extraction well to an injection well in October 2020 for an In-Situ Bioremediation Pilot Test.
(2) - TTU-19 was converted from a monitoring well to an injection well in February 2021 for an In-Situ Bioremediation Pilot Test.
TTU-EX-1 through TTU-EX-5 are not currently operating as extraction wells. TTU-11 and TTU-19 are not currently operating as injection wells.

TABLE 2: GROUNDWATER ELEVATIONS - FOURTH QUARTER 2021
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.
MARCH 2022

Geosyntec consultants

Location	Northing (intl ft)	Easting (intl ft)	Top of Casing Elevation (ft asml)	Date Measured	Depth to Water (ft btoc)	Groundwater Elevation (ft asml)
TTU-1	909420.734	761281.203	1312.73	10/21/2021	33.72	1279.01
				12/21/2021	37.77	1274.96
TTU-2	909087.852	761148.265	1314.44	10/21/2021	57.14	1257.30
				12/21/2021	59.54	1254.90
TTU-3	909303.363	760888.204	1308.03	10/21/2021	90.62	1217.41
				11/18/2021	93.35	1214.68
				12/21/2021	94.98	1213.05
TTU-4	909673.68	761041.975	1305.12	10/21/2021	50.80	1254.32
				11/18/2021	51.13	1253.99
				12/21/2021	51.80	1253.32
TTU-5	908747.636	761102.227	1314.93	10/21/2021	71.01	1243.92
				11/17/2021	73.88	1241.05
				12/21/2021	74.96	1239.97
TTU-6	909260.82	760560.096	1300.84	10/21/2021	122.74	1178.10
				11/18/2021	126.06	1174.78
				12/21/2021	128.34	1172.50
TTU-7	909287.611	760527.269	1301.84	10/21/2021	124.94	1176.90
				11/18/2021	135.84	1166.00
				12/21/2021	127.09	1174.75
TTU-8	909699.266	760514.908	1310.23	10/21/2021	145.19	1165.04
				11/18/2021	145.99	1164.24
				12/21/2021	147.11	1163.12
TTU-9A	909974.49	761710.151	1318.04	10/21/2021	26.34	1291.70
				11/17/2021	27.32	1290.72
				12/21/2021	28.72	1289.32
TTU-10	908960.114	760297.013	1302.42	10/21/2021	149.70	1152.72
				11/18/2021	150.62	1151.80
				12/21/2021	151.80	1150.62
TTU-11	909029.758	761706.47	1339.20	10/21/2021	32.29	1306.91
				12/21/2021	29.33	1309.87
TTU-12	909105.99	761103.28	1312.21	10/21/2021	67.79	1244.42
				11/18/2021	69.09	1243.12
				12/21/2021	70.09	1242.12
TTU-13	909405.92	761232.18	1310.79	10/21/2021	34.47	1276.32
				11/18/2021	37.18	1273.61
				12/21/2021	38.13	1272.66
TTU-14	909224.26	761181.23	1316.80	10/21/2021	54.37	1262.43
				11/18/2021	35.82	1280.98
				12/21/2021	50.12	1266.68
TTU-15	909185.10	762065.91	1350.85	10/21/2021	34.28	1316.57
				11/17/2021	31.74	1319.11
				12/21/2021	30.10	1320.75
TTU-16	909124.98	761848.851	1338.55	10/21/2021	14.70	1323.85
				11/17/2021	14.93	1323.62
				12/21/2021	16.49	1322.06

TABLE 2: GROUNDWATER ELEVATIONS - FOURTH QUARTER 2021
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.
MARCH 2022

Geosyntec consultants

Location	Northing (intl ft)	Easting (intl ft)	Top of Casing Elevation (ft asml)	Date Measured	Depth to Water (ft btoc)	Groundwater Elevation (ft asml)
TTU-17	909370.90	762179.168	1347.49	10/21/2021	29.61	1317.88
				11/17/2021	31.40	1316.09
				12/21/2021	33.09	1314.40
TTU-18	908215.83	761130.011	1320.25	10/21/2021	DRY	
				11/17/2021	DRY	
				12/21/2021	DRY	
TTU-19	909030.75	761687.70	1336.81	10/21/2021	27.84	1308.97
				12/21/2021	27.39	1309.42
TTU-20	909022.53	761681.99	1336.90	10/21/2021	29.65	1307.25
				11/18/2021	29.17	1307.73
				12/21/2021	29.28	1307.62
TTU-EX-1	909350.57	761597.823	1321.69	10/21/2021	15.78	1305.91
				11/17/2021	17.23	1304.46
				12/21/2021	19.17	1302.52
TTU-EX-2	909268.19	761493.214	1316.40	10/21/2021	20.94	1295.46
				11/17/2021	22.28	1294.12
				12/21/2021	24.86	1291.54
TTU-EX-3	909134.94	761465.507	1316.85	10/21/2021	28.59	1288.26
				11/17/2021	29.60	1287.25
				12/21/2021	31.25	1285.60
TTU-EX-4	909051.30	761442.876	1319.96	10/21/2021	42.63	1277.33
				11/17/2021	41.75	1278.21
				12/21/2021	41.34	1278.62
TTU-EX-5	908971.77	761423.325	1319.50	10/21/2021	42.70	1276.80
				11/17/2021	42.06	1277.44
				12/21/2021	41.74	1277.76
PF-1	909161.578	760140.434	1295.99	10/21/2021	147.10	1148.89
				12/21/2021	149.39	1146.60
PF-2	909166.89	760122.25	1296.35	10/21/2021	147.19	1149.16
				11/18/2021	148.08	1148.27
				12/21/2021	149.36	1146.99

Notes:

intl ft = international foot

ft amsl = feet above mean sea level

ft btoc = feet below top of casing

TABLE 3: SUMMARY OF DETECTED VOC CONCENTRATIONS - FOURTH QUARTER 2021
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.
MARCH 2022

Geosyntec consultants

Location	Sample Depth	Date Sampled	Analyte	1,4-Dioxane	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trichloropropane	1,2,3-Trimethylbenzene	1,2,4-Trimethylbenzene	1,2-Dichlorobenzene	1,2-Dichloroethane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	4-Ethyltoluene	Benzene	Bromoform	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	Dichloromethane	Diisopropyl Ether	Ethylbenzene	Isopropylbenzene	Naphthalene	n-Propylbenzene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes (Total)
			Method	8260B SIM	8260B																															
			Units	µg/l																																
			AWQS	NE	200	5	NE	7	NE	NE	NE	NE	5	NE	NE	75	NE	5	100 (1)	NE	100 (1)	NE	100 (1)	NE	70	5	NE	700	NE	140	NE	5	1,000	100	5	2	10,000
TTU-1	50	2021-12-22	Primary	11.1	< 1.00	< 1.00	< 1.00	2.80 J	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	**8.82**	< 1.00	< 3.00
TTU-2	114	2021-12-22	Primary	280	< 1.00	1.92	1.64	**166 J**	< 2.50	0.291 J	0.551 J	< 1.00	< 1.00	0.212 J	< 1.00	< 1.00	0.500 J	1.49	< 1.00	< 1.00	< 1.00	< 5.00	2.44 J	< 2.50	1.76	< 5.00	< 1.00	0.686 J	< 1.00	< 5.00	0.101 J	1.34	0.844 J	0.442 J	**627**	< 1.00	2.15 J
			Duplicate	281	< 1.00	2.12 J+	1.34 J+	**162 J**	< 2.50	< 1.00 J	< 1.00 J	< 1.00	< 1.00	< 1.00 J	< 1.00	< 1.00	< 1.00 J	1.51 J+	< 1.00	< 1.00	< 1.00	< 5.00	2.30 J	< 2.50	1.78 J+	< 5.00	< 1.00	< 1.00 J	< 1.00	< 5.00	< 1.00 J	1.62 J+	< 1.00 J	0.409 J	**653**	< 1.00	< 3.00 J
TTU-3	108	2021-11-18	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-4	57	2021-11-18	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-5	110	2021-11-17	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-6	143	2021-11-18	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-7	345	2021-11-18	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	0.122 J	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	0.186 J	< 5.00	< 1.00	< 1.00	1.19	< 1.00	< 1.00	< 1.00	0.253 J
TTU-8	164	2021-11-18	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-9A	61	2021-11-17	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	0.911 J	< 1.00	< 3.00
			Duplicate	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	0.985 J	< 1.00	< 3.00
TTU-10	147	2021-11-18	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	0.113 J	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-12	82	2021-11-18	Primary	133	< 1.00	1.55	0.868 J	**91.9**	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	0.884 J	< 1.00	< 1.00	< 1.00	< 5.00	1.63 J	< 2.50	1.12	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	1.14	< 1.00	0.217 J	**624**	< 1.00	< 3.00
			Duplicate	141	< 1.00	1.35	0.961 J	**95.4**	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	0.953 J	< 1.00	< 1.00	< 1.00	< 5.00	1.78 J	< 2.50	1.32	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	1.10	< 1.00	0.207 J	**617**	< 1.00	< 3.00
TTU-13	51	2021-11-18	Primary	3.26	< 1.00	< 1.00	< 1.00	0.470 J	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	1.44 J	< 1.00	< 3.00
TTU-14	69	2021-11-18	Primary	279	< 1.00	2.03	1.28	**137**	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	1.86	< 1.00	< 1.00	< 1.00	< 5.00	1.99 J	< 2.50	2.49	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	1.69	< 1.00	0.231 J	**917**	< 1.00	< 3.00
TTU-15	75	2021-11-17	Primary	5.90	< 1.00	< 1.00	< 1.00	0.341 J	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	2.48	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	**10.3**	< 1.00	< 3.00
TTU-16	80	2021-11-17	Primary	3,930	0.842 J	**80.8**	75.6	**2,820 J**	0.379 J	4.23	4.29	5.04	**41.3**	1.17	0.411 J	1.14	1.98	**405 J**	2.94	3.05	0.816 J	< 5.00	**119**	< 2.50	17.2	**124,000**	0.575 J	10.5	0.705 J	2.45 J	0.456 J	**87.4**	194	13.3	**93,200**	0.931 J	150
TTU-17	80	2021-11-17	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	1.41	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	3.08	< 1.00	< 3.00
TTU-20	73	2021-11-18	Primary	2,140	0.258 J	**20.4**	27.4	**2,650**	< 2.50	< 1.00	< 1.00	1.09	4.96	< 1.00	< 1.00	0.349 J	< 1.00	**80.8**	< 1.00	0.849 J	< 1.00	0.329 J	21.8	1.55 J	**74.9**	**319 J**	0.305 J	< 1.00	< 1.00	< 5.00	< 1.00	**16.7**	1.16	18.0	**13,400**	0.839 J	4.51
TTU-EX-1	69	2021-11-17	Primary	112	< 1.00	0.515 J	0.263 J	**36.7**	< 2.50	0.242 J	< 1.00	0.291 J	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	0.464 J	< 2.50	< 1.00	< 5.00	< 1.00	0.161 J	< 1.00	< 5.00	< 1.00	1.40	0.491 J	< 1.00	**79.0**	< 1.00	1.94 J
TTU-EX-2	74	2021-11-17	Primary	158	< 1.00	0.842 J	0.367 J	**49.9**	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	0.686 J	< 2.50	0.726 J	< 25.0	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	0.768 J	< 1.00	< 1.00	**238**	< 1.00	< 3.00
TTU-EX-3	76	2021-11-17	Primary	909	< 1.00	**11.4**	9.59	**1,070**	< 2.50	< 1.00	< 1.00	0.446 J	< 1.00	< 1.00	< 1.00	0.384 J	< 1.00	**13.8**	< 1.00	0.361 J	< 1.00	< 5.00	12.4	< 2.50	5.39	< 500	0.157 J	< 1.00	< 1.00	< 5.00	< 1.00	**12.0**	< 1.00	1.92	**8,120**	< 1.00	< 3.00
			Duplicate	969	< 1.00	**11.0**	9.50	**904**	< 2.50	< 1.00	< 1.00	0.508 J	< 1.00	< 1.00	< 1.00	0.277 J	< 1.00	**13.4**	< 1.00	0.340 J	< 1.00	< 5.00	12.5	< 2.50	5.42	< 500	0.193 J	< 1.00	< 1.00	< 5.00	< 1.00	**12.1**	< 1.00	2.01	**8,010**	< 1.00	< 3.00
TTU-EX-4	77	2021-11-17	Primary	16.1	< 1.00	0.850 J	1.47	**85.8**	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	1.19	< 1.00	< 1.00	< 1.00	< 5.00	1.66 J	< 2.50	2.76	< 100	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	1.29	< 1.00	0.488 J	**755**	< 1.00	< 3.00
TTU-EX-5	80	2021-11-17	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	0.148 J	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	**6.91**	< 1.00	< 3.00
PF-2	400	2021-11-18	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 2.50	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00

Notes:

Any analytes not presented on this table were of non-detectable concentrations.

VOC = volatile organic compound.

Sample depth is presented in feet below the top of well casing.

Method = The United States Environmental Protection Agency standard analytical method used for analysis.

µg/l = micrograms per liter.

AWQS = Arizona Aquifer Water Quality Standard.

NE = Not established; no aquifer water quality standard is established.

(1) = AWQS established for total trihalomethanes, which include chloroform, dibromochloromethane, bromodichloromethane, and bromoform.

Non-detect results are indicated by "<" followed by the laboratory reporting limit.

Concentrations exceeding the AWQS are indicated in **boldface**.

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ = The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

TABLE 4: SUMMARY OF PERCHLORATE CONCENTRATIONS - FOURTH QUARTER 2021

FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.
MARCH 2022

Geosyntec consultants

			Analyte	Perchlorate	
			Method	EPA 314.0	EPA 6850
			Units	µg/l	
			HBGL	14	
Location	**Sample Depth (ft btoc)**	**Sample Date**	**Sample Type**	**Concentration**	
TTU-1	50	2021-12-22	Primary	**21,100**	--
TTU-2	114	2021-12-22	Primary	**171,000**	--
			Duplicate	**198,000**	--
TTU-3	108	2021-11-18	Primary	**161**	--
TTU-4	57	2021-11-18	Primary	< 4.00	--
TTU-5	110	2021-11-17	Primary	**40.1**	--
TTU-6	143	2021-11-18	Primary	**14.8**	--
TTU-7	345	2021-11-18	Primary	10.5 J	--
TTU-8	164	2021-11-18	Primary	< 4.00	--
TTU-9A	61	2021-11-17	Primary	6.41	--
			Duplicate	6.59	--
TTU-10	147	2021-11-18	Primary	< 4.00	--
TTU-12	82	2021-11-18	Primary	**148,000**	--
			Duplicate	**140,000**	--
TTU-13	51	2021-11-18	Primary	**11,000**	--
TTU-14	69	2021-11-18	Primary	**12,600,000**	--
TTU-15	75	2021-11-17	Primary	**2,520**	--
TTU-16	80	2021-11-17	Primary	**879,000**	--
TTU-17	80	2021-11-17	Primary	< 4.00	--
TTU-20	73	2021-11-18	Primary	**526,000**	--
TTU-EX-1	69	2021-11-17	Primary	**219,000**	--
TTU-EX-2	74	2021-11-17	Primary	**66,900**	--
TTU-EX-3	76	2021-11-17	Primary	**434,000**	--
			Duplicate	**469,000**	--
TTU-EX-4	77	2021-11-17	Primary	**86,700**	--
TTU-EX-5	80	2021-11-17	Primary	< 4.00	--
PF-2	400	2021-11-18	Primary	--	1.50
			Duplicate	--	1.30

Notes:

µg/l = micrograms per liter

HBGL = Health-Based Guidance Level

EPA = United States Environmental Protection Agency

Ft btoc = feet below the top of well casing

Concentrations exceeding the HBGL are indicated in **boldface**.

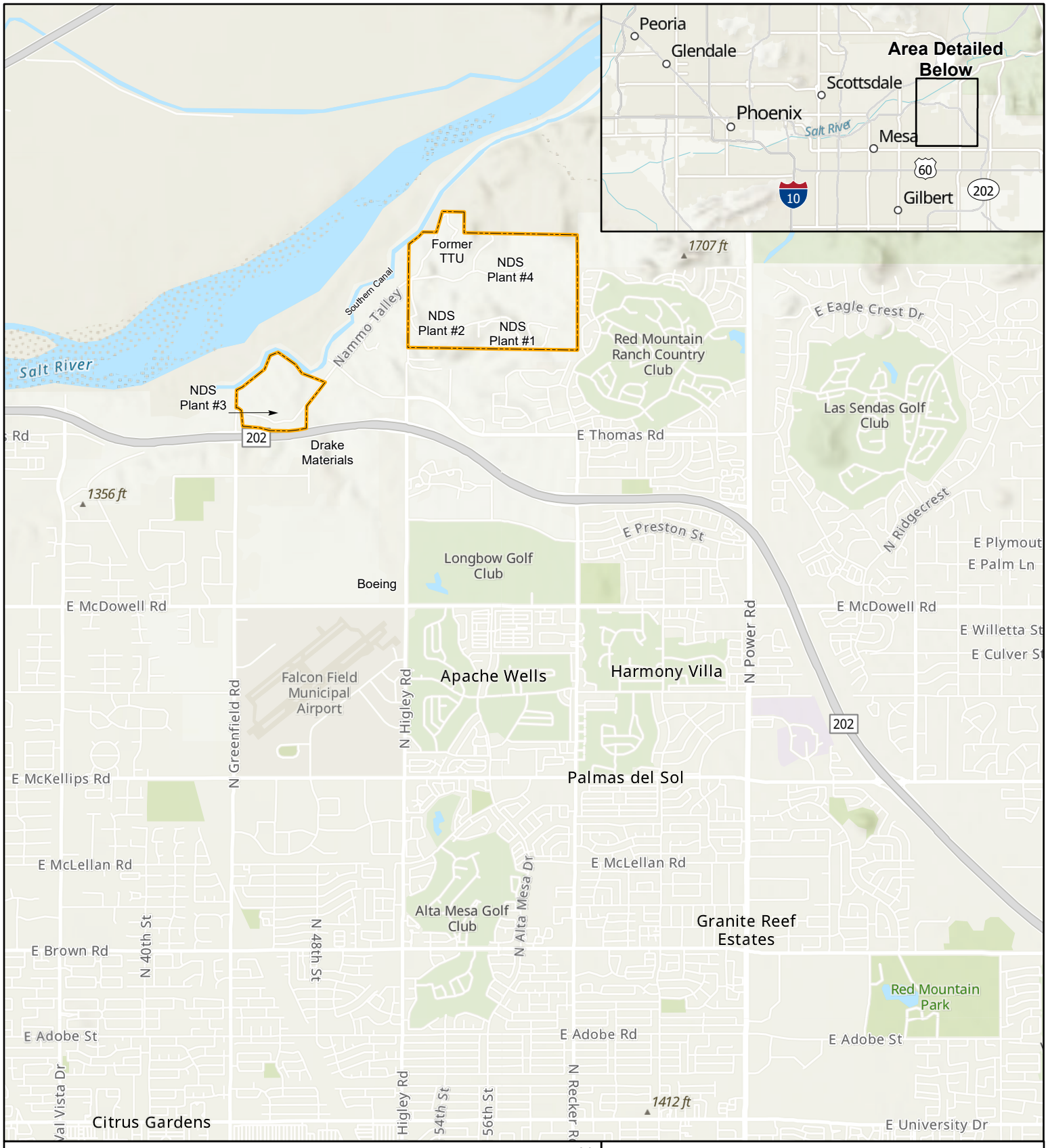
Non-detect results are indicated by "<" followed by the laboratory reporting limit.

-- = not applicable

J = The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

ATTACHMENT 2

FIGURES



Approximate Property Boundary

Notes:
-NDS: Nammo Defense Systems Inc.
-TTU: Thermal Treatment Unit

N

0 2,000 4,000 Feet

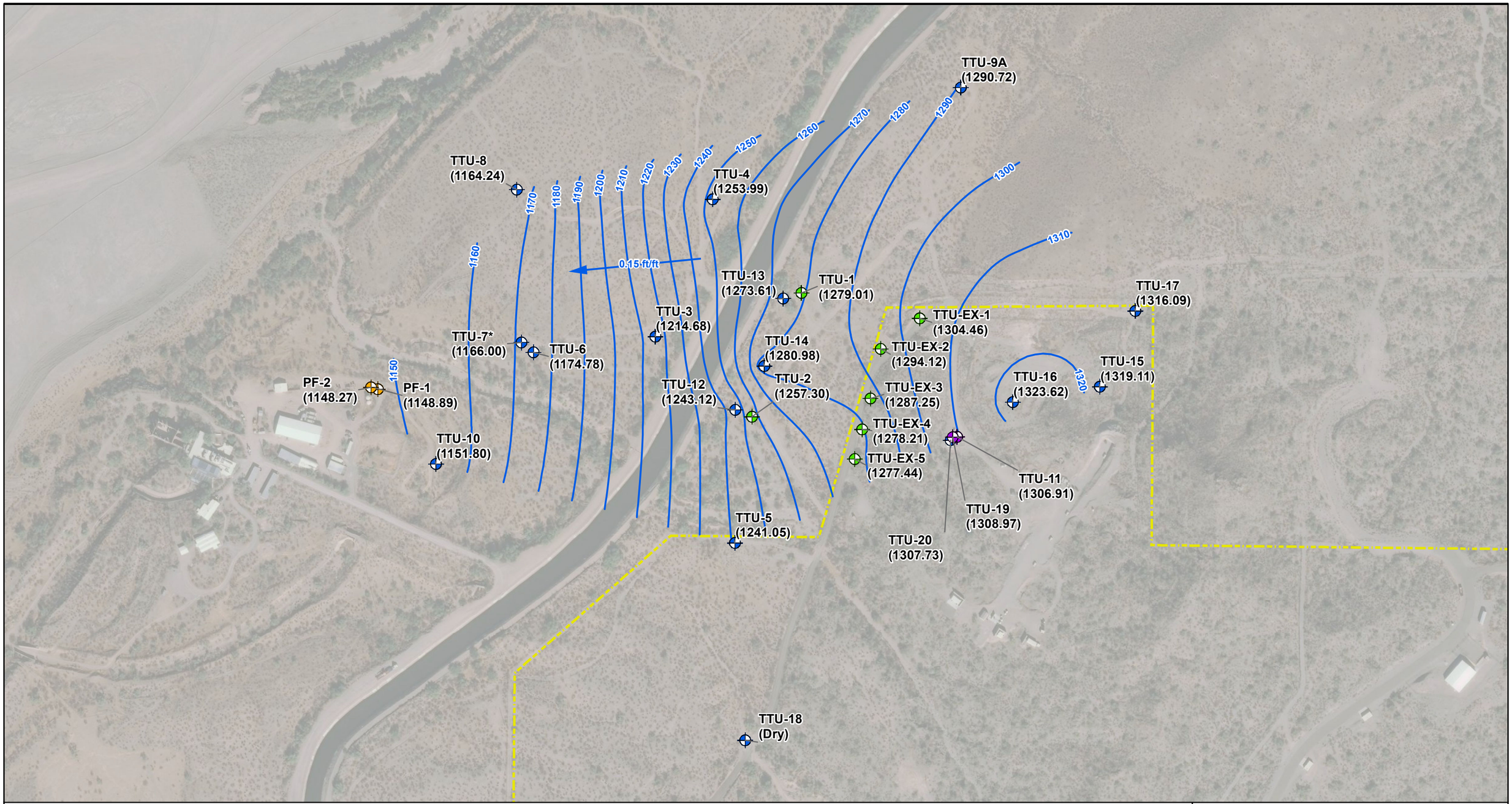
Site Location
Former Thermal Treatment Unit

Nammo Defense Systems Inc.
Former Thermal Treatment Unit
Mesa, Arizona

Geosyntec consultants

Phoenix | March 2022

Figure 1



- Primate Well
- Extraction Well
- Injection Well
- Monitoring Well
- Hydraulic Gradient and Inferred Flow Direction
- Groundwater Elevation Contour (ft amsl)
- NDS Leased Property Boundary with Salt River Pima-Maricopa Indian Community

TTU-1 = Monitoring Well Location
1279.01 = Groundwater Elevation (ft. amsl)

ft amsl: feet above mean sea level
NM: Not Measured
*: not used to generate contours.
PF-1, PF-2, and TTU-7 are deep wells.
TTU-EX-1 through TTU-EX-5 are not currently operating as extraction wells.
*TTU-11 and TTU-19 were converted to injection wells for the In-Situ Bio-Remediation Pilot Test conducted from October 2020 through March 2021.
Laboratory results were not used for contouring.
Groundwater elevations for TTU-1 and TTU-2 were measured during October 2021.

N

0 250 Feet

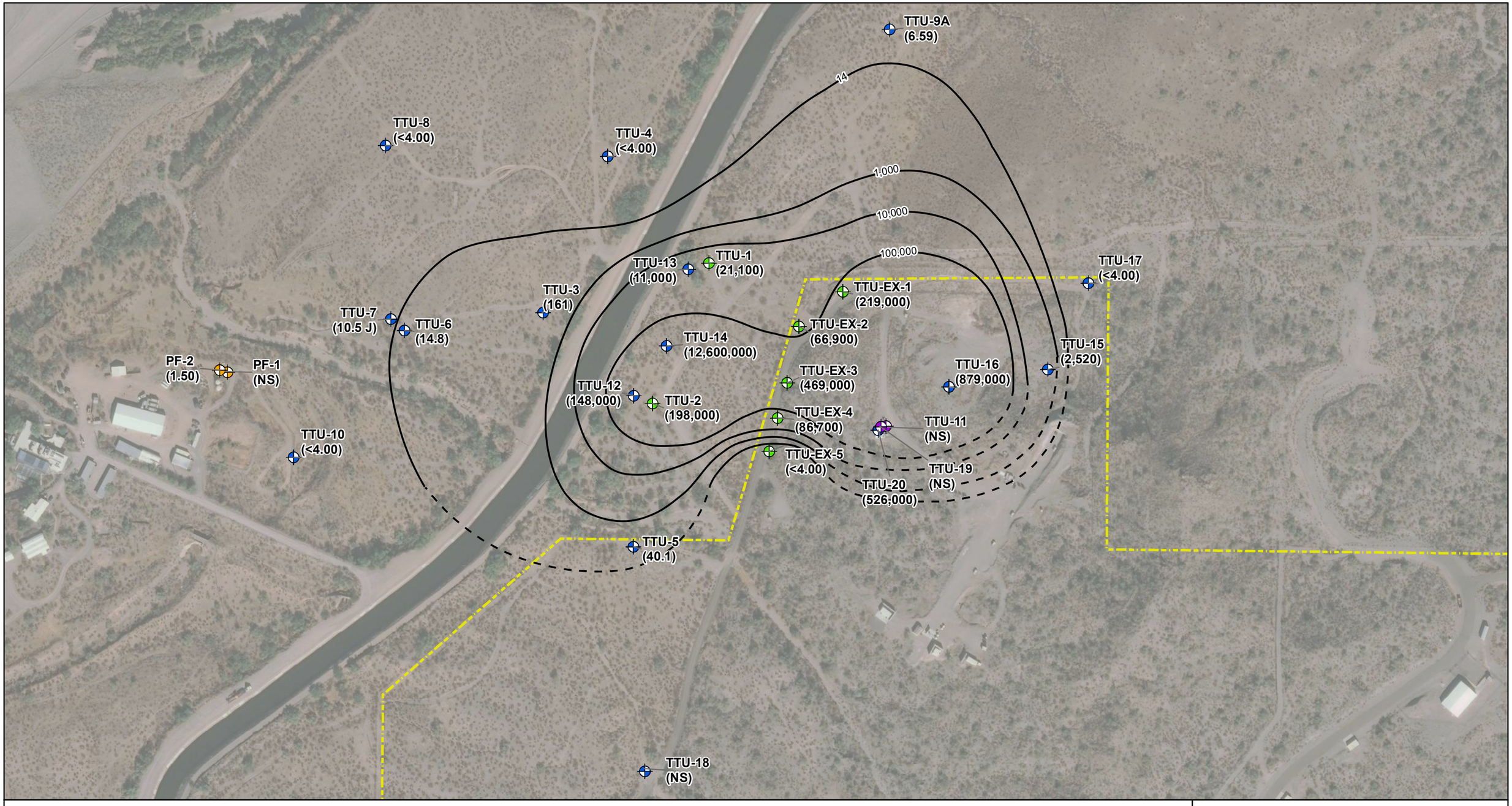
Groundwater Elevations and Contours
Fourth Quarter 2021
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Geosyntec consultants

Phoenix | March 2022

Figure 2

SantaBarbara-01\\\SANDIEGO-01\Data\GIS_SanDiego01\SP0101_Nammo\MXD\TTU\TTU_GWM_2021Q4\Fig02_2021Q4_Groundwater_Elevations_and_Contours.mxd 2/21/2022 (Author: MBradford) 1:57:44 AM



Legend

- Primate Well
- Extraction Well
- Injection Well
- Monitoring Well
- Extent of estimated Perchlorate concentrations in Groundwater (dashed where inferred)
- NDS Leased Property Boundary with Salt River Pima - Maricopa Indian Community

Notes:
All locations are approximate.
NS: Not Sampled
J: estimated concentration.
Non-detect results are indicated by "<" followed by the laboratory RL.
Highest result used where duplicate samples are collected.
TTU-18: This well is dry and has not been sampled since installation in 1Q 2020.
PF-1: The pump for this well is not operational and the well is not in use. Samples for this well have not been collected for the monitoring period.
*TTU-11 and TTU-19 were converted to injection wells for the In-Situ Bio-Remediation Pilot Test conducted from October 2020 through March 2021.
Laboratory results were not used for contouring.
Perchlorate groundwater Health Based Guidance Level is 14 µg/L.

TTU-1 = Monitoring Well Location
21,100 = Perchlorate Concentration in micrograms per liter (µg/L).

N

0 220 Feet

Perchlorate Detections in Groundwater
Fourth Quarter 2021

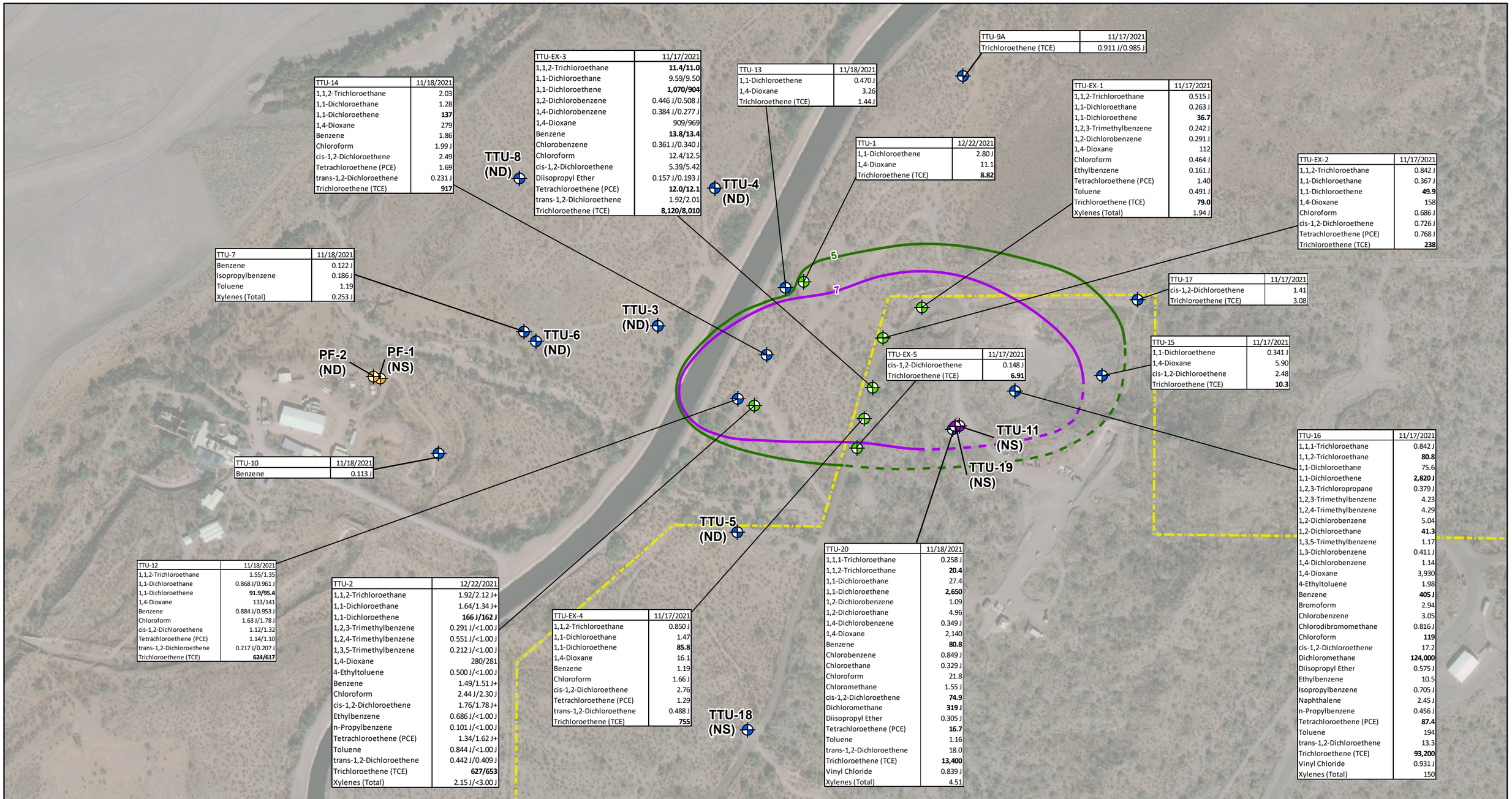
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Geosyntec consultants

Phoenix | March 2022

Figure 3

\\SANDIEGO-01\Data\GIS_SanDiego01\SP0101_Nammo\MXD\TTU\TTU_GWM_2021Q4\Fig03_2021Q4_Perchlorate_Detections_GW.mxd 2/21/2022 (Author: MBradford) 3:03:07 AM



Legend

- Primate Well
- Extraction Well
- Injection Well
- Monitoring Well
- Extent of Estimated 1,1-Dichloroethene (1,1-DCE) concentration in Groundwater July/August 2021 (Dashed Where Inferred)
- Extent of Estimated Trichloroethene (TCE) Concentration in Groundwater July/August 2021 (Dashed Where Inferred)
- NDS Leased Property Boundary with Salt River Pima-Maricopa Indian Community

Notes:
All locations are approximate.
Concentrations are in micrograms per liter (µg/L).
Only detected results are shown.
Primary/duplicate sample results.
ND: Not Detected; NS: Not Sampled.
J: estimated concentration.
J+: estimated concentration; actual concentration is likely higher than the detected value.
TTU-18: This well is dry and has not been sampled since installation in 1Q 2020.
PF-1: The pump for this well is not operational and the well is not in use.
Samples for this well have not been collected for the monitoring period.
*TTU-11 and TTU-19 were converted to injection wells for the In-Situ Bio-Remediation Pilot Test conducted from October 2020 through March 2021.
Laboratory results were not used for contouring.

Contours represent the approximate extent of the TCE plume (green) and 1,1-DCE plume (purple) with concentrations above the Arizona Water Quality Standards (AWQS) for TCE and 1,1-DCE.
Concentrations exceeding the AWQS indicated in **bold.**

AWQS Screening Levels (µg/L):

1,1-DCE - 7	Total Trihalomethanes (including Chloroform) - 100
1,1,1-TCA - 200	Dichloromethane - 5
1,1,2-TCA - 5	Trans-1,2-Dichloroethene - 100
Benzene - 5	PCE - 5
Cis-1,2-DCE - 70	TCE - 5

N

0 250 Feet

VOC Detections in Groundwater Fourth Quarter 2021

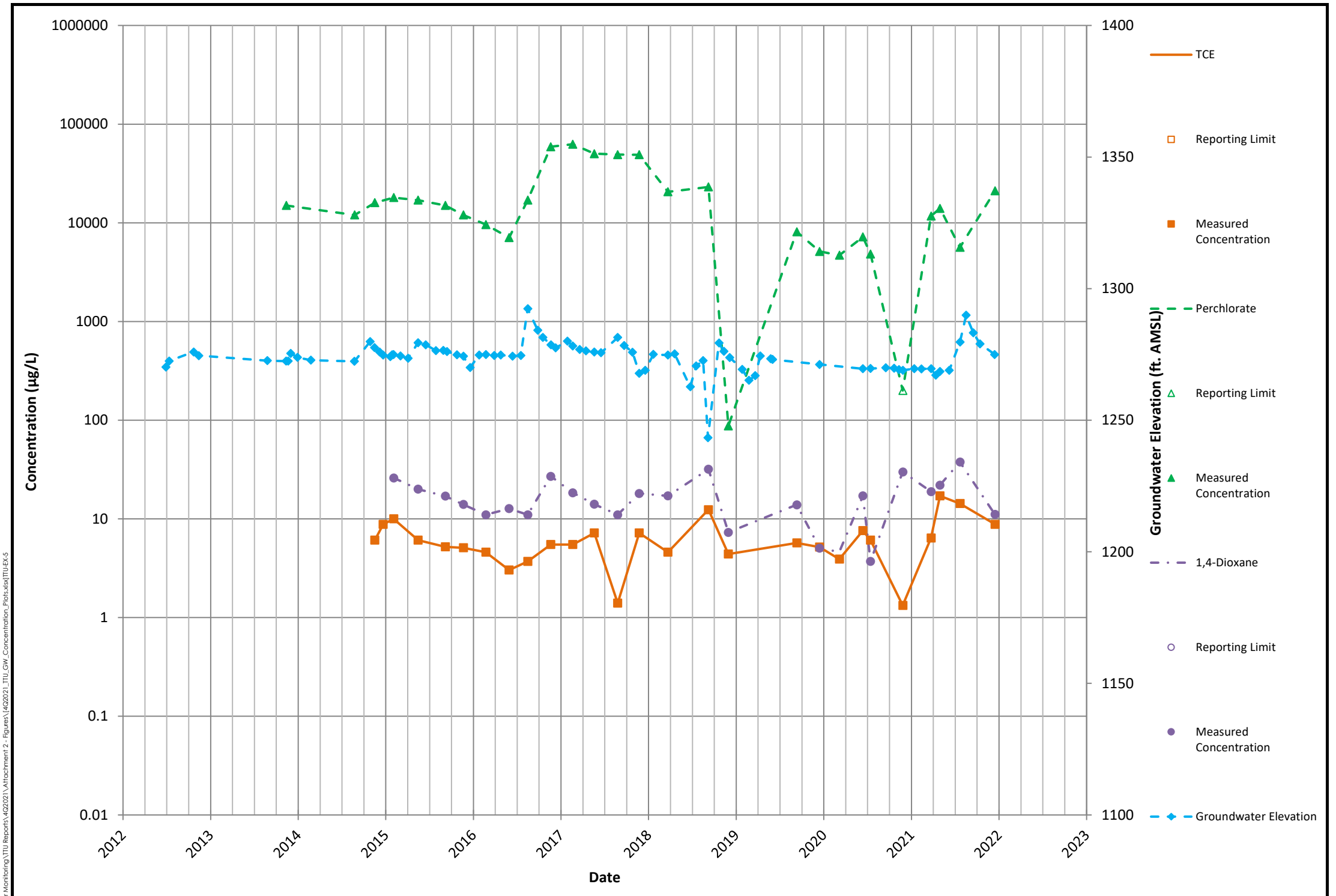
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Geosyntec consultants

Phoenix | March 2022

Figure 4

\\SANDIEGO-01\Data\GIS_SanDiego01\SP0101_Nammo\MXD\TTU\TTU_GWM_2021Q4\Fig04_2021Q4_VOC_Detections_GW.mxd 2/21/2022 (Author: MBradford) 2:03:19 AM



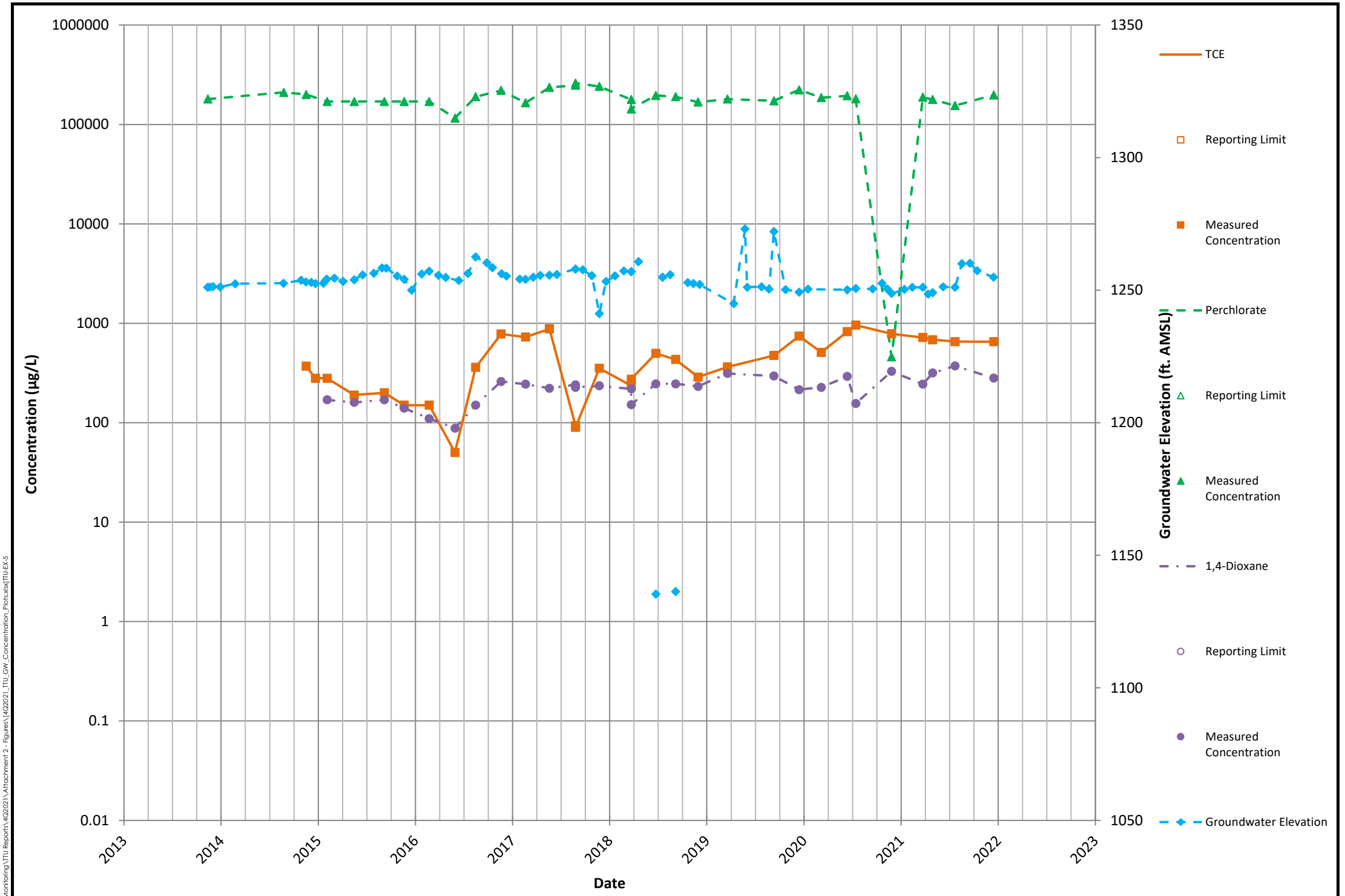
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-1
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-1

P:\SP\01GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



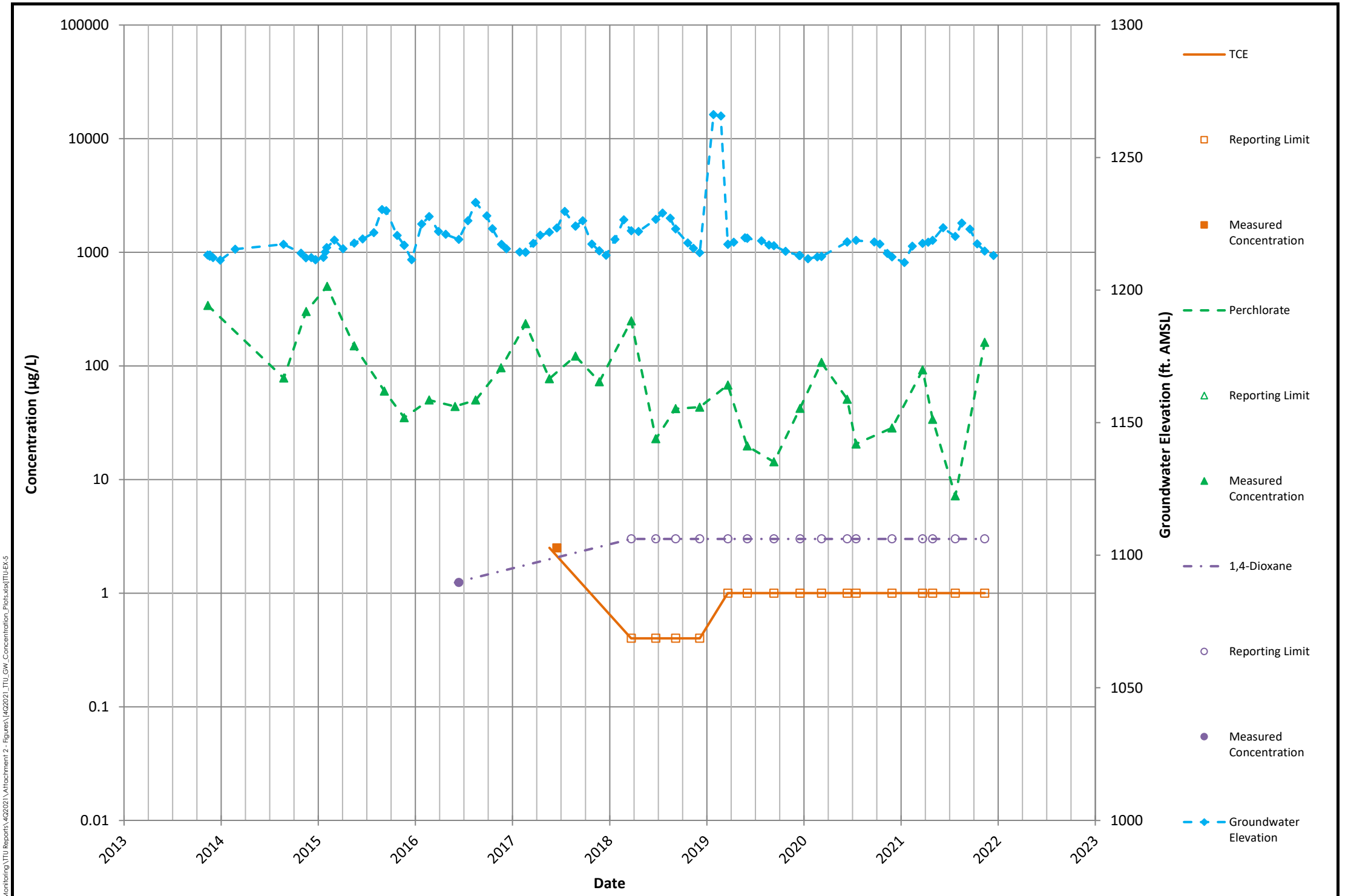
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-2
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-2

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



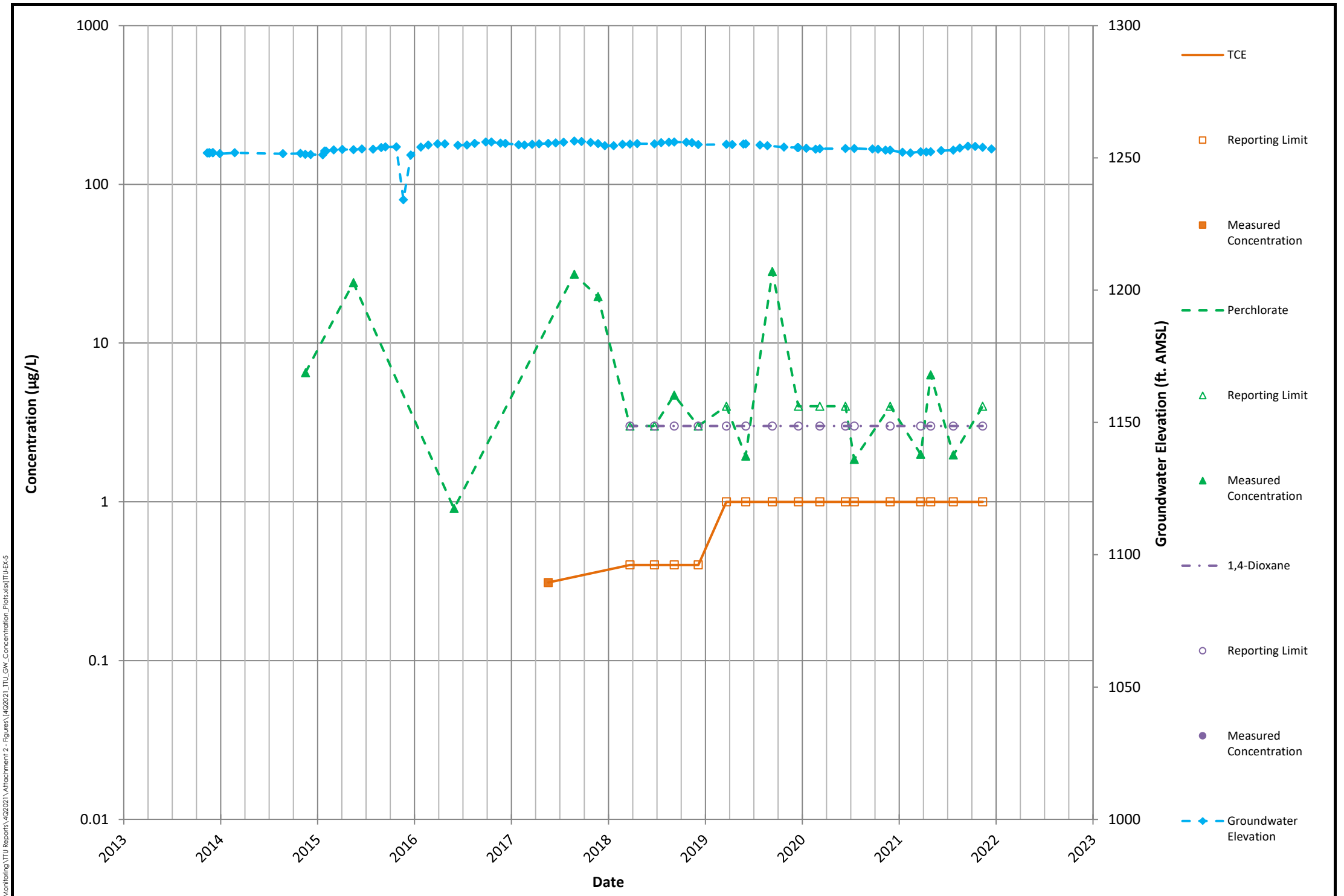
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-3
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-3

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



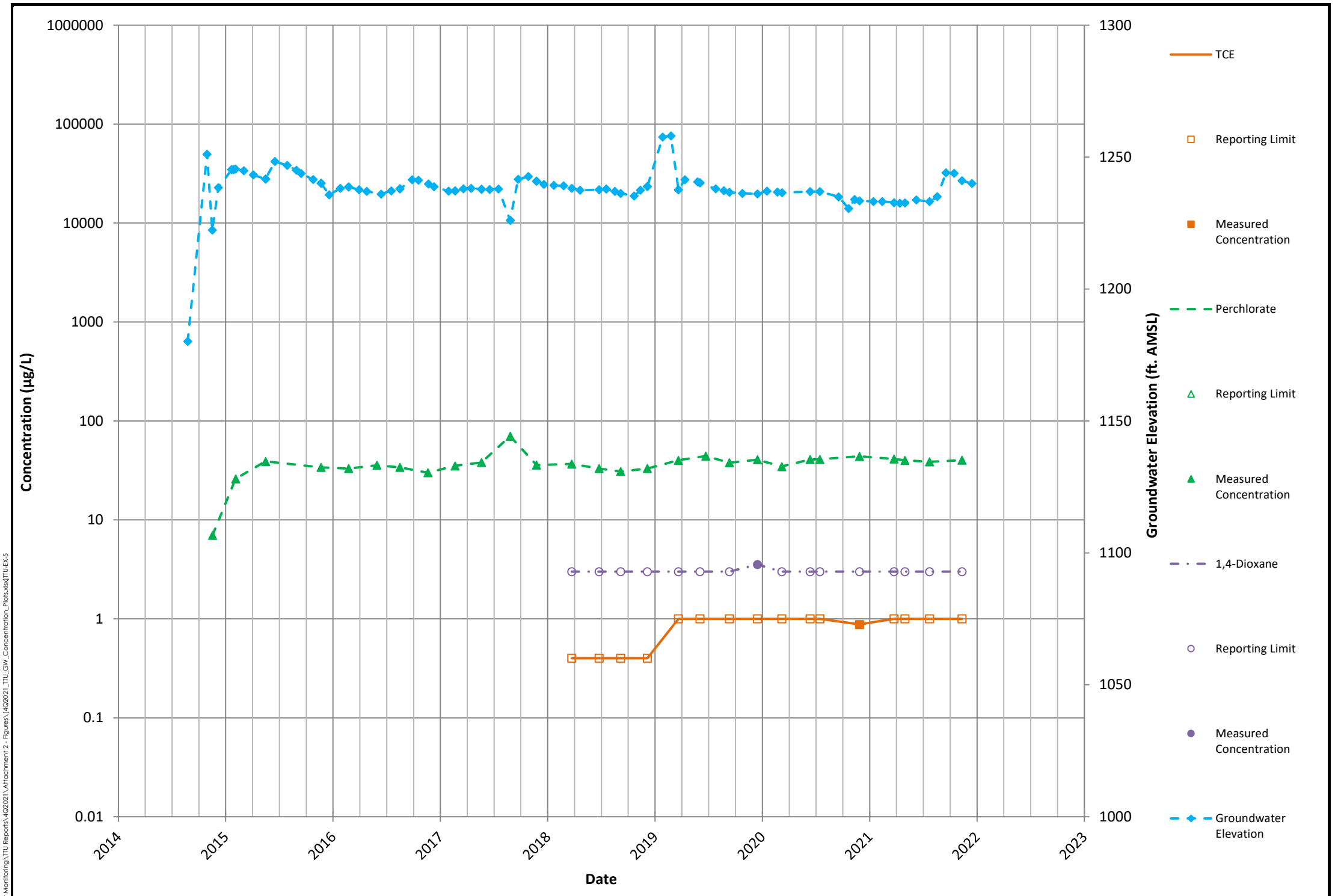
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-4
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-4

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



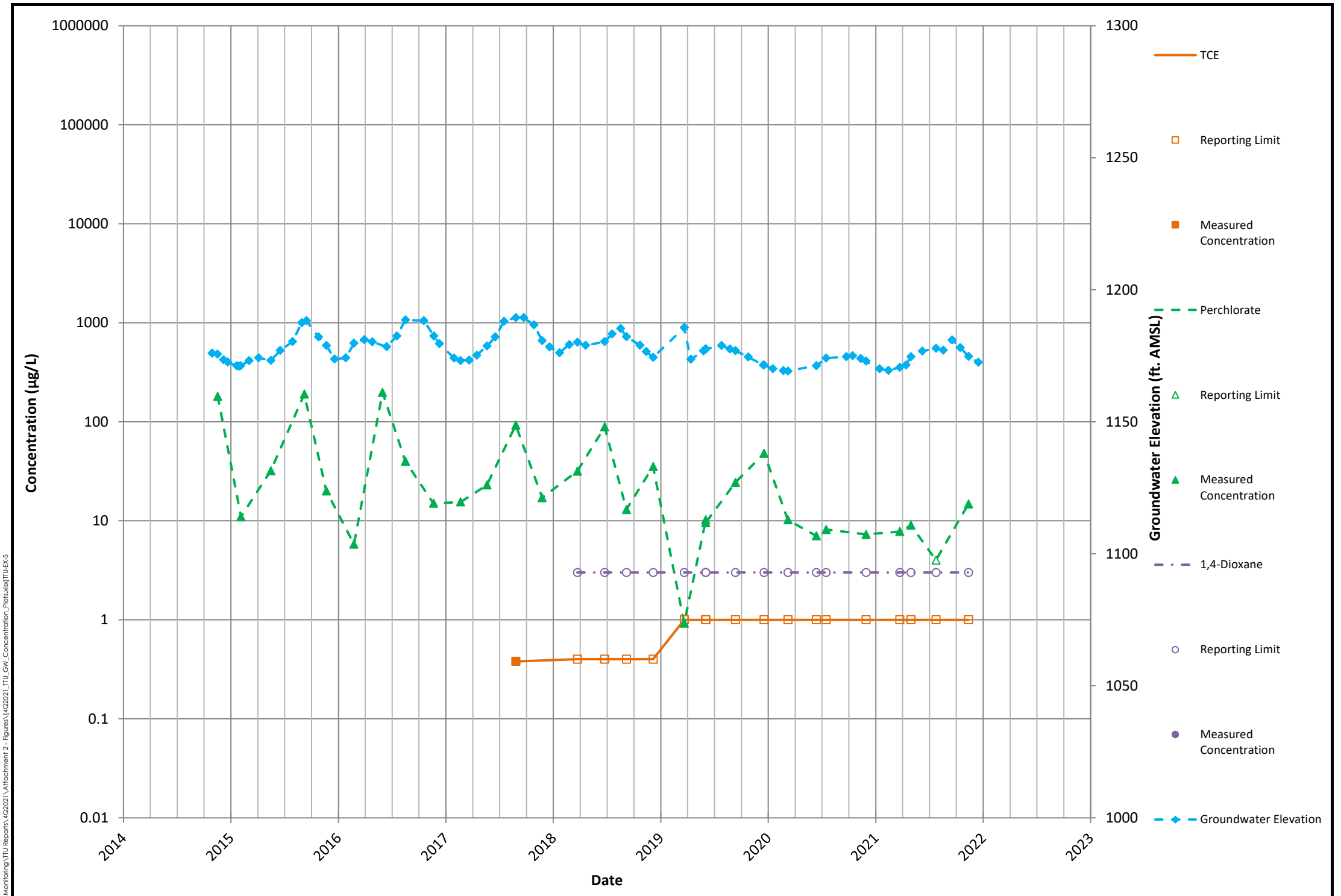
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-5
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-5

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



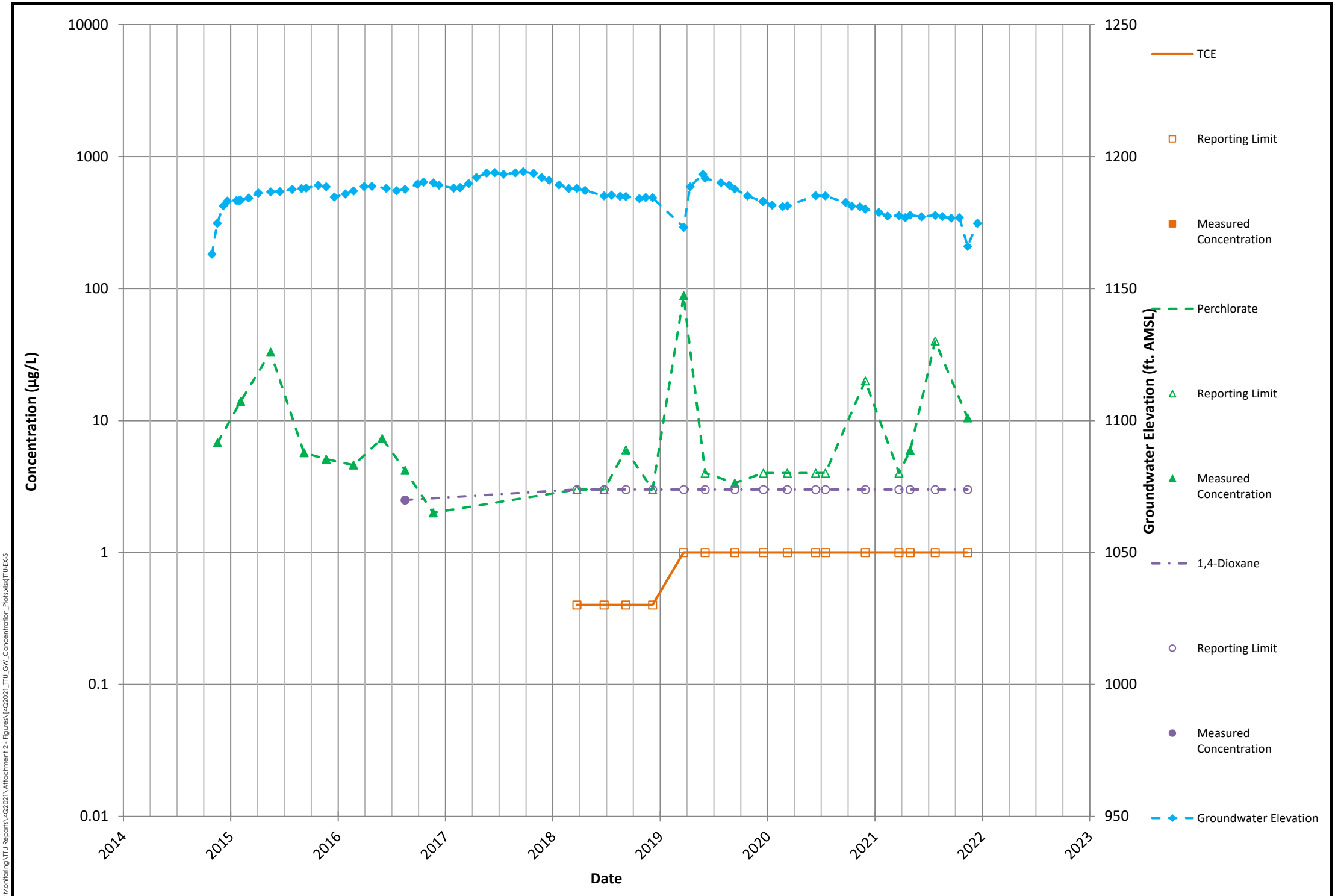
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-6
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-6

P:\SP\01GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



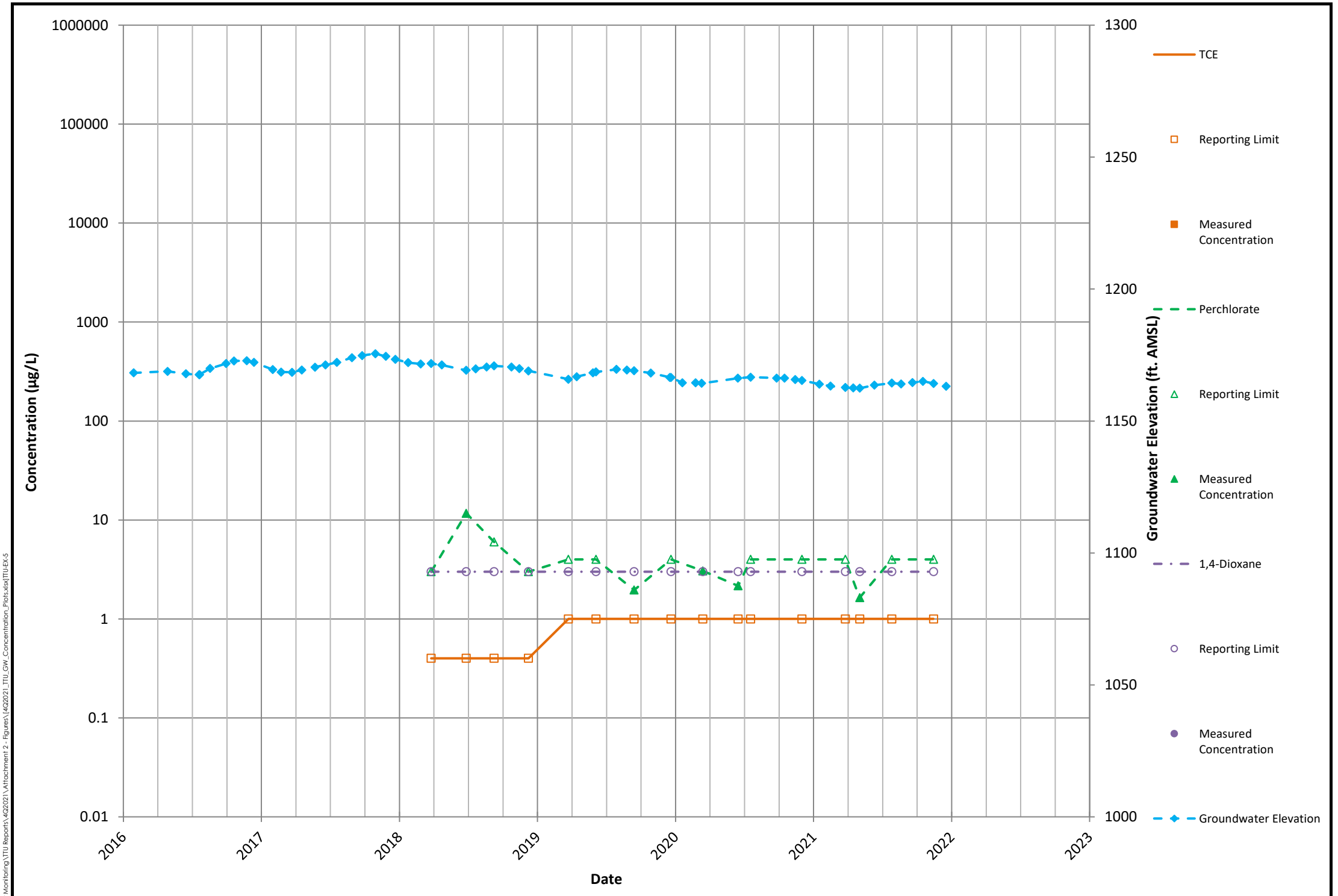
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-7
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-7

P:\SP\0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



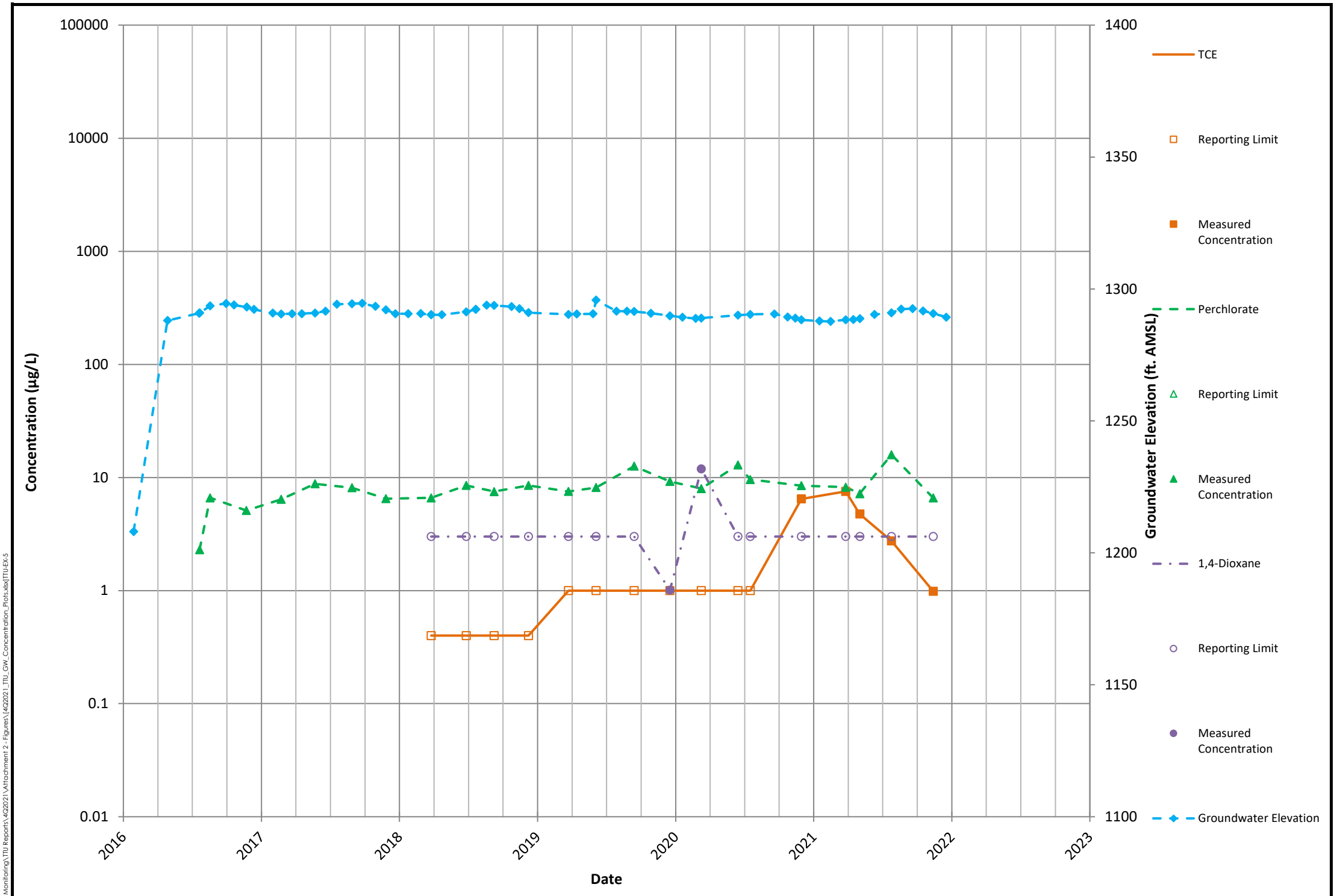
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-8
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-8

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



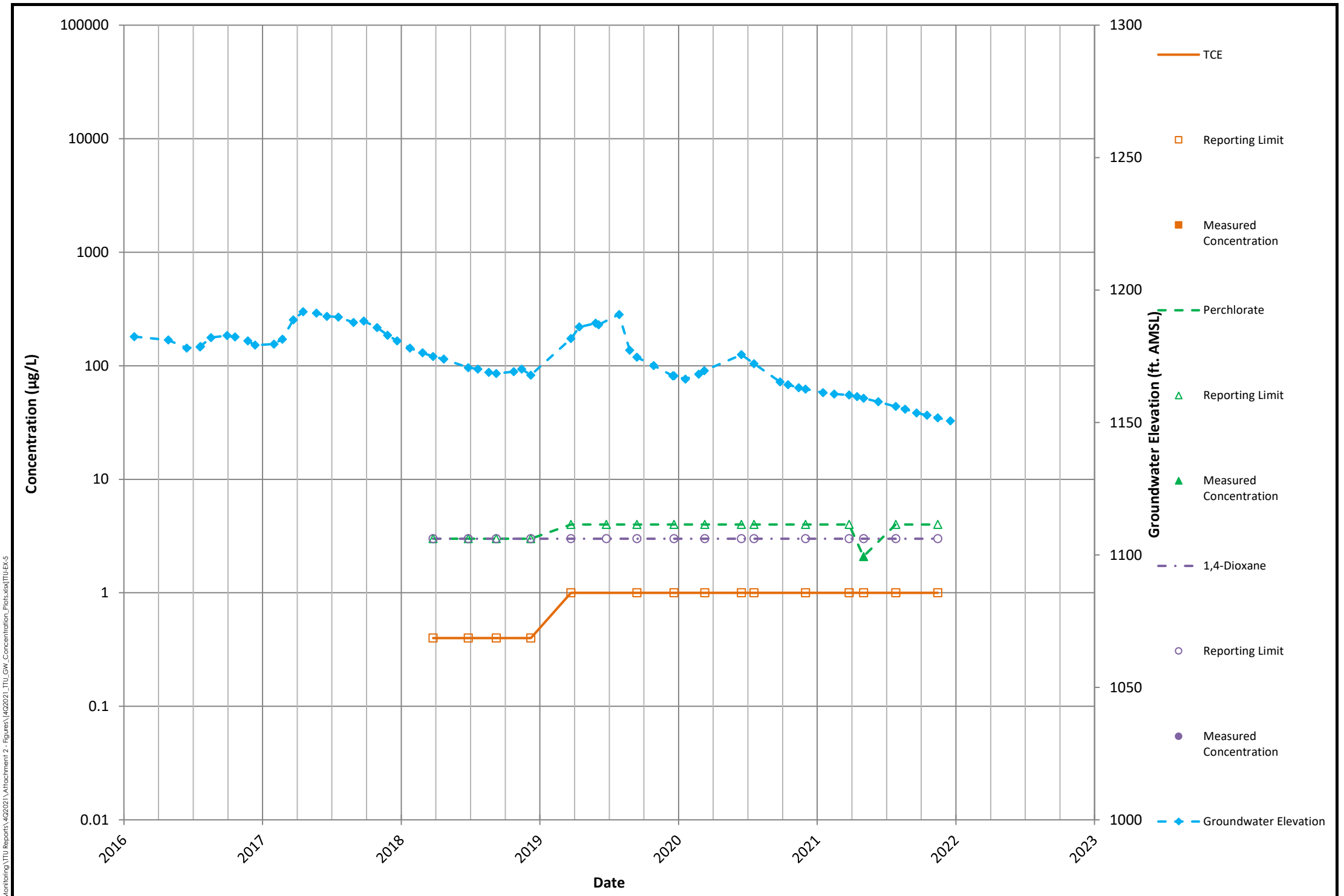
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-9A
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-9

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



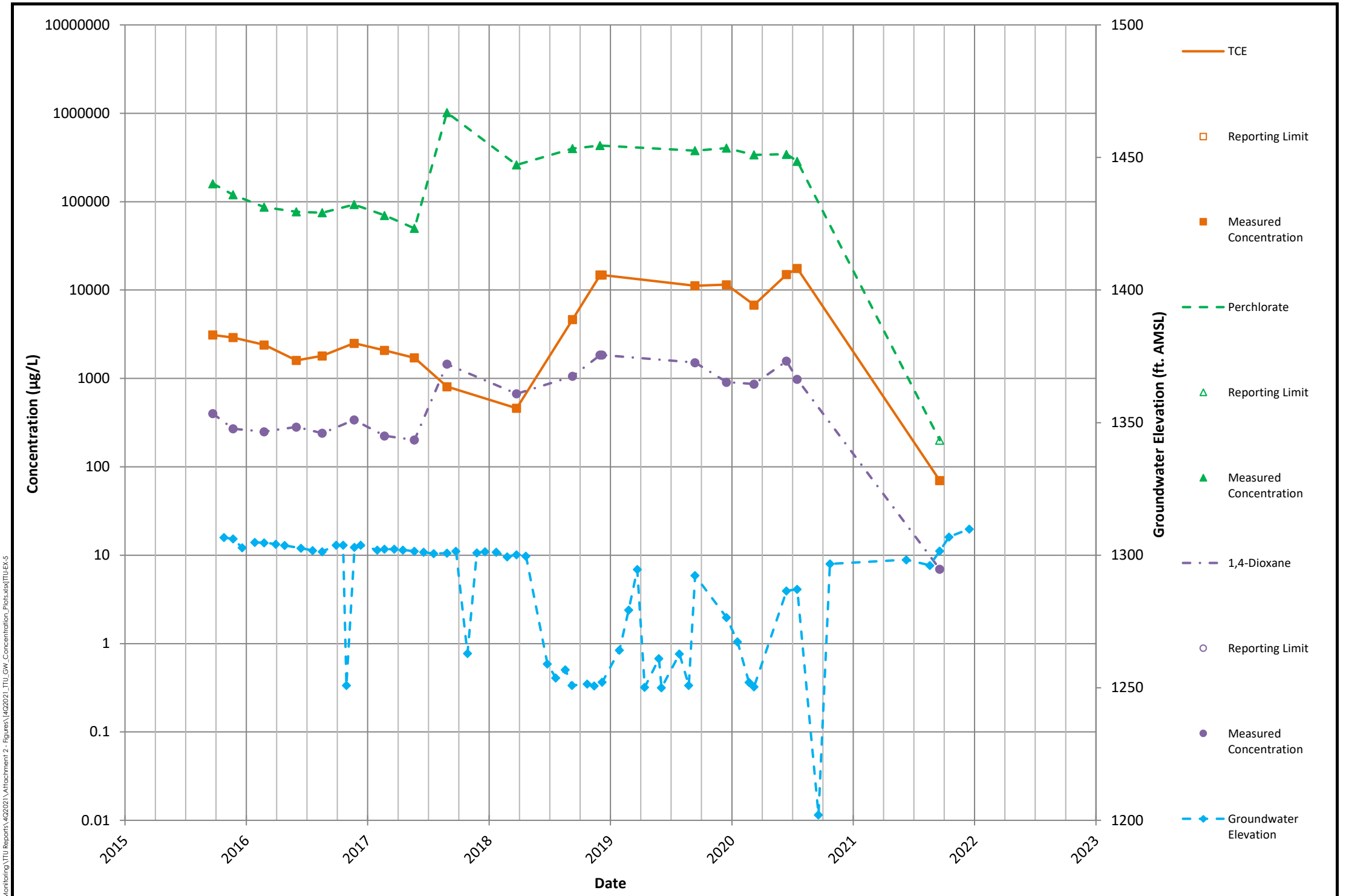
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-10
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-10

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



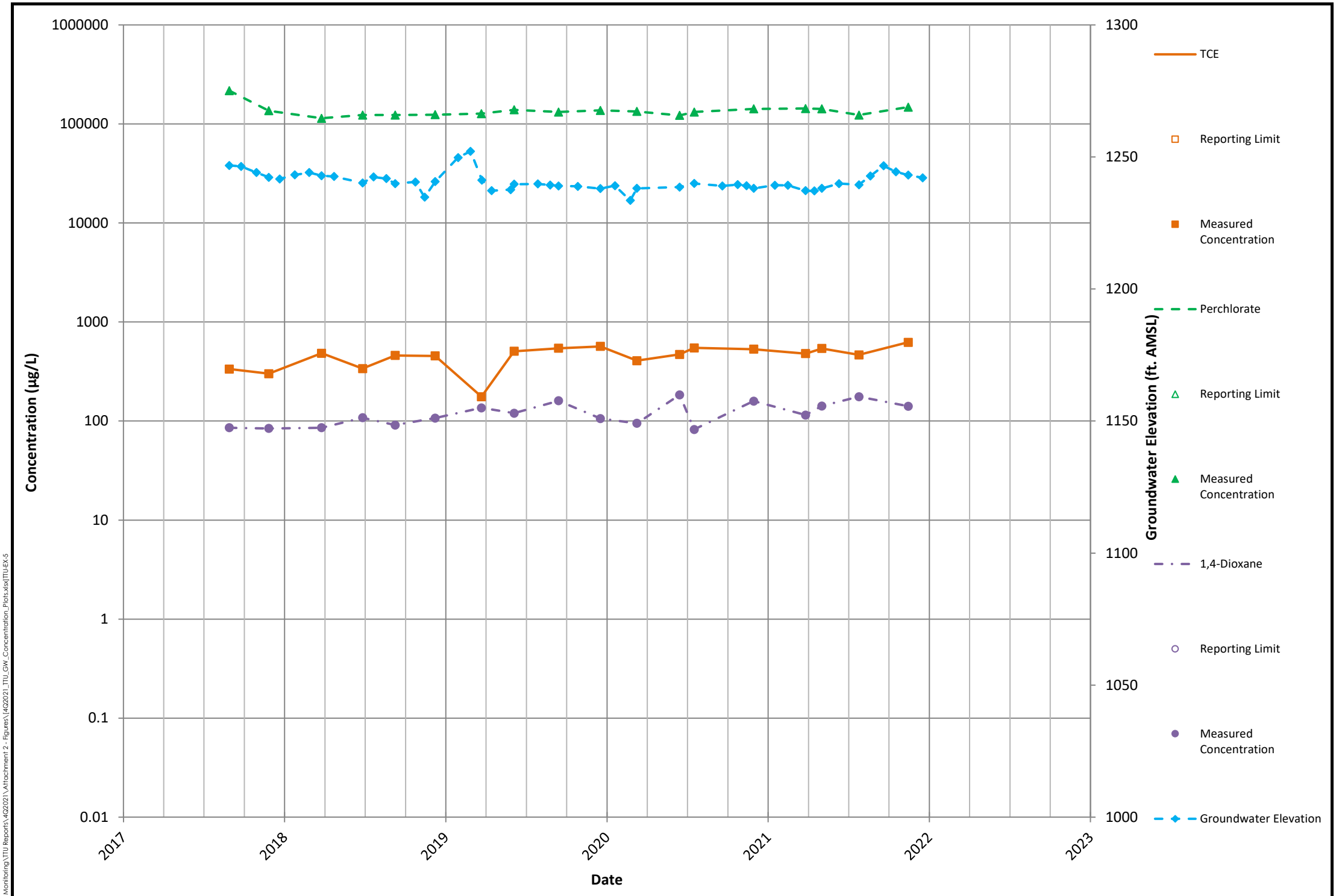
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
Converted into an injection well for an In-Situ Bio-Remediation Pilot Test in October 2020.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-11
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-11

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



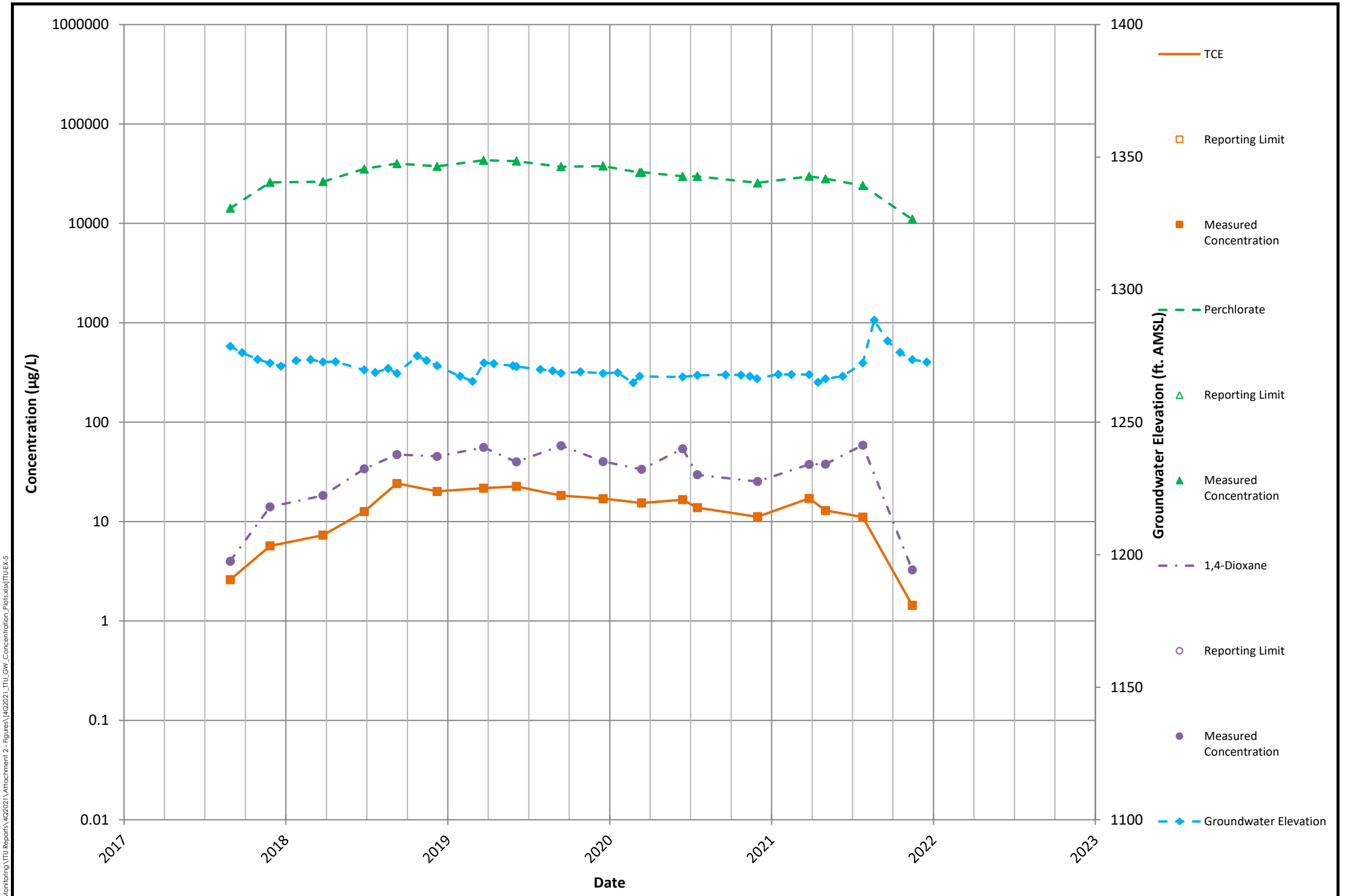
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-12
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-12

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



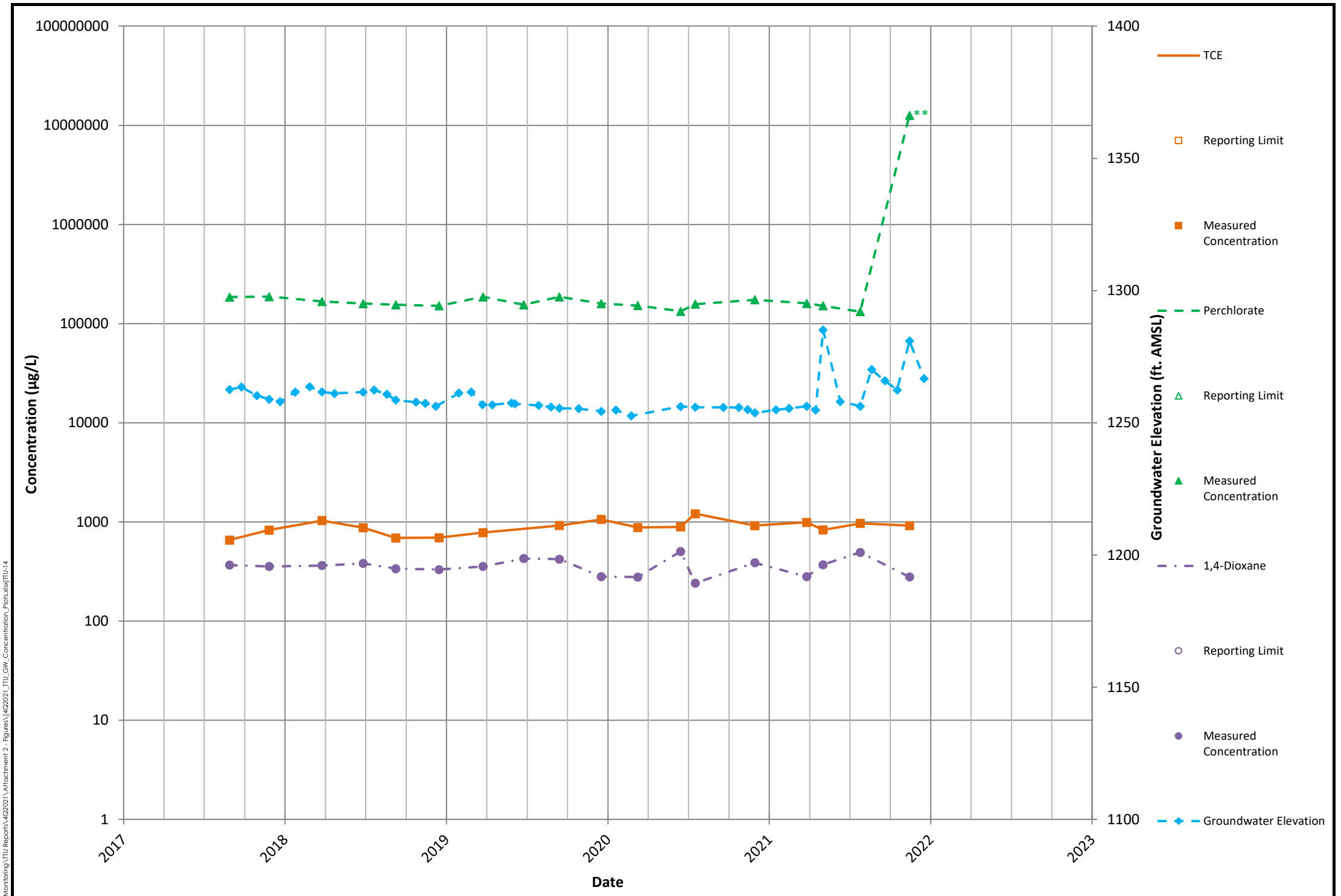
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-13
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-13

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



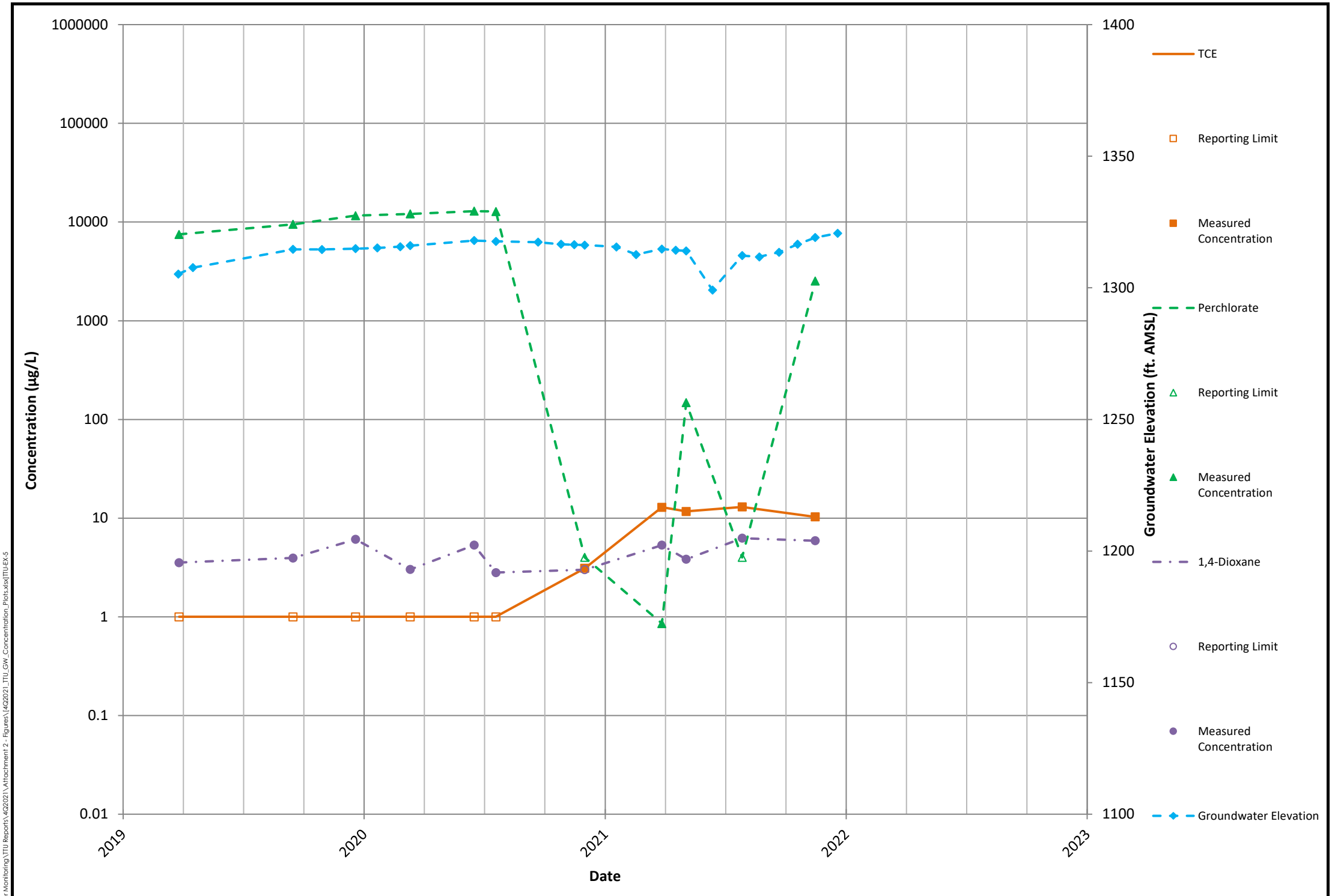
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level
** - Nearby extraction wells TTU-1 and TTU-2 were not operational from 11/4/2021 - 12/6/2021.

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-14
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-14

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-14



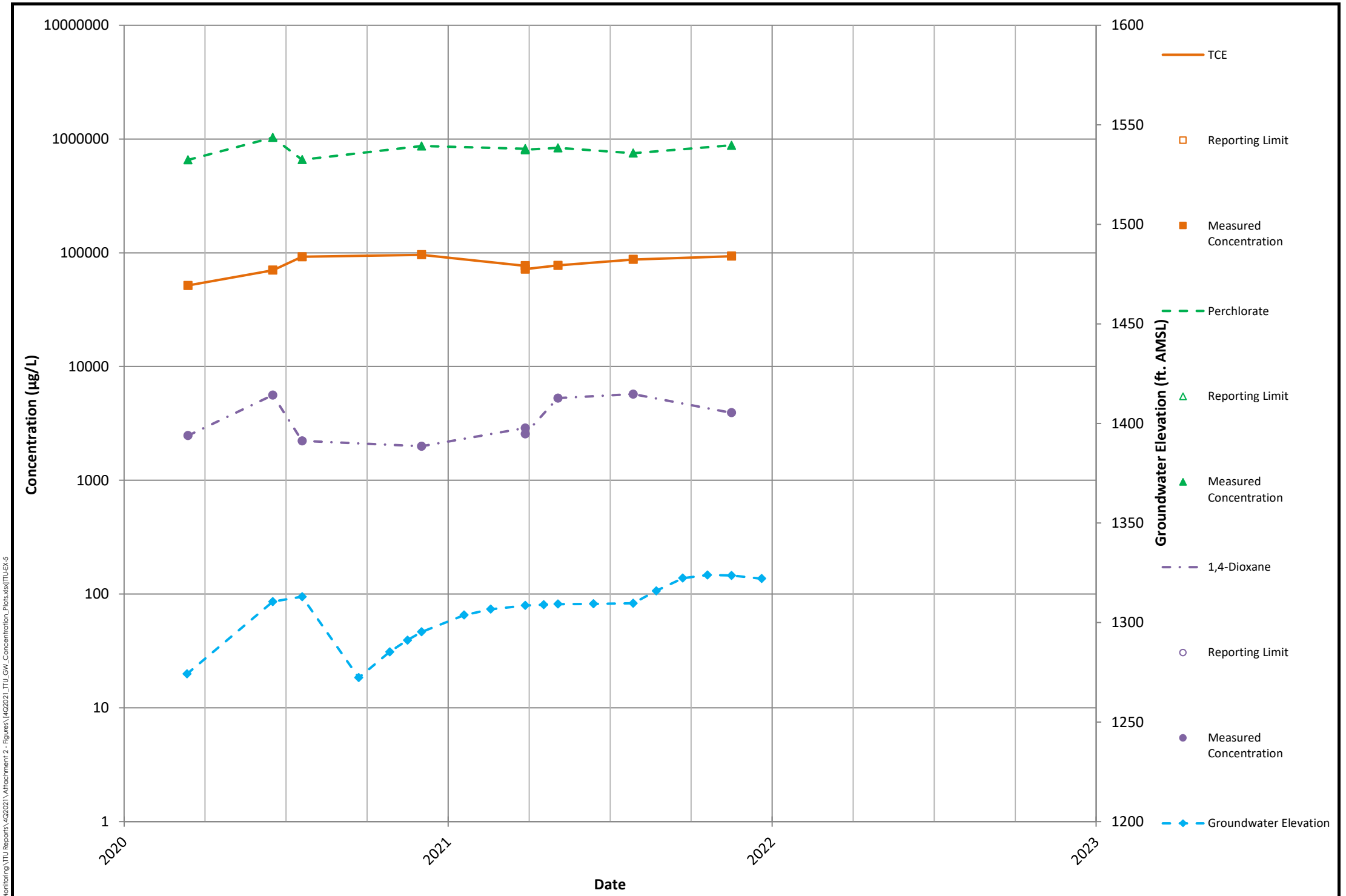
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-15
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-15

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



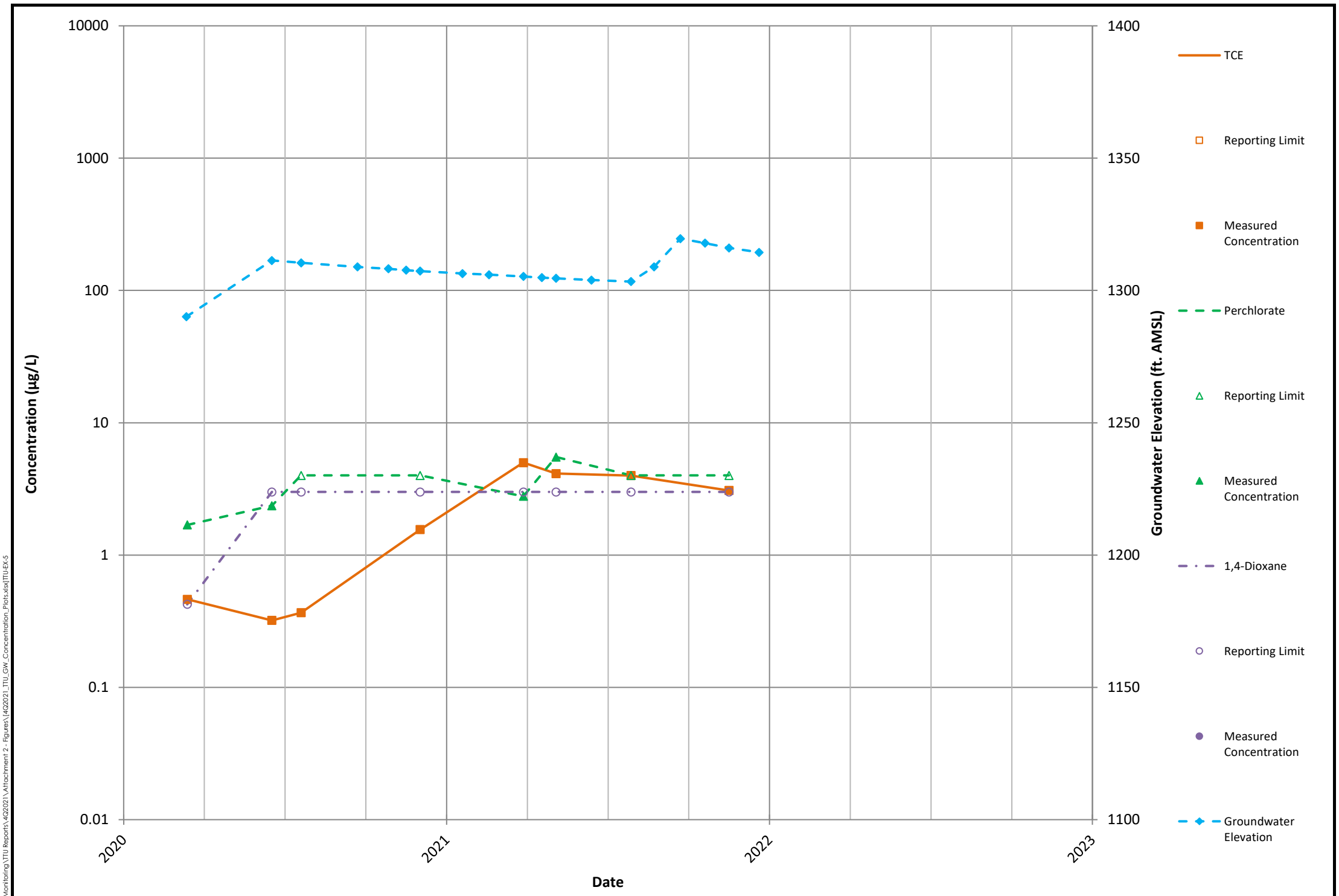
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-16
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-16

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



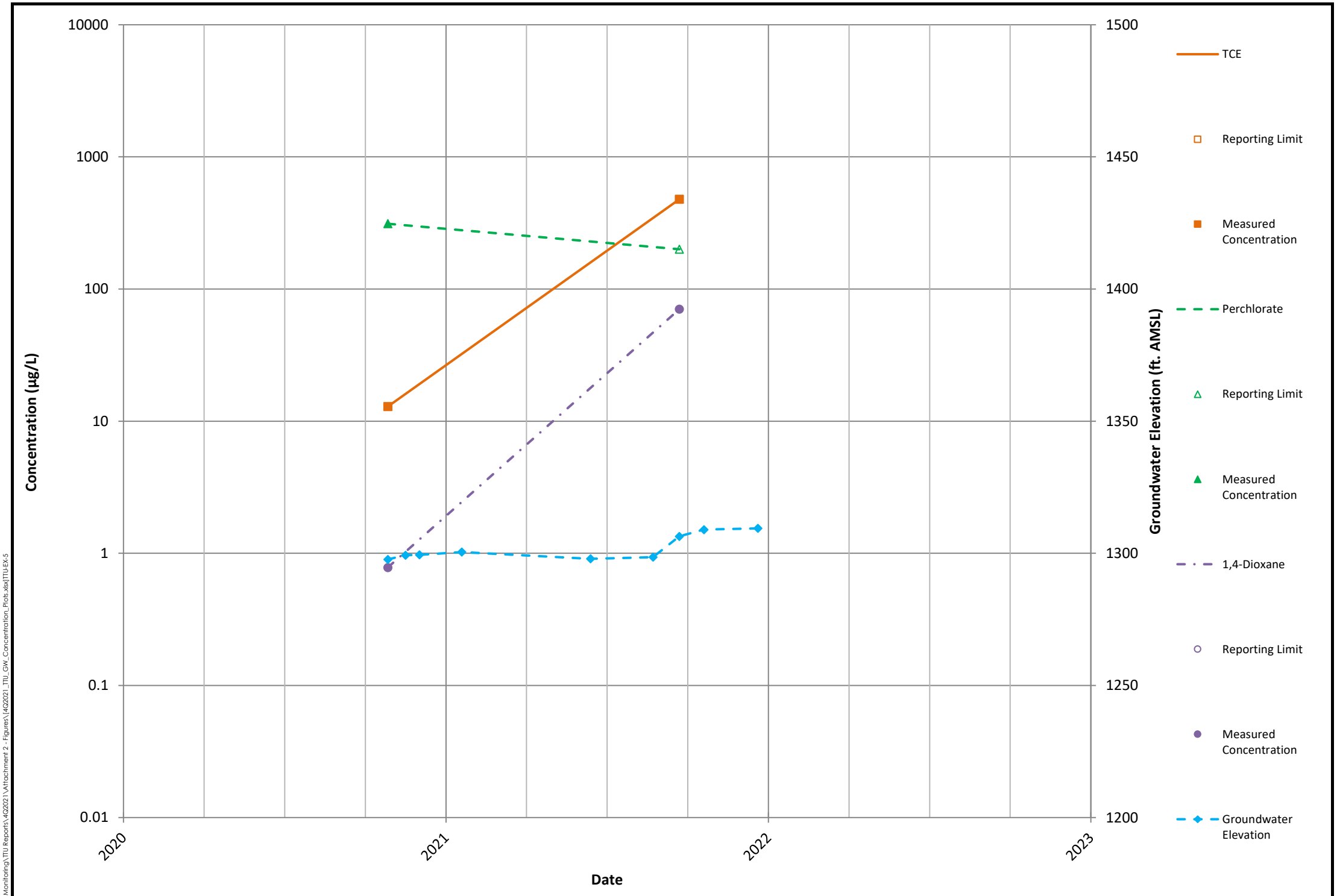
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-17
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-17

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



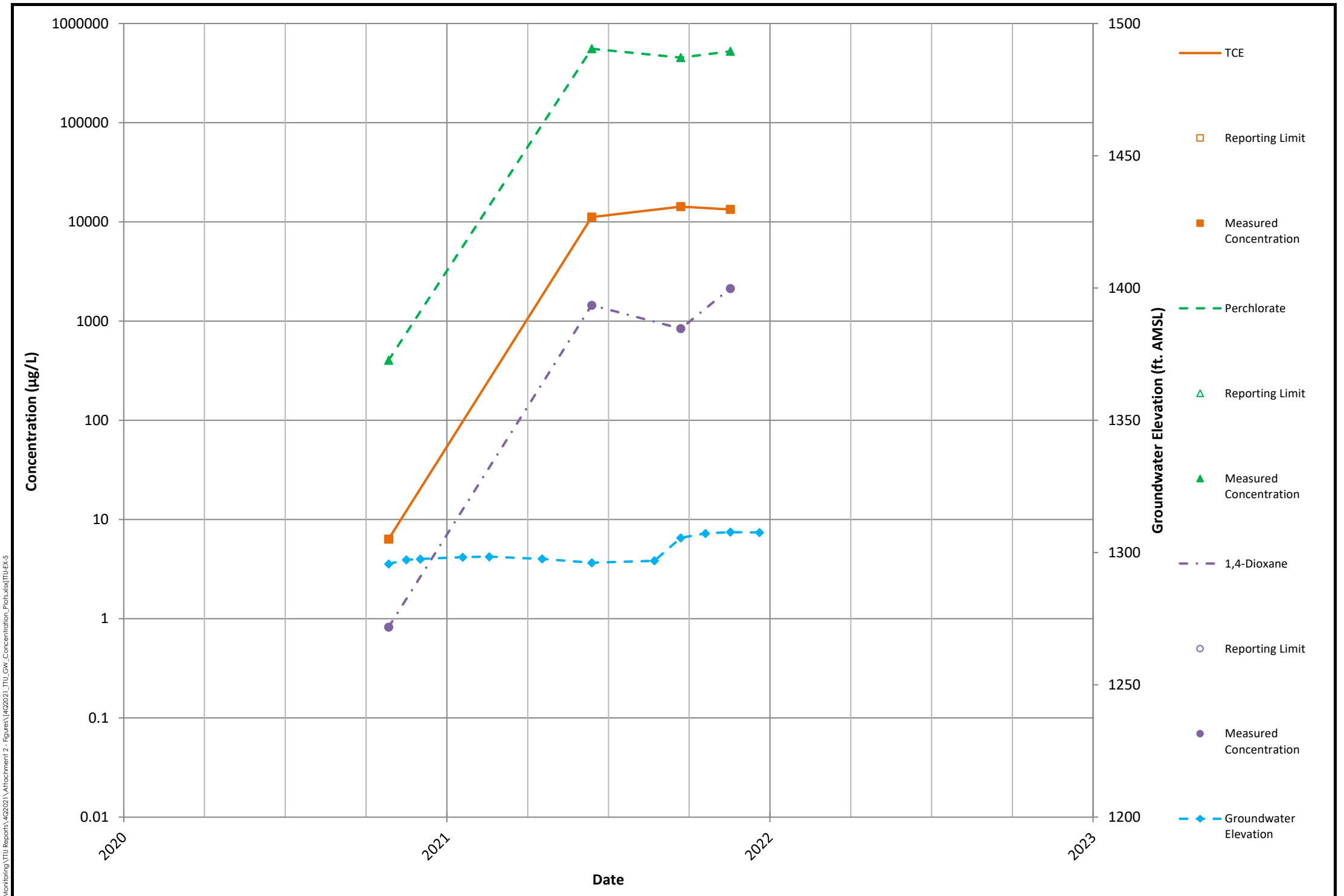
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
Installed as a monitoring well for an In-Situ Bio-Remediation Pilot Test and converted into an injection well for the Pilot Test in February 2020.
µg/L - micrograms per liter ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-19
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-18

P:\SP0101GW21 - 2021 Groundwater Monitoring\TIU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



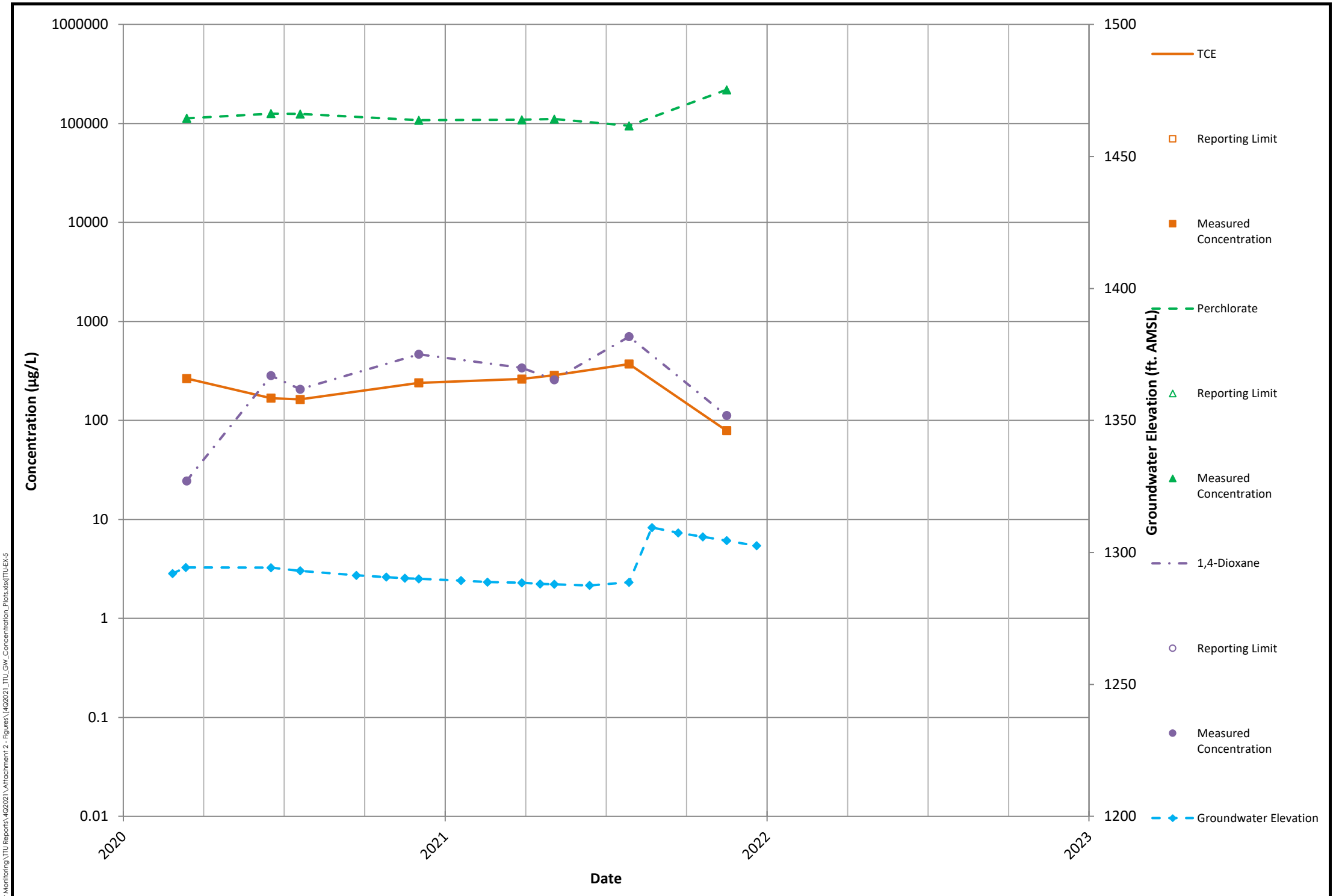
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
Installed as a monitoring well for an In-Situ Bio-Remediation Pilot Test and a quarterly sampling plan has not been established.
µg/L - micrograms per liter ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-20
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-19

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



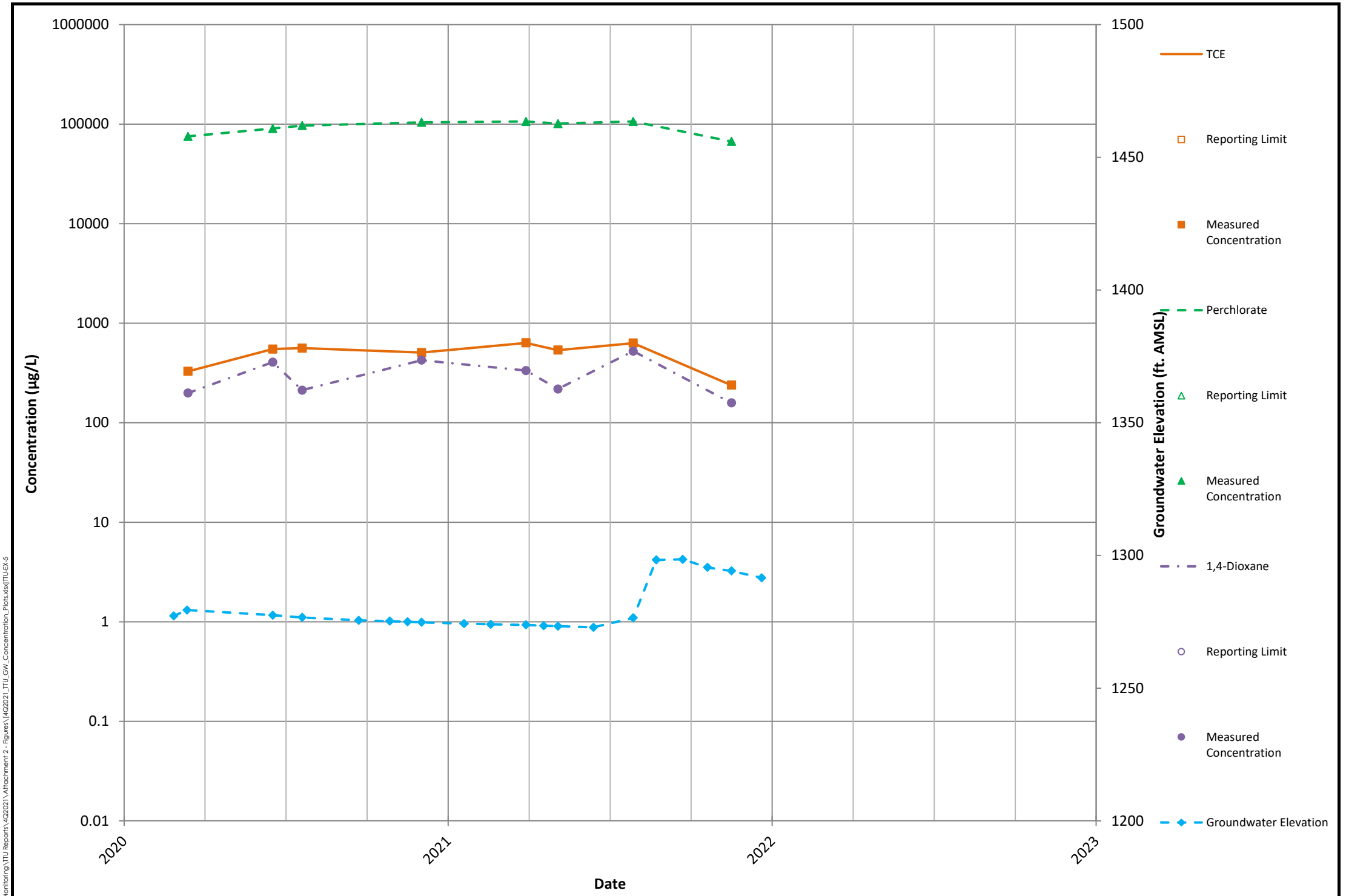
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-EX-1
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-20

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



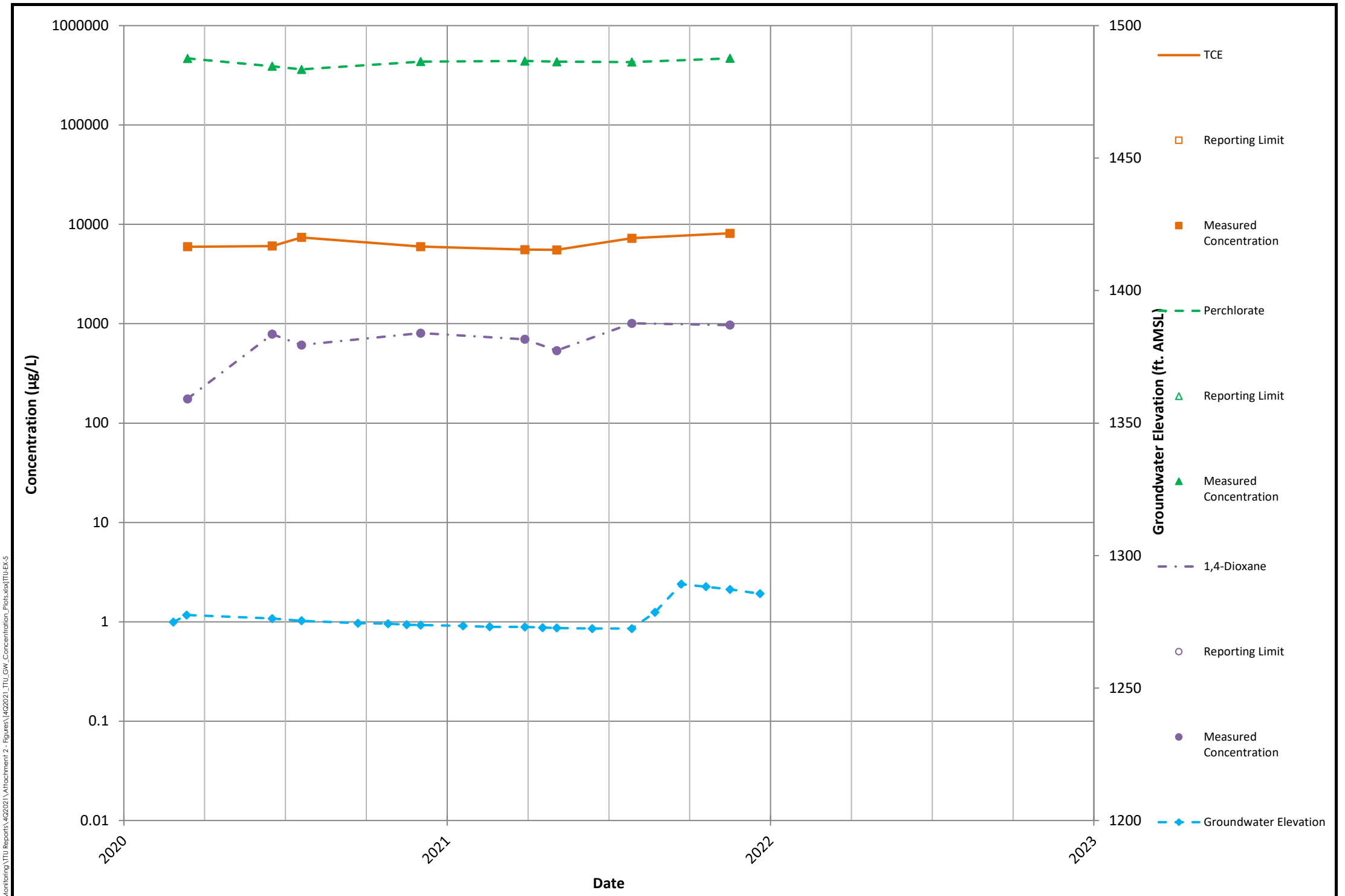
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-EX-2
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-21

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



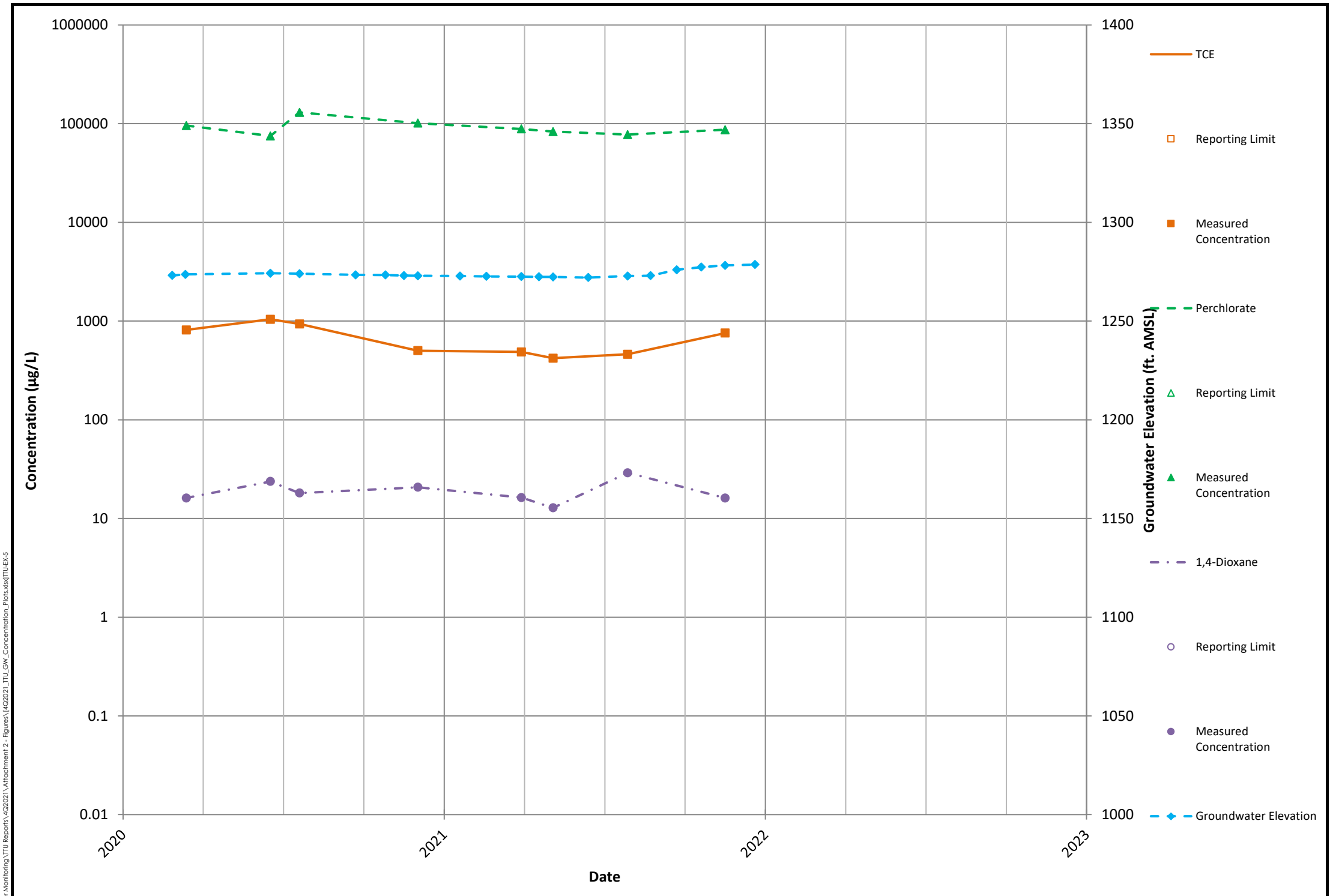
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-EX-3
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-22

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



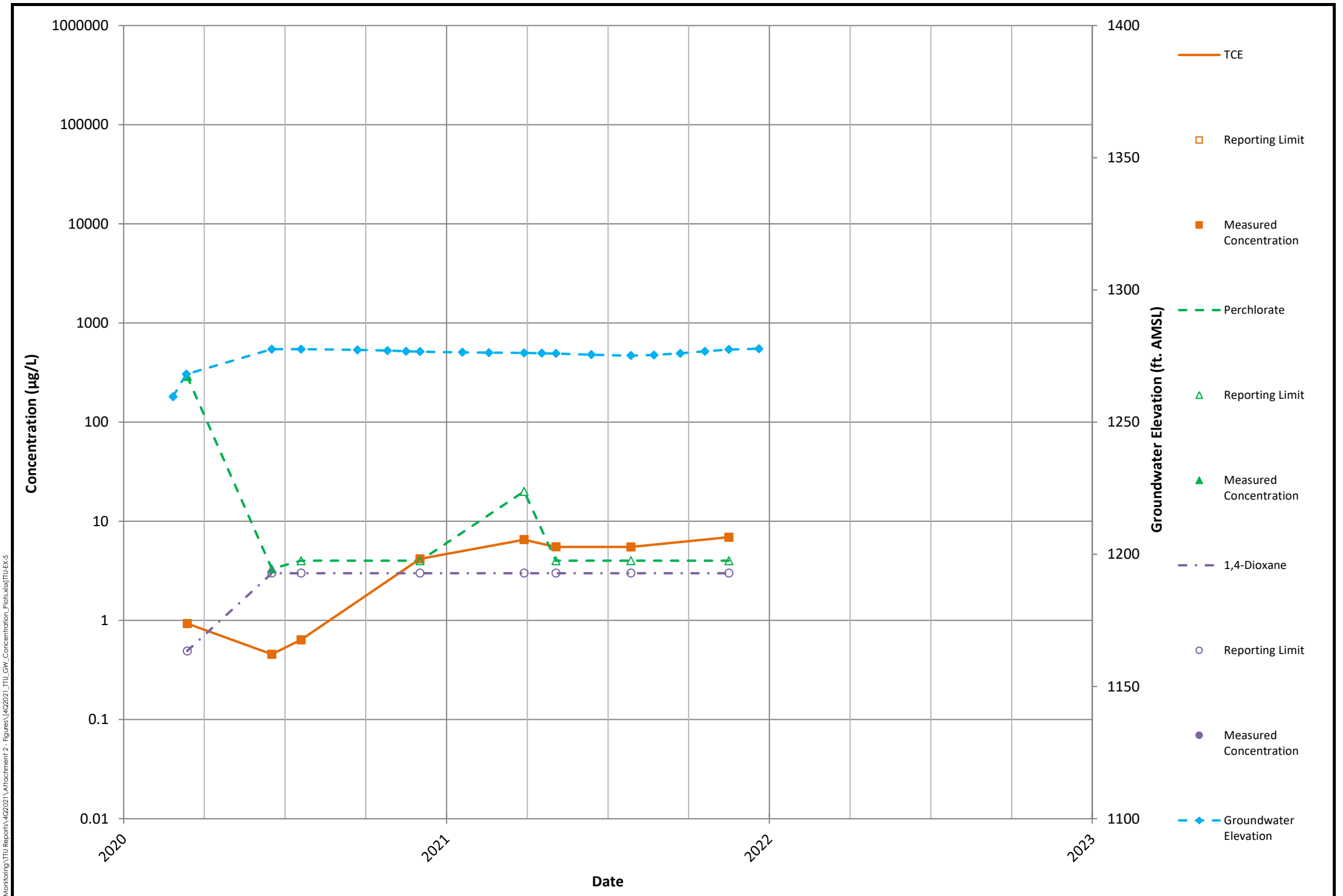
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-EX-4
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-23

P:\SP\0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



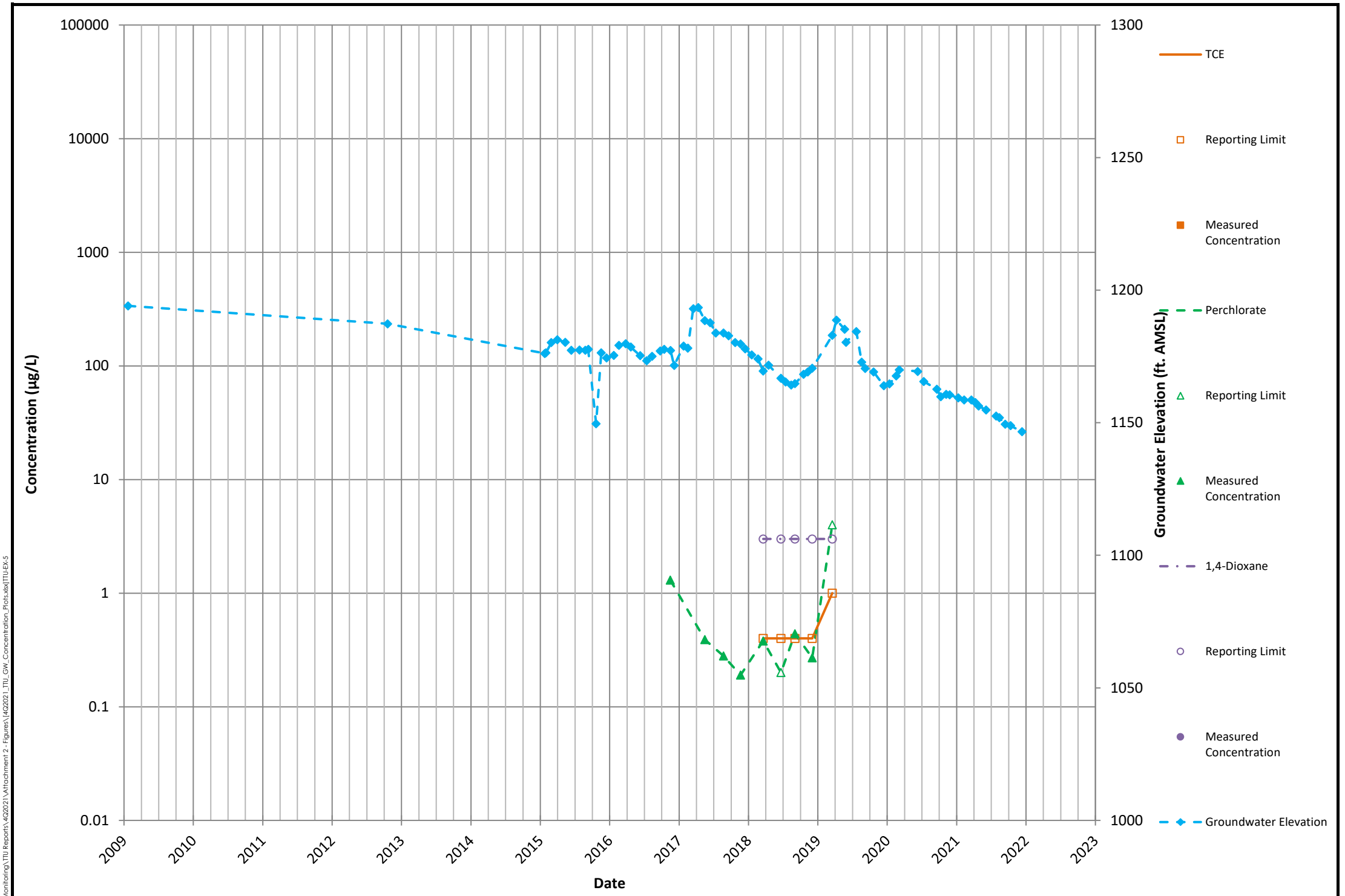
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
TTU-EX-5
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-24

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



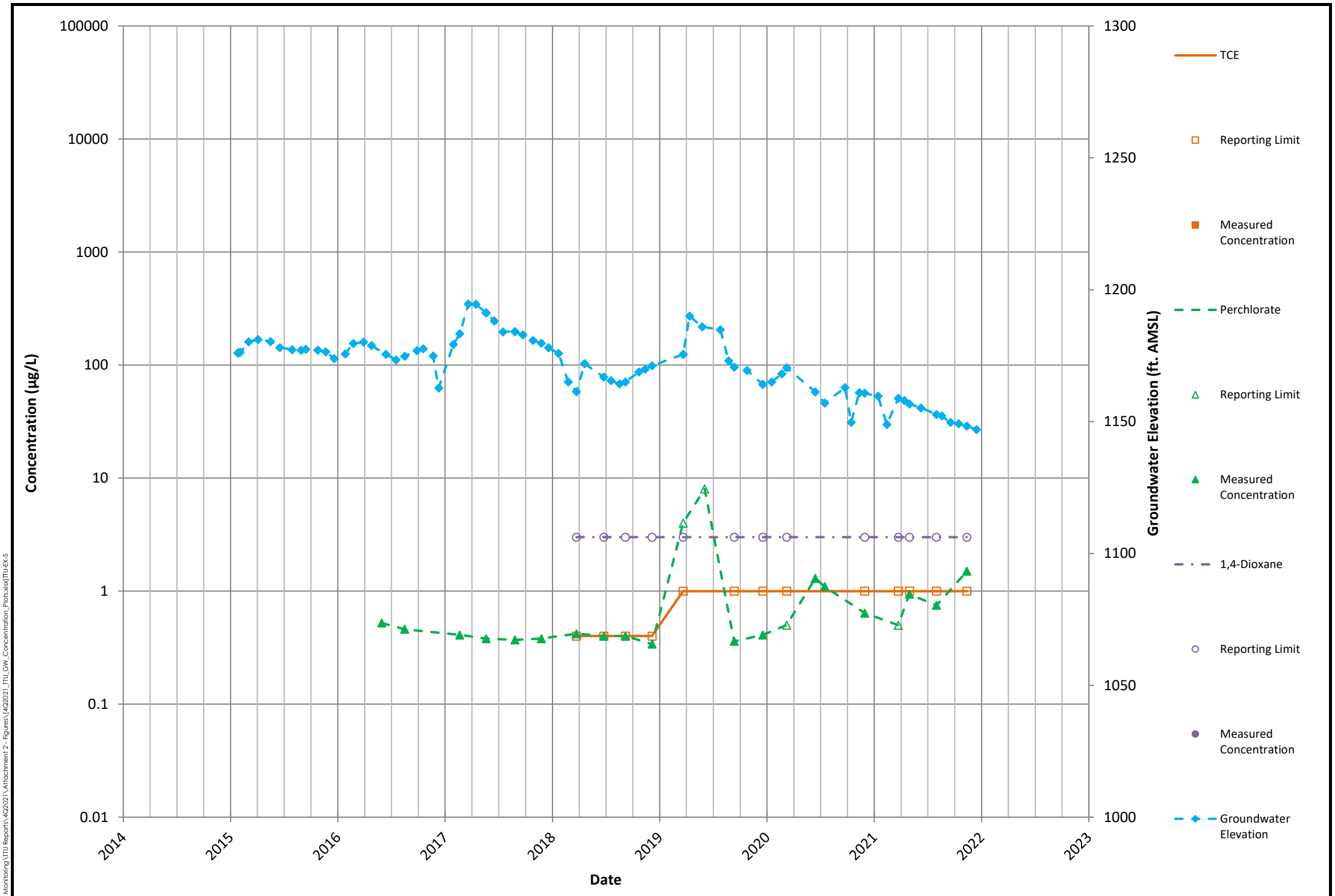
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
PF-1
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-25

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

Time-Series Plot of Groundwater Elevations and Concentrations
PF-2
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | March 2022

Figure 5-26

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\4Q2021\Attachment 2 - Figures\[4Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5

ATTACHMENT 3

DATA VALIDATION MEMORANDUM

Geosyntec consultants

3043 Gold Canal Drive Suite 100
Rancho Cordova, CA 95670
PH 916-637-8048
www.geosyntec.com

Memorandum

Date:	25 January 2022
To:	Tory Luttermoser
From:	Morgan Greenwald
CC:	Susan Scudder, Todd Olsen
Subject:	**Tier 1A Data Validation - Level II Data Deliverables, Pace Analytical Sample Delivery Groups (SDGs) L1433723 Revised Report and L1445691 Revised Report and Eurofins TestAmerica (ETA) Work Order Number 550-174545-1, Revision 1**

SITE: Nammo Defense Systems Inc. (NDS) - Thermal Treatment Unit (TTU)

INTRODUCTION

This report summarizes the findings of the Tier 1A data validation of twenty-three groundwater samples, five field duplicate samples, and two trip blanks, collected between 17 November 2021 and 22 December 2021, as part of the NDS TTU Fourth Quarter 2021 groundwater sampling event. The samples were submitted to Pace Analytical Laboratory (Pace) in Mount Juliet, Tennessee and analyzed for the following tests:

- Perchlorate by United States Environmental Protection Agency (USEPA) Method 314.0 (Modified)
- Volatile Organic Compounds (VOCs) by USEPA Method 8260B
- 1,4-Dioxane by USEPA Method 8260B using Selected Ion Monitoring (SIM) Mode

One groundwater sample and one field duplicate were submitted to ETA Phoenix, Arizona and subcontracted to ETA Sacramento, West Sacramento, California to be analyzed for the following test:

- Perchlorate by USEPA Method 6850

EXECUTIVE SUMMARY

Overall, based on this Tier 1A data validation covering the quality control (QC) parameters listed below and based on the information provided, the data as qualified are usable for supporting project objectives. The qualified data should be used within the limitations of the qualifications.

The data were reviewed based on the Quality Assurance Project Plan for Groundwater Investigation, August 2013 (QAPP), the USEPA National Functional Guidelines (NFG) for Organic Superfund Methods Data Review, November 2020 (EPA-540-R-20-005), the USEPA NFG for Inorganic Superfund Methods Data Review, November 2020 (EPA-542-R-20-006), and the Draft Region 9 Superfund Data Evaluation/Validation Guidance, December 2001 (R9QA/006.1), as well as the pertinent methods referenced by the laboratory reports, and professional and technical judgment.

The following samples were analyzed and validated at a Tier 1A level in the data sets:

Pace Laboratory ID	ETA Laboratory ID	Client ID
L1433723-01	--	TTU-9A-61-20211117
L1433723-02	--	TTU-9A-61-20211117-DUP
L1433723-03	--	TTU-13-51-20211118
L1433723-04	--	TTU-14-69-20211118
L1433723-05	--	TTU-12-82-20211118
L1433723-06	--	TTU-12-82-20211118-DUP
L1433723-07	--	TTU-20-73-20211118
L1433723-08	--	TTU-10-147-20211118
L1433723-09	550-174545-1	PF-2-400-20211118
--	550-174545-2	PF-2-400-20211118-Dup
L1433723-10	--	TTU-8-164-20211118
L1433723-11	--	TTU-17-80-20211117
L1433723-12	--	TTU-15-75-20211117
L1433723-13	--	TTU-16-80-20211117
L1433723-14	--	TTU-EX-1-69-20211117

Pace Laboratory ID	ETA Laboratory ID	Client ID
L1433723-15	--	TTU-EX-2-74-20211117
L1433723-16	--	TTU-EX-3-76-20211117
L1433723-17	--	TTU-EX-3-76-20211117-DUP
L1433723-18	--	TTU-EX-4-77-20211117
L1433723-19	--	TTU-EX-5-80-20211117
L1433723-20	--	TTU-5-110-20211117
L1433723-21	--	TTU-4-57-20211118
L1433723-22	--	TTU-3-108-20211118
L1433723-23	--	TTU-7-345-20211118
L1433723-24	--	TTU-6-143-20211118
L1433723-25	--	TRIP BLANK
L1445691-01	--	TTU-1-50-20211222
L1445691-02	--	TTU-2-114-20211222
L1445691-03	--	TTU-2-114-20211222-DUP
L1445691-04	--	TRIP BLANK

The samples were received at Pace at 2.7 degrees Celsius (ºC) and 3.7ºC, at ETA Phoenix at 5.9ºC, and at ETA Sacramento at 0.9ºC, meeting the QAPP criteria of approximately 4ºC, based on professional and technical judgment. No sample preservation issues were noted by the laboratory.

The L1433723 and L1445691 case narratives indicated that insufficient volume was received for several project samples to perform matrix spike (MS)/MS duplicate (MSD) analysis per method QC requirements for USEPA Methods 8260B and/or 8260B-SIM. Further information from the laboratory clarified that this statement was included because the laboratory's Arizona Department of Health Services (ADHS) accreditation requires that at least one sample is collected in triplicate volume in case a MS/MSD pair is needed; the reported data were not impacted.

Sample collection times were not listed on the chains of custody (COCs) for the trip blank samples. The laboratory assigned collection times of 00:00.

Sample collection times were not recorded for the samples listed on the 550-174545-1 COC. According to the 550-174545-1 Login Sample Receipt Checklist completed by ETA Phoenix, the samples were logged in using the information on the samples' container labels.

Incorrect error corrections were observed on the COCs, instead of the proper procedure of a single strike through, correction, and initials and date of person making the correction.

The L1433723 laboratory report was revised on 20 December 2021 to correct the MSD recovery for the MS/MSD pair reported in Method 8260B batch WG1780831. The revised report is identified as L1433723, Revised Report.

The L1433723 laboratory report was revised a second time on 10 January 2022 to correct the methylcyclohexane result for sample TTU-EX-3-76-20211117-DUP. The revised report is identified as L1433723, Revised Report.

The 550-174545-1 laboratory report was revised on 21 December 2021 to include the MS/MSD sample results for Method 6850 batch 546899. The revised report is identified as 550-174545-1, Revision 1.

The L1445691 laboratory report was revised on 6 January 2022 and again on 7 January 2022 at the request of the Geosyntec project management (PM) team to change the sample IDs for the following samples: TTU-1-50-20211222, TTU-2-114-20211222, and TTU-2-114-20211222-DUP. The revised report is identified as L1445691, Revised Report.

1.0 PERCHLORATE

The samples were analyzed for perchlorate by USEPA Methods 314.0 (modified) and 6850.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate

- ✓ Laboratory Control Sample
- ⊗ Laboratory Duplicate
- ✓ Field Duplicate
- ✓ Equipment Blank
- ✓ Sensitivity
- ✓ Electronic Data Deliverable Review

1.1 Overall Assessment

The perchlorate data reported in these laboratory reports are considered usable for supporting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for these analyses, for the sample sets is 100%.

1.2 Holding Times

The holding time for the perchlorate analysis of an aqueous sample is 28 days from sample collection to analysis. The holding times were met for the sample analyses.

1.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Six method blanks were reported (one in Method 6850 batch 546899, one each in modified Method 314.0 batches WG1784397, WG1789817, and WG1797425, and two in modified Method 314.0 batch WG1784394). Perchlorate was not detected in the method blanks above the method detection limit (MDL) for modified Method 314.0 or above the reporting limit (RL) for Method 6850.

Email communication from the laboratory on 25 January 2022 indicated that batch number WG1786624 reported in SDG L1433723 was a "ghost batch" number created by the laboratory information management system (LIMS) during data capture, and that the samples and batch QC reported with batch number WG1786624 were analyzed in batch WG1784394. Therefore, these two batch numbers were assessed as one batch, identified as WG1784394, during validation.

1.4 Matrix Spike/Matrix Spike Duplicate

Two sample set specific MS/MSD pairs were reported for modified Method 314.0, using samples TTU-EX-5-80-20211117 and TTU-3-108-20211118. Six sample set specific MSs were reported for modified Method 314.0, using the following samples:

- TTU-4-57-20211118
- TTU-7-345-20211118
- TTU-8-164-20211118
- TTU-9A-61-20211117
- TTU-9A-61-20211117-DUP
- TTU-10-147-20211118

The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

The perchlorate recoveries in the MS/MSD pair using sample TTU-3-108-20211118 were low and outside the laboratory specified acceptance criteria. However, due to the difference between the sample concentration and the spike concentration, and based on professional and technical judgment, no qualifications were applied to the data.

The perchlorate RPD in the MS/MSD pair using sample TTU-EX-5-80-20211117 was high and outside the laboratory specified acceptance criteria. Since perchlorate was not detected in sample TTU-EX-5-80-20211117, no qualifications were applied to the data.

Batch sample MSs and MS/MSD pairs were also reported. Since these were batch QC, the results did not impact the data and did not result in qualification of the data.

1.5 Laboratory Control Sample (LCS)

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Four LCSs were reported for modified Method 314.0 and one LCS was reported for Method 6850. The recoveries were within the laboratory specified acceptance criteria.

1.6 Laboratory Duplicate

Four sample set specific laboratory duplicates were reported for modified Method 314.0, using samples TTU-17-80-20211117, TTU-5-110-20211117, TTU-7-345-20211118, and TTU-1-50-20211222. The RPD results were within the laboratory specified acceptance criteria, with the following exception.

The perchlorate RPD in the laboratory duplicate using sample TTU-7-345-20211118 was high and outside the laboratory specified acceptance criteria. Therefore, the perchlorate concentration in sample TTU-7-345-20211118 was J qualified as estimated.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	Validation Result (µg/L)	Validation Qualifier*	Reason code**
TTU-7-345-20211118	Perchlorate	10.5	R8	10.5	J	12

µg/L - Microgram per liter
R8 - Laboratory flag indicating the sample RPD exceeded the method acceptance limit
* - Validation qualifiers are defined in Attachment 1 at the end of this report
** - Reason codes are defined in Attachment 2 at the end of this report

Batch sample laboratory duplicates were also reported. Since these were batch QC, the results did not impact the data and did not result in qualification of the data.

1.7 Field Duplicate

Five field duplicates were collected with the sample sets and analyzed for perchlorate: TTU-9A-61-20211117-DUP, TTU-12-82-20211118-DUP, TTU-EX-3-76-20211117-DUP, TTU-2-114-20211222-DUP, and PF-2-400-20211118-Dup. Acceptable precision (RPD ≤30%) was demonstrated between the field duplicates and original samples, TTU-9A-61-20211117, TTU-12-82-20211118, TTU-EX-3-76-20211117, TTU-2-114-20211222, and PF-2-400-20211118, respectively.

The QAPP specifies that field duplicates should be collected and analyzed at a frequency of 10%. Five field duplicates were collected with the twenty-three project samples submitted for perchlorate analysis. Therefore, the QAPP specified field duplicate frequency was met.

1.8 Equipment Blank

Table 2 in the QAPP specifies that equipment blanks should be collected at a rate of one per day when non-dedicated equipment is used, two per quarterly sampling event, and one per weekly or monthly sampling event. No non-dedicated equipment was used for the quarterly sampling event; therefore, equipment blanks were not collected.

1.9 Sensitivity

The samples analyzed by modified Method 314.0 were reported to the MDL and the samples analyzed by Method 6850 were reported to the RL. No elevated non-detect results were reported. The undiluted modified Method 314.0 MDL and RL and the Method 6850 RL met the Arizona Department of Environmental Quality (ADEQ) Health-Based Guidance Level (HBGL) for perchlorate of 14 µg/L indicated in Table 1 of the QAPP.

1.10 Electronic Data Deliverable (EDD) Review

Results and sample IDs in the EDDs were reviewed against the information provided by the associated level II reports at a minimum of 20%. No discrepancies were identified between the level II reports and the EDDs.

2.0 VOLATILE ORGANIC COMPOUNDS

The samples were analyzed for VOCs per USEPA Method 8260B.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

⊗ Overall Assessment
✓ Holding Times
⊗ Method Blank
⊗ Matrix Spike/Matrix Spike Duplicate
⊗ Laboratory Control Sample
⊗ Surrogates
⊗ Field Duplicate
✓ Trip Blank
✓ Equipment Blank
✓ Sensitivity
✓ Electronic Data Deliverable Review

2.1 Overall Assessment

The VOC data reported in the laboratory reports are considered usable for supporting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for the sample sets is 100%.

The internal standard (IS) responses for the samples were reported in the laboratory reports. The IS responses were within the method specified acceptance criteria.

The benzene concentration in sample TTU-16-80-20211117 was E1 flagged by the laboratory to indicate that the concentration is estimated because the analyte concentration exceeded calibration range; reanalysis was not possible due to insufficient sample. Therefore, based on professional and technical judgment, the benzene concentration in sample TTU-16-80-20211117 was J qualified as estimated.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	Validation Result (µg/L)	Validation Qualifier	Reason code
TTU-16-80-20211117	Benzene	405	E1	405	J	10

µg/L - Microgram per liter
E1 - Laboratory flag indicating the concentration is estimated; analyte concentration exceeded calibration range. Reanalysis not possible due to insufficient sample volume

2.2 Holding Times

The holding time for the VOC analysis of preserved water samples is 14 days from sample collection to analysis. The holding times were met for the sample analyses.

2.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Six method blanks were reported (batches WG1780361, WG1780831, WG1782067, WG1782742, WG1796559, and WG1796911). VOCs were not detected in the method blanks above the MDLs, with the following exceptions.

The following analytes were detected in the method blank in batch WG1780361 at estimated concentrations greater than the MDLs and less than the RLs:

- n-Butylbenzene
- sec-Butylbenzene
- Hexachloro-1,3-butadiene (Hexachlorobutadiene)
- p-Isopropyltoluene
- 1,2,3-Trichlorobenzene

Therefore, the estimated p-isopropyltoluene concentration in sample TTU-16-80-20211117 was U qualified as not detected at the RL. Since the other analytes listed above were not detected in the associated samples, no qualifications were applied to the data.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	Validation Result (µg/L)	Validation Qualifier	Reason code
TTU-16-80-20211117	p-Isopropyltoluene	0.743	B1;E4	1.0	U	3

µg/L - Microgram per liter
B1 - Laboratory flag indicating the target analyte was detected in the method blank at or above the method reporting limit
E4 - Laboratory flag indicating the concentration is estimated; the analyte was detected below the RL but above MDL

2.4 Matrix Spike/Matrix Spike Duplicate

Two sample set specific MS/MSD pairs were reported using samples TTU-EX-5-80-20211117 and TTU-3-108-20211118. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

One or both of the recoveries for acrolein and dichlorodifluoromethane were high and outside the laboratory specified acceptance criteria in the MS/MSD pair using sample TTU-EX-5-80-20211117. Since these analytes were not detected in sample TTU-EX-5-80-20211117, no qualifications were applied to the data.

There were no recoveries (i.e., 0%) for trichloroethene in the MS/MSD pair using sample TTU-EX-5-80-20211117. Additional information provided by the laboratory indicated that the initial analysis of sample TTU-EX-5-80-20211117 and the analyses of the associated MS and MSD samples were affected by carryover contamination. Therefore, based on professional and technical judgment and due to the differences between the sample concentrations and the spike concentrations and the presence of carryover contamination, no qualifications were applied to the data. The results for sample TTU-EX-5-80-20211117 were reported from a reanalysis that was not impacted by carryover.

The MS/MSD recoveries for dicyclopentadiene were low and the RPDs for multiple target analytes were high in the MS/MSD pair using sample TTU-3-108-20211118, outside the laboratory specified acceptance criteria. Therefore, the non-detect dicyclopentadiene result in sample TTU-3-108-20211118 was UJ qualified as estimated less than the MDL. Since no target analytes were detected in sample TTU-3-108-20211118, no qualifications were applied to the data based on the RPDs outside the laboratory specified acceptance criteria.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	Validation Result (µg/L)	Validation Qualifier	Reason code
TTU-3-108-20211118	Dicyclopentadiene	0.253	U;M2;R5	0.253	UJ	4

µg/L - Microgram per liter
M2 - Laboratory flag indicating that the matrix spike recovery was low, but the method control sample recovery was acceptable
R5 - Laboratory flag indicating that the MS/MSD RPD exceeded the laboratory acceptance limit, but the recovery met acceptance criteria
U - The analyte was analyzed for, but was not detected at or above the reported sample quantitation limit

A batch sample MS/MSD pair was also reported. Since these were batch QC, the results did not impact the data and did not result in qualification of the data.

MS/MSD pairs were not reported in batches WG1782067, WG1782742, and WG1796911. LCS/LCSD pairs were used to assess precision and accuracy.

2.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Six LCS/LCS duplicate (LCSD) pairs were reported. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The LCSD recoveries for methylene chloride (dichloromethane) and trichloroethene and the RPDs for acrolein, 2,2-dichloropropane, and trichloroethene were high and outside the laboratory specified acceptance criteria in the LCS/LCSD pair in batch WG1780361. Therefore, the trichloroethene concentrations in samples TTU-9A-61-20211117, TTU-9A-61-20211117-DUP, and TTU-13-51-20211118 were J qualified as estimated. Since dichloromethane, acrolein, and 2,2-dichloropropane were not detected in the associated samples, no qualifications were applied to the data.

The LCSD recovery for acrolein and the LCSD recoveries and RPDs for carbon disulfide, 1,1-dichloroethene, and 1,1,2-trichlorotrifluoroethane were high and outside the laboratory specified acceptance criteria in the LCS/LCSD pair in batch WG1796559. Therefore, the 1,1-dichloroethene concentrations in samples TTU-1-50-20211222, TTU-2-114-20211222, and TTU-2-114-20211222-DUP were J qualified as estimated. Since acrolein, carbon disulfide, and 1,1,2-trichlorotrifluoroethane were not detected in the associated samples, no qualifications were applied to the data.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	Validation Result (µg/L)	Validation Qualifier	Reason code
TTU-13-51-20211118	Trichloroethene	1.44	L1;R5	1.44	J	5
TTU-9A-61-20211117-DUP	Trichloroethene	0.985	E4;L1;R5	0.985	J	5
TTU-9A-61-20211117	Trichloroethene	0.911	E4;L1;R5	0.911	J	5
TTU-1-50-20211222	1,1-Dichloroethene	2.80	L1;R7	2.80	J	5
TTU-2-114-20211222	1,1-Dichloroethene	166	L1;R7	166	J	5
TTU-2-114-20211222-DUP	1,1-Dichloroethene	162	L1;R7	162	J	5

µg/L - Microgram per liter
E4 - Laboratory flag indicating that the concentration is estimated; analyte was detected below RL, but above MDL
L1 - Laboratory flag indicating that the associated blank spike recovery was above laboratory acceptance limits
R5 - Laboratory flag indicating that the MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
R7 - Laboratory flag indicating that the LCS/LCSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria

U - The analyte was analyzed for, but was not detected at or above the reported sample quantitation limit

2.6 Surrogates

Acceptable surrogate recoveries were reported for the sample analyses, with the following exceptions.

The recoveries of surrogates toluene-d8 and 1,2-dichloroethane-d4 were high and outside the laboratory specified acceptance criteria in the undiluted analysis of sample TTU-2-114-20211222-DUP. Therefore, the estimated concentrations of chloroform and trans-1,2-dichloroethene in sample TTU-2-114-20211222-DUP were J qualified as estimated and the concentrations of benzene, 1,1-dichloroethane, 1,1-dichloroethene, cis-1,2-dichloroethene, tetrachloroethene, and 1,1,2-trichloroethane were J+ qualified as estimated with high biases.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	Validation Result (µg/L)	Validation Qualifier	Reason code
TTU-2-114-20211222-DUP	Chloroform	2.30	E4	2.30	J	6
TTU-2-114-20211222-DUP	trans-1,2-Dichloroethene	0.409	E4	0.409	J	6
TTU-2-114-20211222-DUP	1,1,2-Trichloroethane	2.12	NA	2.12	J+	6
TTU-2-114-20211222-DUP	1,1-Dichloroethane	1.34	NA	1.34	J+	6
TTU-2-114-20211222-DUP	1,1-Dichloroethene	162	L1;R7	162	J+	6
TTU-2-114-20211222-DUP	Benzene	1.51	NA	1.51	J+	6
TTU-2-114-20211222-DUP	cis-1,2-Dichloroethene	1.78	NA	1.78	J+	6
TTU-2-114-20211222-DUP	Tetrachloroethene	1.62	NA	1.62	J+	6

µg/L - Microgram per liter
E4 - Laboratory flag indicating that the concentration is estimated; analyte was detected below RL, but above MDL
L1 - Laboratory flag indicating that the associated blank spike recovery was above laboratory acceptance limits
NA - Not applicable
R7 - Laboratory flag indicating that the LCS/LCSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria

2.7 Field Duplicate

Four field duplicates were collected with the sample sets and analyzed for VOCs: TTU-9A-61-20211117-DUP, TTU-12-82-20211118-DUP, TTU-EX-3-76-20211117-DUP, and TTU-2-114-20211222-DUP. Acceptable precision (RPD $\leq$30%) was demonstrated between the field duplicates and original samples, TTU-9A-61-20211117, TTU-12-82-20211118, TTU-EX-3-76-20211117, and TTU-2-114-20211222, respectively, with the following exceptions.

The following analytes were detected at estimated concentrations greater than the MDLs and less than the RLs in sample TTU-2-114-20211222, but not detected in field duplicate TTU-2-114-

20211222-DUP, resulting in non-calculable RPDs between the results: 1,2,3-trimethylbenzene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, 4-ethyltoluene, ethylbenzene, n-propylbenzene, toluene, and total xylenes. Therefore, the estimated concentrations of these analytes in sample TTU-2-114-20211222 were J qualified as estimated and the non-detect results in field duplicate TTU-2-114-20211222-DUP were UJ qualified as estimated less than the MDLs.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	RPD	Validation Result (µg/L)	Validation Qualifier	Reason code
TTU-2-114-20211222	1,2,3-Trimethylbenzene	0.291	E4	NC	0.291	J	7
TTU-2-114-20211222-DUP	1,2,3-Trimethylbenzene	0.104	U		0.104	UJ	7
TTU-2-114-20211222	1,2,4-Trimethylbenzene	0.551	E4	NC	0.551	J	7
TTU-2-114-20211222-DUP	1,2,4-Trimethylbenzene	0.322	U		0.322	UJ	7
TTU-2-114-20211222	1,3,5-Trimethylbenzene	0.212	E4	NC	0.212	J	7
TTU-2-114-20211222-DUP	1,3,5-Trimethylbenzene	0.104	U		0.104	UJ	7
TTU-2-114-20211222	4-Ethyltoluene	0.500	E4	NC	0.500	J	7
TTU-2-114-20211222-DUP	4-Ethyltoluene	0.208	U		0.208	UJ	7
TTU-2-114-20211222	Ethylbenzene	0.686	E4	NC	0.686	J	7
TTU-2-114-20211222-DUP	Ethylbenzene	0.137	U		0.137	UJ	7
TTU-2-114-20211222	n-Propylbenzene	0.101	E4	NC	0.101	J	7
TTU-2-114-20211222-DUP	n-Propylbenzene	0.0993	U		0.0993	UJ	7
TTU-2-114-20211222	Toluene	0.844	E4	NC	0.844	J	7
TTU-2-114-20211222-DUP	Toluene	0.278	U		0.278	UJ	7
TTU-2-114-20211222	Xylenes (Total)	2.15	E4	NC	2.15	J	7
TTU-2-114-20211222-DUP	Xylenes (Total)	0.174	U		0.174	UJ	7

µg/L - Microgram per liter
E4 - Laboratory flag indicating that the concentration is estimated; analyte was detected below RL, but above MDL
U - The analyte was analyzed for, but was not detected at or above the reported sample quantitation limit

The QAPP specifies that field duplicates should be collected and analyzed at a frequency of 10%. Four field duplicates were collected with the twenty-three project samples submitted for VOC analysis. Therefore, the QAPP specified field duplicate frequency was met.

2.8 Trip Blank

Two trip blank samples, both identified as Trip Blank, accompanied the VOC samples submitted in SDGs L1433723 and L1445691. The QAPP requires a frequency of one trip blank per shipment of VOC samples. Therefore, the QAPP specified trip blank frequency was met. VOCs were not detected above the MDLs in the trip blanks.

2.9 Equipment Blank

Table 2 in the QAPP specifies that equipment blanks should be collected at a rate of one per day when non-dedicated equipment is used, two per quarterly sampling event, and one per weekly or monthly sampling event. No non-dedicated equipment was used for the quarterly sampling event; therefore, equipment blanks were not collected.

2.10 Sensitivity

The samples were reported to the MDLs. Elevated non-detect results were reported due to the dilutions analyzed. The undiluted trichloroethene MDLs and RLs met the EPA Maximum Contaminant Level (MCL) for trichloroethene of 5.0 µg/L indicated in Table 1 of the QAPP. There are no site specific technical and regulatory quality standards provided for other VOCs in Table 1 of the QAPP.

Estimated concentrations greater than the MDLs and less than the RLs were flagged by the laboratory with E4. These estimated concentrations were J qualified as estimated.

2.11 Electronic Data Deliverable Review

Results and sample IDs in the EDDs were reviewed against the information provided by the associated level II reports at a minimum of 20%. No discrepancies were identified between the level II reports and the EDDs.

3.0 1,4-DIOXANE

The samples were analyzed for 1,4-dioxane per USEPA Method 8260B-SIM.

The areas of data review are listed below. A leading check mark (✓) indicates an area of review in which the data were acceptable. A preceding crossed circle (⊗) signifies areas where issues were raised during the course of the validation review and should be considered to determine any impact on data quality and usability.

- ✓ Overall Assessment
- ✓ Holding Times
- ✓ Method Blank
- ✓ Matrix Spike/Matrix Spike Duplicate
- ✓ Laboratory Control Sample
- ✓ Surrogates
- ✓ Field Duplicate

⊗ Trip Blank
✓ Equipment Blank
✓ Sensitivity
✓ Electronic Data Deliverable Review

3.1 Overall Assessment

The 1,4-dioxane data reported in the laboratory reports are considered usable for supporting project objectives. The results are considered valid; the analytical completeness, defined as the ratio of the number of valid analytical results (valid analytical results include values qualified as estimated) to the total number of analytical results requested on samples submitted for this analysis, for the sample sets is 100%.

The IS responses for the samples were reported in the laboratory reports. The IS responses were within the method specified acceptance criteria.

3.2 Holding Times

The holding time for the 1,4-dioxane analysis of a preserved water sample is 14 days from sample collection to analysis. The holding times were met for the sample analyses.

3.3 Method Blank

Method blanks were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Five method blanks were reported (batches WG1779946, WG1780446, WG1780650, WG1780984, and WG1795312). 1,4-Dioxane was not detected in the method blanks above the MDL.

3.4 Matrix Spike/Matrix Spike Duplicate

Two sample set specific MS/MSD pairs were reported using samples TTU-EX-5-80-20211117 and TTU-3-108-20211118. The recovery and RPD results were within the laboratory specified acceptance criteria,

A batch sample MS/MSD pair was reported in batch WG1795312. Since these were batch QC, the results did not impact the data and did not result in qualification of the data.

MS/MSD pairs were not reported for batches WG1780650 and WG1780984. LCS/LCSD pairs were used to assess precision and accuracy.

3.5 Laboratory Control Sample

LCSs were analyzed at the proper frequency for the number and types of samples analyzed (one per batch of 20 samples). Five LCS/LCSD pairs were reported. The recovery and RPD results were within the laboratory specified acceptance criteria.

3.6 Surrogates

Acceptable surrogate recoveries were reported for the sample analyses.

3.7 Field Duplicate

Four field duplicates were collected with the sample sets and analyzed for 1,4-dioxane: TTU-9A-61-20211117-DUP, TTU-12-82-20211118-DUP, TTU-EX-3-76-20211117-DUP, and TTU-2-114-20211222-DUP. Acceptable precision (RPD $\leq$30%) was demonstrated between the field duplicates and original samples, TTU-9A-61-20211117, TTU-12-82-20211118, TTU-EX-3-76-20211117, and TTU-2-114-20211222, respectively.

The QAPP specifies that field duplicates should be collected and analyzed at a frequency of 10%. Four field duplicates were collected with the twenty-three project samples submitted for 1,4-dioxane analysis. Therefore, the QAPP specified field duplicate frequency was met.

3.8 Trip Blank

Two trip blank samples accompanied the VOC samples. However, per the COC, 1,4-dioxane analyses were not requested for the trip blanks. No qualifications were applied to the data, but the discrepancy should be noted by the data user.

3.9 Equipment Blank

Table 2 in the QAPP specifies that equipment blanks should be collected at a rate of one per day when non-dedicated equipment is used, two per quarterly sampling event, and one per weekly or monthly sampling event. No non-dedicated equipment was used for the quarterly sampling event; therefore, equipment blanks were not collected.

3.10 Sensitivity

The samples were reported to the MDL. No elevated non-detect results were reported. There are no site specific technical and regulatory quality standards provided for 1,4-dioxane in Table 1 of the QAPP.

3.11 Electronic Data Deliverable Review

Results and sample IDs in the EDDs were reviewed against the information provided by the associated level II reports at a minimum of 20%. No discrepancies were identified between the level II reports and the EDDs.

---

* * * * *

ATTACHMENT 1
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Geosyntec's Data Validation Team

DATA QUALIFIER DEFINITIONS

U The analyte was analyzed for, but was not detected at or above the reported sample quantitation limit. Upon application of the U qualifier to a reported result, the definition changes to "not detected at or above the reported result".

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

J+ The analyte was positively identified; however, the associated numerical value is likely to be higher than the concentration of the analyte in the sample due to positive bias of associated QC or calibration data or attributable to matrix interference.

J- The analyte was positively identified; however, the associated numerical value is likely to be lower than the concentration of the analyte in the sample due to negative bias of associated QC or calibration data or attributable to matrix interference.

UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

ATTACHMENT 2
DATA VALIDATION REASON CODES
Assigned by Geosyntec's Data Validation Team

Valid Value	Description
1	Preservation requirement not met
2	Extraction or analysis holding time exceeded
3	Blank contamination (i.e., method, trip, equipment, etc.)
4	Matrix spike/matrix spike duplicate recovery or RPD outside limits
5	LCS recovery outside limits or RPD outside limits (LCS/LCSD)
6	Surrogate recovery outside limits
7	Field Duplicate RPD exceeded
8	Serial dilution percent difference exceeded
9	Calibration criteria not met
10	Linear range exceeded
11	Internal standard criteria not met
12	Lab duplicates RPD exceeded
13	Other
14	Lab flag removed or modified: no validation qualification required

LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample duplicate
RPD - Relative percent difference

ATTACHMENT 4

FIELD NOTES

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-1	55-914440	6/6/2012	75	30 - 70	1312.73	4" PVC	33 29'59.1382"	-111 42'56.2704"	50		Date/Time: — DTW: —

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance / Odor:
Field Parameters	TTU-1-50-2021	—	—	—	—	—	—	—

Checklist	Depth to Water: Yes / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: Yes / No Size of sleeve: _____ Samples Packed : Yes / No
Notes	Please make a note of the well condition and any issues that arose during sampling. Not measured/sampled in November 2021.			

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-2	N/A	10/17/2013	185	49.4 - 179.6	1314.44	4" PVC	33 29'55.8472"	-111 42'57.8480"	114.5	—	Date/Time: — DTW: —

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance / Odor:
Field Parameters	TTU-2-114-2021	—	—	—	—	—	—	—

Checklist	Depth to Water: Yes / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: Yes / No Size of sleeve: _____ Samples Packed : Yes / No
Notes	Please make a note of the well condition and any issues that arose during sampling. Not measured/sampled in November 2021.			

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	**TTU-3**	N/A	10/18/2013	143.6	78.1 - 138.1	1308.03	4" PVC	33 29'57.9845"	-111 43'00.9143"	108		Date/Time: 1417 11-18-21 DTW: 93.35

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance / Odor:
Field Parameters	TTU-3-108-2021 1118 + MS/MSD	11-18-21 1425	23.8	1368	7.34	7.08	84.4	Clear top, cloudy bottom 1/5

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed : (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling. **Collect MS/MSD**				

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	**TTU-4**	N/A	10/25/2013	104.9	39.5 - 99.5	1305.12	4" PVC	33 30'01.6455"	-111 42'59.0898"	57		Date/Time: 11-18-21 1400 DTW: 51.13

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance / Odor:
Field Parameters	TTU-4-57-2021 1118	11-18-21 1405	24.9	2014	3.03	7.62	34.6	Clear

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed : (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling.				

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-5	N/A	9/20/2014	169.5	59.5 - 164.5	1314.93	4" PVC	33 29'52.4820"	-111 42'58.3994"	110		Date/Time: 11-17-21 1410 DTW: 73.88

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance / Odor:
	TTU-5-110-2021 1117	11-17-21 1415	26.2	648	4.24	7.50	74.0	Clear

Checklist					
	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed : (Yes) / No

Notes	
	Please make a note of the well condition and any issues that arose during sampling.

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-6	N/A	10/7/2014	180	110 - 175	1300.84	4" PVC	33 29'57.5698"	-111 43'04.7900"	143		Date/Time: 11-18-21 1502 DTW: 126.06

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance / Odor:
	TTU-6-143-2021 1118	11-18-21 1507	24.3	2865	2.04	7.25	60.8	Clear

Checklist					
	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed : (Yes) / No

Notes	
	Please make a note of the well condition and any issues that arose during sampling.

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-7	N/A	10/8/2014	410	Open 280 - 410	1301.84	8.5" Steel	33 29'57.8355"	-111 43'05.1771"	345		Date/Time: 11-18-21 1440 DTW: 135.84

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
	TTU-7-345-20211118	11-18-21 1447	25.3	3542	1.69	6.88	-145.7	Clear, black tinted bottom 1/5

Checklist				
	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed: (Yes) / No

Notes	
	Please make a note of the well condition and any issues that arose during sampling.

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-8	N/A	4/18/2016	190	135 - 185	1310.23	4" PVC	33 30'01.9086"	-111 43'05.3138"	164		Date/Time: 1340 11-18-21 DTW: 145.99

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
	TTU-8-164-20211118	11-18-21 1345	24.8	3018	2.57	7.03	-407	Clear

Checklist				
	Depth to Water: Yes / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed: (Yes) / No

Notes	
	Please make a note of the well condition and any issues that arose during sampling.

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-9A	N/A	6/16/2016	104	24 - 99	1318.04	4" PVC	33 30'04.6089"	-111 42'51.1919"	61		Date/Time: 11-17-21 1426 DTW: 27.32

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-9A-61-2021 1117 TTU-9A-61-2021 1117 -DUP	11-17-21 1435	26.9	1586	7.30	7.70	89.9	Clear

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed: (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling. **Collect duplicate on Perchlorate, VOCs, and 1,4 Dioxane**				

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-10	N/A	4/18/2016	185	115 - 180	1302.42	4" PVC	33 29'54.5995"	-111 43'07.9037"	147		Date/Time: 11-18-21 1229 DTW: 150.62

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-10-147-2021 1118	11-18-21 1235	NM					Cloudy

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed: (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling. Not enough water for parameters				

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-11	55-918534	9/11/2015	94	24-89	1339.2	4" PVC	33 29'55.28"	-111 42'51.47"	56.6		Date/Time: DTW:
Field Parameters	Sample ID: ~~TTU-11-~~		Date and Time Sampled:		Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:		
Checklist	Depth to Water: Yes / No	~~Transducer Downloaded: Yes / No~~			Sampled: None			Hydraleeve Reset: Yes / No Size of sleeve: ____		~~Samples Packed~~ : Yes / No		
Notes	Please make a note of the well condition and any issues that arose during sampling. Injection well; not measured in November 2021.											

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-12	N/A	7/31/2018	180	Open to 180	1312.21	5"	33°29'56.0275"	-111°42'58.3788"	82		Date/Time: 11-18-21 1052 DTW: 69.09
Field Parameters	Sample ID: TTU-12-82-2021 1118 TTU-12-82-2021 1118 -DUP		Date and Time Sampled: 11-18-21 1100		Temp (°C) 23.2	Spec Cond (µS/cm) 3117	DO (mg/l) 6.12	pH (S.U.) 6.95	ORP (mV) 127.1	Appearance: Cloudy		
Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~			Sampled: Perchlorate / VOCs / 1,4-Dioxane			Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L		Samples Packed (Yes) No		
Notes	Please make a note of the well condition and any issues that arose during sampling. **Collect duplicate on Perchlorate, VOCs, and 1,4 Dioxane**											

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-13	N/A	7/20/18	80	Open to 80	1310.79	5"	33 29'58.9926"	-111 42'56.8497"	51		Date/Time: 1013 11-18-21 DTW: 37.18

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
	TTU-13-51-2021111B	11-18-21 1017	23.2	990	2.64	7.10	101.6	Cloudy rust color, opaque bottom 1/4.

Checklist				
	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed (Yes) No

Notes	
	Please make a note of the well condition and any issues that arose during sampling.

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-14	N/A	7/19/2018	100	Open to 100	1316.8	5"	33 29'57.1962"	-111 42'57.4555"	69		Date/Time: 11-18-21 1032 DTW: 35.82

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
	TTU-14-69-2021111B	11-18-21 1038	23.4	2553	5.27	6.94	115.1	Clear to cloudy, dark brown 1/5

Checklist				
	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed (Yes) No

Notes	
	Please make a note of the well condition and any issues that arose during sampling.

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-15	55-228014	1/25/2018	100	OPEN	1350.85				75		Date/Time: 11-17-21 1142 DTW: 31.74

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
	TTU-15-75-20211117	11-17-21 1147	25.3	2166	1.71	7.24	-48.5	Clear, some flowing sed., slight yellow color

Checklist				
	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L Samples Packed (Yes) / No

Notes	
	Please make a note of the well condition and any issues that arose during sampling.

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-16	55-231730	1/23/2020	96.6*	Open	1338.554	8"	33°29'56.18415"	-111°42'49.59235"	80		Date/Time: 11-17-21 1158 DTW: 14.93

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
	TTU-16-80-20211117	11-17-21 1203	27.4	9489	1.04	6.31	91.5	Bubbly, strong odor, clear to dark red/rust color

Checklist				
	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L Samples Packed : (Yes) / No

Notes	
	Please make a note of the well condition and any issues that arose during sampling.

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-17	55-231735	1/22/2020	102*	Open	1347.489	8"	33°29'58.61092"	-111°42'45.68575"	80		Date/Time: 11-17-21 1125 DTW: 31.40

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-17-80-20211117	11-17-21 1127	25.3	940	1.28	7.12	-96.9	Clear top, cloudy black & cloudy bottom. odor

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-IL	Samples Packed (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling.				

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-18	55-231737	1/21/2020	104.5*	Open	1320.248	8"	33°29'47.20278"	-111°42'58.10223"	none	Dry	Date/Time: 11/17/21 DTW: Dry

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-18-	—	—	—	—	—	—	—

Checklist	Depth to Water: Yes / (No)	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: Yes / (No) Size of sleeve: _____	Samples Packed : Yes / (No)
Notes	Please make a note of the well condition and any issues that arose during sampling.				

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-19	55-232969	9/24/2020	95	25-90	1336.81	4"	33 29' 55.25498"	-111 42' 51.49762"			Date/Time: DTW:
Field Parameters	Sample ID: ~~TTU-19~~		Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)		Appearance:		
Checklist	Depth to Water: Yes / No	~~Transducer Downloaded: Yes / No~~		Sampled: None			Hydraleeve Reset: ~~Yes / No~~ Size of sleeve: _____			Samples Packed : Yes / No		
Notes	Please make a note of the well condition and any issues that arose during sampling. Ser sleeve by mistake, 11-17-21. Injection well; not measured in November 2021.											

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-20	55-232968	9/24/2020	95	25-90	1336.9	4"	33 29' 55.17373"	-111 42' 51.57575	73		Date/Time: 11-18-21 1117 DTW: 29.17
Field Parameters	Sample ID: TTU-20-73-20211118		Date and Time Sampled: 11-18-21 1123	Temp (°C) 26.0	Spec Cond (µS/cm) 5733	DO (mg/l) 1.46	pH (S.U.) 6.41	ORP (mV) 154.5		Appearance: Clear top, cloudy bottom		
Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~		Sampled: Perchlorate, VOCs, 1,4 Dioxane, Bromide			Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L			Samples Packed : (Yes) No		
Notes	Please make a note of the well condition and any issues that arose during sampling.											

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	**TTU-EX-1**	55-231733	1/29/2020	109*	Open	1321.694	8"	33°29'58.42103"	-111°42'52.55168"	69		Date/Time: 11-17-21 1222 DTW: 17.23

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-EX-1-69-2021 1117	11-17-21 1227	25.1	4675	7.08	7.02	108.3	Cloudy, tan/opaque color

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling.				

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	**TTU-EX-2**	55-231734	1/28/2020	110*	Open	1316.401	8"	33°29'57.60791"	-111°42'53.78896"	74		Date/Time: 11-17-21 1252 DTW: 22.28

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-EX-2-74-2021 1117	11-17-21 1255	25.5	1676	2.05	7.61	79.8	Cloudy, ~8" of sed. at bottom

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed : (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling.				

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-EX-3	55-231731	1/24/2020	111*	Open	1316.85	8"	33°29'56.29009"	-111°42'54.11922"	76		Date/Time: 11-17-21 1312 DTW: 29.60

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-EX-3-76-2021117 TTU-EX-3-76-2021117 -DUP	11-17-21 1315	25.2	3998	4.37	6.79	118.4	Clear top, cloudy bottom

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-IL	Samples Packed: (Yes) / No

Notes	Please make a note of the well condition and any issues that arose during sampling. **Collect duplicate on Perchlorate, VOCs, and 1,4 Dioxane**

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	TTU-EX-4	55-231732	1/25/2020	112*	Open	1319.958	8"	33°29'55.46297"	-111°42'54.38840"	77		Date/Time: 11-17-21 1330 DTW: 41.75

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-EX-4-77-2021117	11-17-21 ~~1335~~ 1335	25.2	1974	1.98	7.12	93.1	Cloudy, bubbly, Dark grey bottom 1/5 th

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-IL	Samples Packed: (Yes) / No

Notes	Please make a note of the well condition and any issues that arose during sampling.

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	**TTU-EX-5**	55-231736	1/24/2020	112.4*	Open	1319.499	8"	33°29'54.67649"	-111°42'54.62111"	80		Date/Time: 11-17-21 1352 DTW: 42.06

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	
Field Parameters	TTU-EX-5-80-2021 +MS/MSD 1117	11-17-21 1357	26.0	1070	2.25	7.36	-22.6	Cloudy, clear

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	Samples Packed : (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling. **Collect MS/MSD**				

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	**PF-1**	N/A				1295.99		33 29'56.5958"	-111 43'09.7483"	159.7		Date/Time: — DTW: —

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	PF-1-159	—	—	—	—	—	—	—

Checklist	Depth to Water: Yes / (No)	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate (6850), VOCs, 1,4 Dioxane	Hydraleeve Reset: Yes / (No) Size of sleeve: _____	Samples Packed : Yes / (No)
Notes	Please make a note of the well condition and any issues that arose during sampling. Not measured/sampled in November 2021.				

SP0101GW

TTU Groundwater Monitoring Checklist

Geosyntec consultants

	Well Name	ADWR#	Date Completed	Total Depth (FT BGS)	Screened Interval (FT BGS)	Casing Elevation (FT MSL)	Casing Material/Diameter	Latitude	Longitude	Sample Depth	Previous DTW:	Current DTW:
Well Information	PF-2	N/A				1296.35		33 29'56.6487"	-111 43'09.9629"	400		Date/Time: 11-18-21 1245 DTW: 148.08

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	PF-2-400-2021 1118	11-18-21 1312						Clear

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate (6850), VOCs, 1,4 Dioxane	Hydraleeve Reset: Yes / (No) Size of sleeve: NA	Samples Packed (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling. **Collect Duplicate on Perchlorate by 6850 only, Sample ID: PF-2-400-2021 1118 -DUP**				

1246 - Pump Start	Temp	Cond	DO	pH	ORP	Notes
1256	24.5	1243	6.06	7.47	51.7	Clear
1259	24.3	1152	5.31	7.34	53.3	Clear
1302	24.2	1153	6.11	7.33	57.1	Clear
1305	23.8	1156	5.76	7.31	55.5	Clear
1308	24.1	1160	6.87	7.42	54.7	Clear
1312	24.1	1156	6.09	7.32	49.8	Clear, Sampled

ATTACHMENT 5

LABORATORY ANALYTICAL REPORTS

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Phoenix
4625 East Cotton Ctr Blvd
Suite 189
Phoenix, AZ 85040
Tel: (602)437-3340

Laboratory Job ID: 550-174545-1
Client Project/Site: Nammo Talley

For:
Geosyntec Consultants, Inc.
11811 N Tatum Blvd
Ste P186
Phoenix, Arizona 85028

Attn: Fabrizio Mascioni

Authorized for release by:
12/3/2021 4:07:35 PM

Linda Eshelman, Project Manager II
(602)659-7681
linda.eshelman@eurofinset.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at:
www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Job ID: 550-174545-1

Laboratory: Eurofins TestAmerica, Phoenix

Narrative

Job Narrative
550-174545-1

Comments
No additional comments.

Receipt
The samples were received on 11/18/2021 3:45 PM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 5.9º C.

LCMS
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Sample Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-174545-1	PF-2-400-20211118	Water	11/18/21 13:12	11/18/21 15:45
550-174545-2	PF-2-400-20211118-Dup	Water	11/18/21 13:12	11/18/21 15:45

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Client Sample ID: PF-2-400-20211118 — Lab Sample ID: 550-174545-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	1.5		0.50		ug/L	1		6850	Total/NA

Client Sample ID: PF-2-400-20211118-Dup — Lab Sample ID: 550-174545-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Perchlorate	1.3		0.50		ug/L	1		6850	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Client Sample ID: PF-2-400-20211118

Lab Sample ID: 550-174545-1

Date Collected: 11/18/21 13:12

Matrix: Water

Date Received: 11/18/21 15:45

Method: 6850 - Perchlorate by LC/MS or LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	1.5		0.50		ug/L		11/30/21 12:53	12/01/21 17:55	1

Client Sample ID: PF-2-400-20211118-Dup

Lab Sample ID: 550-174545-2

Date Collected: 11/18/21 13:12

Matrix: Water

Date Received: 11/18/21 15:45

Method: 6850 - Perchlorate by LC/MS or LC/MS/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	1.3		0.50		ug/L		11/30/21 12:53	12/01/21 18:10	1

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Method: 6850 - Perchlorate by LC/MS or LC/MS/MS

Lab Sample ID: MB 320-546899/1-A
Matrix: Water
Analysis Batch: 547309

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 546899

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.50		ug/L		11/30/21 12:53	12/01/21 16:29	1

Lab Sample ID: LCS 320-546899/2-A
Matrix: Water
Analysis Batch: 547309

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 546899

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			5.00	4.77		ug/L		95	80 - 120		

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

LCMS

Prep Batch: 546899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-174545-1	PF-2-400-20211118	Total/NA	Water	Filtration	
550-174545-2	PF-2-400-20211118-Dup	Total/NA	Water	Filtration	
MB 320-546899/1-A	Method Blank	Total/NA	Water	Filtration	
LCS 320-546899/2-A	Lab Control Sample	Total/NA	Water	Filtration	

Analysis Batch: 547309

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-174545-1	PF-2-400-20211118	Total/NA	Water	6850	546899
550-174545-2	PF-2-400-20211118-Dup	Total/NA	Water	6850	546899
MB 320-546899/1-A	Method Blank	Total/NA	Water	6850	546899
LCS 320-546899/2-A	Lab Control Sample	Total/NA	Water	6850	546899

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Client Sample ID: PF-2-400-20211118

Lab Sample ID: 550-174545-1

Date Collected: 11/18/21 13:12

Matrix: Water

Date Received: 11/18/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Filtration			546899	11/30/21 12:53	LN	TAL SAC
Total/NA	Analysis	6850		1	547309	12/01/21 17:55	D1R	TAL SAC

Client Sample ID: PF-2-400-20211118-Dup

Lab Sample ID: 550-174545-2

Date Collected: 11/18/21 13:12

Matrix: Water

Date Received: 11/18/21 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Filtration			546899	11/30/21 12:53	LN	TAL SAC
Total/NA	Analysis	6850		1	547309	12/01/21 18:10	D1R	TAL SAC

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Accreditation/Certification Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Laboratory: Eurofins TestAmerica, Sacramento

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Alaska (UST)	State	17-020	02-20-24
ANAB	Dept. of Defense ELAP	L2468	01-20-24
ANAB	Dept. of Energy	L2468.01	01-20-24
ANAB	ISO/IEC 17025	L2468	01-20-24
Arizona	State	AZ0708	08-11-22
Arkansas DEQ	State	88-0691	06-17-21 *
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-22
Florida	NELAP	E87570	06-30-22
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-18-22
Louisiana	NELAP	01944	06-30-22
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA00044	08-31-22
New Hampshire	NELAP	2997	04-18-22
New Jersey	NELAP	CA005	06-30-22
New York	NELAP	11666	04-01-22
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-29-22
Texas	NELAP	T104704399-19-13	05-31-22
US Fish & Wildlife	US Federal Programs	58448	07-31-22
USDA	US Federal Programs	P330-18-00239	07-31-24
Utah	NELAP	CA000442021-12	03-01-22
Virginia	NELAP	460278	03-14-22
Washington	State	C581	05-05-22
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-22
Wyoming	State Program	8TMS-L	01-28-19 *

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: Nammo Talley

Job ID: 550-174545-1

Method	Method Description	Protocol	Laboratory
6850	Perchlorate by LC/MS or LC/MS/MS	EPA	TAL SAC
Filtration	Sample Filtration	None	TAL SAC

Protocol References:

EPA = US Environmental Protection Agency

None = None

Laboratory References:

TAL SAC = Eurofins TestAmerica, Sacramento, 880 Riverside Parkway, West Sacramento, CA 95605, TEL (916)373-5600

Chain of Custody Record

576625

eurofins | Environment Testing TestAmerica

12/3/2021

Address: _____

174545

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

TAL-8210

Client Contact	Project Manager: FMascioni	Site Contact:	Date:	COC No:
Company Name: Geosyntec Consultants	Tel/Email: FMascioni@geosyntec.com	Lab Contact:	Carrier:	1 of 1 COCs
Address: 11811 N Tatum Blvd P-186	Analysis Turnaround Time			Sampler: Ryan Ayala
City/State/Zip: Phoenix, AZ 85028	☒ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 602-513-5812	TAT if different from Below _____			Walk-in Client:
Fax: N/A	☒ 2 weeks			Lab Sampling:
Project Name: Nammo TTU GW	☐ 1 week			
Site:	☐ 2 days			Job / SDG No.:
PO # SP0101GW21/01	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	6850 Perchlorate	Sample Specific Notes:
PF-2-400-20211118	11-18-21		G	GW	1	Y	N	X	-01
PF-2-400-20211118-Dup	↓		↓	↓	1	Y	N	X	-02

550-174545 Chain of Custody

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

5.9°C cds

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: _____ Corr'd: _____ | Therm ID No.: _____

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Ryan Ayala	Geosyntec	11-18-21 1545			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company: TALK	Date/Time: 11-18-21 1545

Eurofins TestAmerica, Phoenix
4625 East Cotton Ctr Blvd Suite 189
Phoenix, AZ 85040
Phone: 602-437-3340 Fax: 602-454-9303

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Eshelman, Linda	Carrier Tracking No(s):	COC No: 550-32410.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: linda.eshelman@eurofinset.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Arizona		Job #: 550-174545-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 12/2/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: Nammo Talley	Project #: 55016882			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	6850/Filtration_14D Perchlorate Only	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
PF-2-400-20211118 (550-174545-1)	11/18/21	13:12 Arizona		Water			X	1	
PF-2-400-20211118-Dup (550-174545-2)	11/18/21	13:12 Arizona		Water			X	1	

Note: Since laboratory accreditations are subject to change, Eurofins TestAmerica places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins TestAmerica attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins TestAmerica.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Ewell-18-21	16:00	ECTSW	Fedex		
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	11/19/21 1050	ABT SDC
					Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: 1754945	Cooler Temperature(s) °C and Other Remarks: 0.9c

Ver: 06/08/2021

eurofins | Environment Testing TestAmerica

Sacramento
Sample Receiving Notes

550-174545 Field Sheet

Tracking # : 529046200489

Job: _____

SO / PO / FO / SAT / 2-Day / Ground / UPS / CDO / Courier

GSO / OnTrac / Goldstreak / USPS / Other _____

Use this form to record Sample Custody Seal, Cooler Custody Seal, Temperature & corrected Temperature & other observations. File in the job folder with the COC.

Therm. ID: L-07 Corr. Factor: (+ / -) — °C

Ice 1 Wet 1 Gel _____ Other _____

Cooler Custody Seal: 1754949

Cooler ID: _____

Temp Observed: 0.9 °C Corrected: 0.9 °C

From: Temp Blank ☒ Sample ☐

Opening/Processing The Shipment	Yes	No	NA
Cooler compromised/tampered with?	☐	☒	☐
Cooler Temperature is acceptable?	☒	☐	☐
Frozen samples show signs of thaw?	☐	☐	☒

Initials: LS Date: 11/19/20

Unpacking/Labeling The Samples	Yes	No	NA
CoC is complete w/o discrepancies?	☒	☐	☐
Samples compromised/tampered with?	☐	☒	☐
Sample containers have legible labels?	☒	☐	☐
Sample custody seal?	☐	☐	☒
Containers are not broken or leaking?	☒	☐	☐
Sample date/times are provided?	☒	☐	☐
Appropriate containers are used?	☒	☐	☐
Sample bottles are completely filled?	☒	☐	☐
Sample preservatives verified?	☐	☐	☒
Samples w/o discrepancies?	☒	☐	☐
Zero headspace?*	☐	☐	☒
Alkalinity has no headspace?	☐	☐	☒
Perchlorate has headspace? (Methods 314, 331, 6850)	☐	☐	☒
Multiphasic samples are not present?	☒	☐	☐

*Containers requiring zero headspace have no headspace, or bubble < 6 mm (1/4")

Initials: LS Date: 11/19/20

Notes: _____

Trizma Lot #(s): _____

Login Completion	Yes	No	NA
Receipt Temperature on COC?	☒	☐	☐
Samples received within hold time?	☒	☐	☐
NCM Filed?	☐	☐	☒
Log Release checked in TALS?	☐	☐	☒

Initials: LS Date: 11/19/20

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 550-174545-1

Login Number: 174545
List Number: 1
Creator: Gravlin, Andrea

List Source: Eurofins TestAmerica, Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No date or time on COC, logged in per container labels.
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 550-174545-1

Login Number: 174545
List Number: 2
Creator: Simmons, Jason C

List Source: Eurofins TestAmerica, Sacramento
List Creation: 11/19/21 04:42 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	1754949
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9c
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

December 15, 2021

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

GeoSyntec, Inc. - AZ

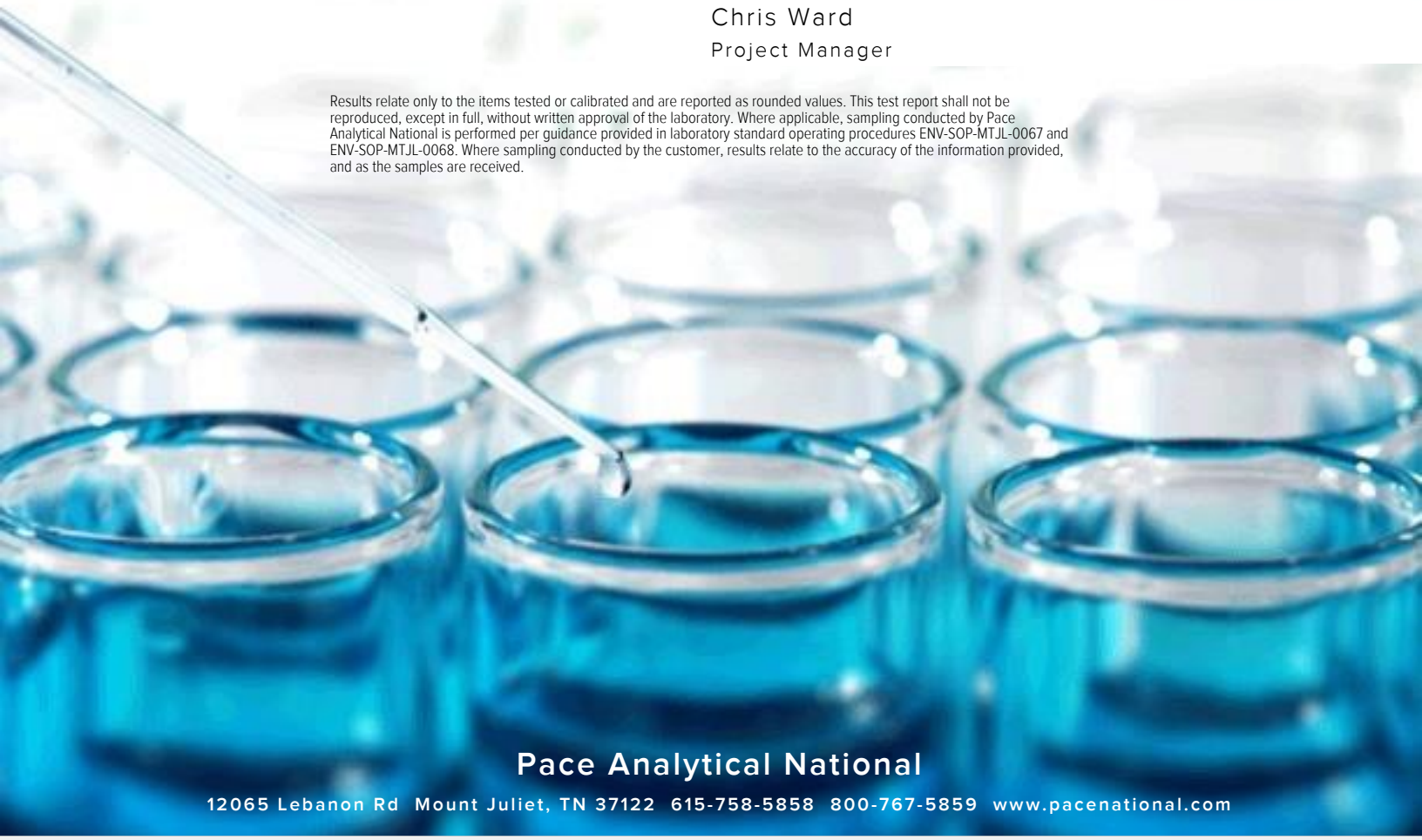
Sample Delivery Group:	L1433723
Samples Received:	11/19/2021
Project Number:	SP0101GW21/02
Description:	Nammo Defense Systems Inc

Report To: Fabrizio Mascioni
11811 N Tatum Blvd, Ste P186
Phoenix, AZ 85028

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

TTU-9A-61-20211117 L1433723-01 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 14:35 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1786624	1	12/07/21 14:29	12/07/21 14:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 00:12	11/27/21 00:12	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780984	1	11/29/21 10:37	11/29/21 10:37	ACG	Mt. Juliet, TN

TTU-9A-61-20211117-DUP L1433723-02 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 14:35 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1786624	1	12/07/21 15:24	12/07/21 15:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 00:33	11/27/21 00:33	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 17:27	11/24/21 17:27	BMB	Mt. Juliet, TN

TTU-13-51-20211118 L1433723-03 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 10:17 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	500	12/07/21 17:16	12/07/21 17:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 00:53	11/27/21 00:53	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 17:47	11/24/21 17:47	BMB	Mt. Juliet, TN

TTU-14-69-20211118 L1433723-04 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 10:38 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	500000	12/08/21 11:38	12/08/21 11:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 01:13	11/27/21 01:13	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	50	12/01/21 04:53	12/01/21 04:53	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 18:07	11/24/21 18:07	BMB	Mt. Juliet, TN

TTU-12-82-20211118 L1433723-05 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 11:00 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	5000	12/07/21 18:12	12/07/21 18:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 01:34	11/27/21 01:34	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	25	12/01/21 05:14	12/01/21 05:14	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 18:26	11/24/21 18:26	BMB	Mt. Juliet, TN

TTU-12-82-20211118-DUP L1433723-06 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 11:00 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	5000	12/07/21 18:40	12/07/21 18:40	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 01:54	11/27/21 01:54	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	25	12/01/21 05:34	12/01/21 05:34	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 18:46	11/24/21 18:46	BMB	Mt. Juliet, TN

TTU-20-73-20211118 L1433723-07 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 11:23 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	10000	12/07/21 19:08	12/07/21 19:08	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 02:14	11/27/21 02:14	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782742	200	12/01/21 22:21	12/01/21 22:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780984	20	11/29/21 11:58	11/29/21 11:58	ACG	Mt. Juliet, TN

TTU-10-147-20211118 L1433723-08 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 12:35 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1786624	1	12/07/21 19:36	12/07/21 19:36	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 02:35	11/27/21 02:35	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	1	11/30/21 23:03	11/30/21 23:03	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780984	1	11/29/21 10:58	11/29/21 10:58	ACG	Mt. Juliet, TN

PF-2-400-20211118 L1433723-09 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 13:12 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 02:55	11/27/21 02:55	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	1	11/30/21 23:23	11/30/21 23:23	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 19:45	11/24/21 19:45	BMB	Mt. Juliet, TN

TTU-8-164-20211118 L1433723-10 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 13:45 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1786624	1	12/07/21 20:31	12/07/21 20:31	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 03:15	11/27/21 03:15	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	1	11/30/21 23:44	11/30/21 23:44	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 20:05	11/24/21 20:05	BMB	Mt. Juliet, TN

TTU-17-80-20211117 L1433723-11 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 11:27 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	1	12/07/21 21:27	12/07/21 21:27	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 03:36	11/27/21 03:36	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	1	12/01/21 00:04	12/01/21 00:04	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 20:25	11/24/21 20:25	BMB	Mt. Juliet, TN

TTU-15-75-20211117 L1433723-12 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 11:47 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	100	12/08/21 09:59	12/08/21 09:59	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 03:56	11/27/21 03:56	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	1	12/01/21 00:25	12/01/21 00:25	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780984	1	11/29/21 11:18	11/29/21 11:18	ACG	Mt. Juliet, TN

TTU-16-80-20211117 L1433723-13 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 12:03 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	10000	12/08/21 00:15	12/08/21 00:15	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 04:17	11/27/21 04:17	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	5000	12/01/21 06:15	12/01/21 06:15	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780984	50	11/29/21 12:17	11/29/21 12:17	ACG	Mt. Juliet, TN

TTU-EX-1-69-20211117 L1433723-14 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 12:27 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	5000	12/08/21 00:43	12/08/21 00:43	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 04:37	11/27/21 04:37	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	1	12/01/21 00:46	12/01/21 00:46	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780984	1	11/29/21 11:38	11/29/21 11:38	ACG	Mt. Juliet, TN

TTU-EX-2-74-20211117 L1433723-15 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 12:55 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	5000	12/08/21 01:10	12/08/21 01:10	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 04:57	11/27/21 04:57	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	5	12/01/21 01:47	12/01/21 01:47	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1779946	1	11/24/21 21:44	11/24/21 21:44	BMB	Mt. Juliet, TN

TTU-EX-3-76-20211117 L1433723-16 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 13:15 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	5000	12/08/21 01:38	12/08/21 01:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 05:18	11/27/21 05:18	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782742	100	12/01/21 21:42	12/01/21 21:42	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780984	5	11/29/21 12:37	11/29/21 12:37	ACG	Mt. Juliet, TN

TTU-EX-3-76-20211117-DUP L1433723-17 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 13:15 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	5000	12/08/21 02:06	12/08/21 02:06	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 05:38	11/27/21 05:38	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782742	100	12/01/21 22:02	12/01/21 22:02	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780984	5	11/29/21 12:57	11/29/21 12:57	ACG	Mt. Juliet, TN

TTU-EX-4-77-20211117 L1433723-18 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 13:35 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	5000	12/08/21 02:34	12/08/21 02:34	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 05:58	11/27/21 05:58	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	20	12/01/21 02:49	12/01/21 02:49	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780446	1	11/26/21 16:33	11/26/21 16:33	ADM	Mt. Juliet, TN

TTU-EX-5-80-20211117 L1433723-19 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 13:57 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	1	12/08/21 03:02	12/08/21 03:02	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 06:19	11/27/21 06:19	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	1	12/01/21 01:06	12/01/21 01:06	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780446	1	11/26/21 16:53	11/26/21 16:53	ADM	Mt. Juliet, TN

TTU-5-110-20211117 L1433723-20 GW

Collected by: Ryan Ayala | Collected date/time: 11/17/21 14:15 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784394	1	12/08/21 05:22	12/08/21 05:22	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780361	1	11/27/21 06:39	11/27/21 06:39	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1782067	1	12/01/21 01:27	12/01/21 01:27	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780650	1	11/29/21 13:36	11/29/21 13:36	ACG	Mt. Juliet, TN

TTU-4-57-20211118 L1433723-21 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 14:05 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1789817	1	12/10/21 18:17	12/10/21 18:17	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780831	1	11/28/21 13:03	11/28/21 13:03	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780446	1	11/26/21 17:33	11/26/21 17:33	ADM	Mt. Juliet, TN

TTU-3-108-20211118 L1433723-22 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 14:25 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1784397	10	12/10/21 19:14	12/10/21 19:14	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780831	1	11/28/21 13:24	11/28/21 13:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780446	1	11/26/21 17:53	11/26/21 17:53	ADM	Mt. Juliet, TN

TTU-7-345-20211118 L1433723-23 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 14:47 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1789817	1	12/10/21 21:36	12/10/21 21:36	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780831	1	11/28/21 13:44	11/28/21 13:44	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780446	1	11/26/21 18:12	11/26/21 18:12	ADM	Mt. Juliet, TN

TTU-6-143-20211118 L1433723-24 GW

Collected by: Ryan Ayala | Collected date/time: 11/18/21 15:07 | Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1789817	1	12/10/21 22:33	12/10/21 22:33	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780831	1	11/28/21 14:05	11/28/21 14:05	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1780446	1	11/26/21 18:32	11/26/21 18:32	ADM	Mt. Juliet, TN

TRIP BLANK L1433723-25 GW

Collected by: Ryan Ayala
Collected date/time: 11/18/21 00:00
Received date/time: 11/19/21 12:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1780831	1	11/28/21 12:42	11/28/21 12:42	DWR	Mt. Juliet, TN

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

Chris Ward
Project Manager

Sample Delivery Group (SDG) Narrative

Insufficient sample volume to perform MS/MSD analyses per method QC requirements.

Lab Sample ID	Project Sample ID	Method
L1433723-01	TTU-9A-61-20211117	8260B-SIM
L1433723-02	TTU-9A-61-20211117-DUP	8260B-SIM
L1433723-03	TTU-13-51-20211118	8260B-SIM
L1433723-04	TTU-14-69-20211118	8260B-SIM, 8260B
L1433723-05	TTU-12-82-20211118	8260B-SIM, 8260B
L1433723-06	TTU-12-82-20211118-DUP	8260B-SIM, 8260B
L1433723-07	TTU-20-73-20211118	8260B-SIM, 8260B
L1433723-08	TTU-10-147-20211118	8260B-SIM, 8260B
L1433723-09	PF-2-400-20211118	8260B-SIM, 8260B
L1433723-10	TTU-8-164-20211118	8260B-SIM, 8260B
L1433723-11	TTU-17-80-20211117	8260B-SIM, 8260B
L1433723-12	TTU-15-75-20211117	8260B-SIM, 8260B
L1433723-13	TTU-16-80-20211117	8260B-SIM, 8260B
L1433723-14	TTU-EX-1-69-20211117	8260B-SIM, 8260B
L1433723-15	TTU-EX-2-74-20211117	8260B-SIM, 8260B
L1433723-16	TTU-EX-3-76-20211117	8260B-SIM, 8260B
L1433723-17	TTU-EX-3-76-20211117-DUP	8260B-SIM, 8260B
L1433723-18	TTU-EX-4-77-20211117	8260B
L1433723-19	TTU-EX-5-80-20211117	8260B
L1433723-20	TTU-5-110-20211117	8260B-SIM, 8260B

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	6.41		0.300	4.00	1	12/07/2021 14:29	WG1786624

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 00:12	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 00:12	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 00:12	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 00:12	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 00:12	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 00:12	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 00:12	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 00:12	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 00:12	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 00:12	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 00:12	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 00:12	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 00:12	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 00:12	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 00:12	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 00:12	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 00:12	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 00:12	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 00:12	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 00:12	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 00:12	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 00:12	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 00:12	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 00:12	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 00:12	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 00:12	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 00:12	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 00:12	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 00:12	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 00:12	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 00:12	WG1780361
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2021 00:12	WG1780361
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2021 00:12	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 00:12	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 00:12	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 00:12	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 00:12	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 00:12	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 00:12	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 00:12	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 00:12	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 00:12	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 00:12	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 00:12	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 00:12	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 00:12	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 00:12	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 00:12	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 00:12	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 00:12	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 00:12	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 00:12	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 00:12	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 00:12	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 00:12	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 00:12	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 00:12	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 00:12	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 00:12	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 00:12	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 00:12	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 00:12	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 00:12	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 00:12	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 00:12	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 00:12	WG1780361
Trichloroethene	0.911	E4 L1 R5	0.190	1.00	1	11/27/2021 00:12	WG1780361
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 00:12	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 00:12	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 00:12	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 00:12	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 00:12	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 00:12	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 00:12	WG1780361
(S) Toluene-d8	*110*			*80.0-120*		*11/27/2021 00:12*	WG1780361
(S) 4-Bromofluorobenzene	*112*			*77.0-126*		*11/27/2021 00:12*	WG1780361
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/27/2021 00:12*	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/29/2021 10:37	WG1780984
(S) Toluene-d8	*99.3*			*77.0-127*		*11/29/2021 10:37*	WG1780984

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	6.59		0.300	4.00	1	12/07/2021 15:24	WG1786624

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 00:33	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 00:33	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 00:33	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 00:33	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 00:33	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 00:33	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 00:33	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 00:33	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 00:33	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 00:33	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 00:33	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 00:33	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 00:33	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 00:33	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 00:33	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 00:33	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 00:33	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 00:33	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 00:33	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 00:33	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 00:33	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 00:33	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 00:33	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 00:33	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 00:33	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 00:33	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 00:33	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 00:33	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 00:33	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 00:33	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 00:33	WG1780361
1,1-Dichloroethene	U		0.188	1.00	1	11/27/2021 00:33	WG1780361
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2021 00:33	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 00:33	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 00:33	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 00:33	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 00:33	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 00:33	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 00:33	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 00:33	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 00:33	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 00:33	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 00:33	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 00:33	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 00:33	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 00:33	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 00:33	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 00:33	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 00:33	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 00:33	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 00:33	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 00:33	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 00:33	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 00:33	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 00:33	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 00:33	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 00:33	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 00:33	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 00:33	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 00:33	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 00:33	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 00:33	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 00:33	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 00:33	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 00:33	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 00:33	WG1780361
Trichloroethene	0.985	E4 L1 R5	0.190	1.00	1	11/27/2021 00:33	WG1780361
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 00:33	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 00:33	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 00:33	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 00:33	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 00:33	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 00:33	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 00:33	WG1780361
(S) Toluene-d8	*108*			*80.0-120*		*11/27/2021 00:33*	WG1780361
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*11/27/2021 00:33*	WG1780361
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/27/2021 00:33*	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/24/2021 17:27	WG1779946
(S) Toluene-d8	*101*			*77.0-127*		*11/24/2021 17:27*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	11000		150	2000	500	12/07/2021 17:16	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 00:53	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 00:53	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 00:53	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 00:53	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 00:53	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 00:53	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 00:53	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 00:53	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 00:53	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 00:53	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 00:53	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 00:53	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 00:53	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 00:53	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 00:53	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 00:53	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 00:53	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 00:53	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 00:53	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 00:53	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 00:53	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 00:53	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 00:53	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 00:53	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 00:53	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 00:53	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 00:53	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 00:53	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 00:53	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 00:53	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 00:53	WG1780361
1,1-Dichloroethene	0.470	E4	0.188	1.00	1	11/27/2021 00:53	WG1780361
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2021 00:53	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 00:53	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 00:53	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 00:53	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 00:53	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 00:53	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 00:53	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 00:53	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 00:53	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 00:53	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 00:53	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 00:53	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 00:53	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 00:53	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 00:53	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 00:53	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 00:53	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 00:53	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 00:53	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 00:53	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 00:53	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 00:53	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 00:53	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 00:53	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 00:53	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 00:53	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 00:53	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 00:53	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 00:53	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 00:53	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 00:53	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 00:53	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 00:53	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 00:53	WG1780361
Trichloroethene	1.44	L1 R5	0.190	1.00	1	11/27/2021 00:53	WG1780361
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 00:53	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 00:53	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 00:53	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 00:53	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 00:53	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 00:53	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 00:53	WG1780361
(S) Toluene-d8	*109*			*80.0-120*		*11/27/2021 00:53*	WG1780361
(S) 4-Bromofluorobenzene	*112*			*77.0-126*		*11/27/2021 00:53*	WG1780361
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/27/2021 00:53*	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	3.26		0.597	3.00	1	11/24/2021 17:47	WG1779946
(S) Toluene-d8	*101*			*77.0-127*		*11/24/2021 17:47*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	12600000		150000	2000000	500000	12/08/2021 11:38	WG1784394

Sample Narrative:

L1433723-04 WG1784394: sample diluted 5,000,000x

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	11/27/2021 01:13	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 01:13	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 01:13	WG1780361
Benzene	1.86		0.0941	1.00	1	11/27/2021 01:13	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 01:13	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 01:13	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 01:13	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 01:13	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 01:13	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 01:13	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 01:13	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 01:13	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 01:13	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 01:13	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 01:13	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 01:13	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 01:13	WG1780361
Chloroform	1.99	E4	0.111	5.00	1	11/27/2021 01:13	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 01:13	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 01:13	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 01:13	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 01:13	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 01:13	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 01:13	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 01:13	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 01:13	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 01:13	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 01:13	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 01:13	WG1780361
1,1-Dichloroethane	1.28		0.100	1.00	1	11/27/2021 01:13	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 01:13	WG1780361
1,1-Dichloroethene	137		0.188	1.00	1	11/27/2021 01:13	WG1780361
cis-1,2-Dichloroethene	2.49		0.126	1.00	1	11/27/2021 01:13	WG1780361
trans-1,2-Dichloroethene	0.231	E4	0.149	1.00	1	11/27/2021 01:13	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 01:13	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 01:13	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 01:13	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 01:13	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 01:13	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 01:13	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 01:13	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 01:13	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 01:13	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 01:13	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 01:13	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 01:13	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 01:13	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 01:13	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 01:13	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 01:13	WG1780361
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 01:13	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 01:13	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 01:13	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 01:13	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 01:13	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 01:13	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 01:13	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 01:13	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 01:13	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 01:13	WG1780361
Tetrachloroethene	1.69		0.300	1.00	1	11/27/2021 01:13	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 01:13	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 01:13	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 01:13	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 01:13	WG1780361
1,1,2-Trichloroethane	2.03		0.158	1.00	1	11/27/2021 01:13	WG1780361
Trichloroethene	917		9.50	50.0	50	12/01/2021 04:53	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 01:13	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 01:13	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 01:13	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 01:13	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 01:13	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 01:13	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 01:13	WG1780361
(S) Toluene-d8	*112*			*80.0-120*		*11/27/2021 01:13*	WG1780361
(S) Toluene-d8	*100*			*80.0-120*		*12/01/2021 04:53*	WG1782067
(S) 4-Bromofluorobenzene	*112*			*77.0-126*		*11/27/2021 01:13*	WG1780361
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*12/01/2021 04:53*	WG1782067
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/27/2021 01:13*	WG1780361
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*12/01/2021 04:53*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	279		0.597	3.00	1	11/24/2021 18:07	WG1779946
(S) Toluene-d8	*101*			*77.0-127*		*11/24/2021 18:07*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	148000		1500	20000	5000	12/07/2021 18:12	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 01:34	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 01:34	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 01:34	WG1780361
Benzene	0.884	E4	0.0941	1.00	1	11/27/2021 01:34	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 01:34	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 01:34	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 01:34	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 01:34	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 01:34	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 01:34	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 01:34	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 01:34	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 01:34	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 01:34	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 01:34	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 01:34	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 01:34	WG1780361
Chloroform	1.63	E4	0.111	5.00	1	11/27/2021 01:34	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 01:34	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 01:34	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 01:34	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 01:34	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 01:34	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 01:34	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 01:34	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 01:34	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 01:34	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 01:34	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 01:34	WG1780361
1,1-Dichloroethane	0.868	E4	0.100	1.00	1	11/27/2021 01:34	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 01:34	WG1780361
1,1-Dichloroethene	91.9		0.188	1.00	1	11/27/2021 01:34	WG1780361
cis-1,2-Dichloroethene	1.12		0.126	1.00	1	11/27/2021 01:34	WG1780361
trans-1,2-Dichloroethene	0.217	E4	0.149	1.00	1	11/27/2021 01:34	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 01:34	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 01:34	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 01:34	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 01:34	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 01:34	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 01:34	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 01:34	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 01:34	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 01:34	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 01:34	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 01:34	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 01:34	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 01:34	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 01:34	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 01:34	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 01:34	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 01:34	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 01:34	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 01:34	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 01:34	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 01:34	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 01:34	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 01:34	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 01:34	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 01:34	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 01:34	WG1780361
Tetrachloroethene	1.14		0.300	1.00	1	11/27/2021 01:34	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 01:34	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 01:34	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 01:34	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 01:34	WG1780361
1,1,2-Trichloroethane	1.55		0.158	1.00	1	11/27/2021 01:34	WG1780361
Trichloroethene	624		4.75	25.0	25	12/01/2021 05:14	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 01:34	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 01:34	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 01:34	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 01:34	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 01:34	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 01:34	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 01:34	WG1780361
(S) Toluene-d8	*111*			*80.0-120*		*11/27/2021 01:34*	WG1780361
(S) Toluene-d8	*100*			*80.0-120*		*12/01/2021 05:14*	WG1782067
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*11/27/2021 01:34*	WG1780361
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*12/01/2021 05:14*	WG1782067
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/27/2021 01:34*	WG1780361
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*12/01/2021 05:14*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	133		0.597	3.00	1	11/24/2021 18:26	WG1779946
(S) Toluene-d8	*97.1*			*77.0-127*		*11/24/2021 18:26*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	140000		1500	20000	5000	12/07/2021 18:40	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 01:54	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 01:54	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 01:54	WG1780361
Benzene	0.953	E4	0.0941	1.00	1	11/27/2021 01:54	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 01:54	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 01:54	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 01:54	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 01:54	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 01:54	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 01:54	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 01:54	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 01:54	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 01:54	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 01:54	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 01:54	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 01:54	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 01:54	WG1780361
Chloroform	1.78	E4	0.111	5.00	1	11/27/2021 01:54	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 01:54	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 01:54	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 01:54	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 01:54	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 01:54	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 01:54	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 01:54	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 01:54	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 01:54	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 01:54	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 01:54	WG1780361
1,1-Dichloroethane	0.961	E4	0.100	1.00	1	11/27/2021 01:54	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 01:54	WG1780361
1,1-Dichloroethene	95.4		0.188	1.00	1	11/27/2021 01:54	WG1780361
cis-1,2-Dichloroethene	1.32		0.126	1.00	1	11/27/2021 01:54	WG1780361
trans-1,2-Dichloroethene	0.207	E4	0.149	1.00	1	11/27/2021 01:54	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 01:54	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 01:54	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 01:54	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 01:54	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 01:54	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 01:54	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 01:54	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 01:54	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 01:54	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 01:54	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 01:54	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 01:54	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 01:54	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 01:54	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 01:54	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 01:54	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 01:54	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 01:54	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 01:54	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 01:54	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 01:54	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 01:54	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 01:54	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 01:54	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 01:54	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 01:54	WG1780361
Tetrachloroethene	1.10		0.300	1.00	1	11/27/2021 01:54	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 01:54	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 01:54	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 01:54	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 01:54	WG1780361
1,1,2-Trichloroethane	1.35		0.158	1.00	1	11/27/2021 01:54	WG1780361
Trichloroethene	617		4.75	25.0	25	12/01/2021 05:34	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 01:54	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 01:54	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 01:54	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 01:54	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 01:54	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 01:54	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 01:54	WG1780361
(S) Toluene-d8	*107*			*80.0-120*		*11/27/2021 01:54*	WG1780361
(S) Toluene-d8	*103*			*80.0-120*		*12/01/2021 05:34*	WG1782067
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*11/27/2021 01:54*	WG1780361
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*12/01/2021 05:34*	WG1782067
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/27/2021 01:54*	WG1780361
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*12/01/2021 05:34*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	141		0.597	3.00	1	11/24/2021 18:46	WG1779946
(S) Toluene-d8	*82.3*			*77.0-127*		*11/24/2021 18:46*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	526000		3000	40000	10000	12/07/2021 19:08	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 02:14	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 02:14	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 02:14	WG1780361
Benzene	80.8		0.0941	1.00	1	11/27/2021 02:14	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 02:14	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 02:14	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 02:14	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 02:14	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 02:14	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 02:14	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 02:14	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 02:14	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 02:14	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 02:14	WG1780361
Chlorobenzene	0.849	E4	0.116	1.00	1	11/27/2021 02:14	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 02:14	WG1780361
Chloroethane	0.329	E4	0.192	5.00	1	11/27/2021 02:14	WG1780361
Chloroform	21.8		0.111	5.00	1	11/27/2021 02:14	WG1780361
Chloromethane	1.55	E4	0.960	2.50	1	11/27/2021 02:14	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 02:14	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 02:14	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 02:14	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 02:14	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 02:14	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 02:14	WG1780361
1,2-Dichlorobenzene	1.09		0.107	1.00	1	11/27/2021 02:14	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 02:14	WG1780361
1,4-Dichlorobenzene	0.349	E4	0.120	1.00	1	11/27/2021 02:14	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 02:14	WG1780361
1,1-Dichloroethane	27.4		0.100	1.00	1	11/27/2021 02:14	WG1780361
1,2-Dichloroethane	4.96		0.0819	1.00	1	11/27/2021 02:14	WG1780361
1,1-Dichloroethene	2650		37.6	200	200	12/01/2021 22:21	WG1782742
cis-1,2-Dichloroethene	74.9		0.126	1.00	1	11/27/2021 02:14	WG1780361
trans-1,2-Dichloroethene	18.0		0.149	1.00	1	11/27/2021 02:14	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 02:14	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 02:14	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 02:14	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 02:14	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 02:14	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 02:14	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 02:14	WG1780361
Di-isopropyl ether	0.305	E4	0.105	1.00	1	11/27/2021 02:14	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 02:14	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 02:14	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 02:14	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 02:14	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 02:14	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 02:14	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 02:14	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 02:14	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	319	E4	86.0	1000	200	12/01/2021 22:21	WG1782742
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 02:14	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 02:14	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 02:14	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 02:14	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 02:14	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 02:14	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 02:14	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 02:14	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 02:14	WG1780361
Tetrachloroethene	16.7		0.300	1.00	1	11/27/2021 02:14	WG1780361
Toluene	1.16		0.278	1.00	1	11/27/2021 02:14	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 02:14	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 02:14	WG1780361
1,1,1-Trichloroethane	0.258	E4	0.149	1.00	1	11/27/2021 02:14	WG1780361
1,1,2-Trichloroethane	20.4		0.158	1.00	1	11/27/2021 02:14	WG1780361
Trichloroethene	13400		38.0	200	200	12/01/2021 22:21	WG1782742
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 02:14	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 02:14	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 02:14	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 02:14	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 02:14	WG1780361
Vinyl chloride	0.839	E4	0.234	1.00	1	11/27/2021 02:14	WG1780361
Xylenes, Total	4.51		0.174	3.00	1	11/27/2021 02:14	WG1780361
(S) Toluene-d8	*108*			*80.0-120*		*11/27/2021 02:14*	WG1780361
(S) Toluene-d8	*120*			*80.0-120*		*12/01/2021 22:21*	WG1782742
(S) 4-Bromofluorobenzene	*114*			*77.0-126*		*11/27/2021 02:14*	WG1780361
(S) 4-Bromofluorobenzene	*93.7*			*77.0-126*		*12/01/2021 22:21*	WG1782742
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/27/2021 02:14*	WG1780361
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*12/01/2021 22:21*	WG1782742

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	2140		11.9	60.0	20	11/29/2021 11:58	WG1780984
(S) Toluene-d8	*91.2*			*77.0-127*		*11/29/2021 11:58*	WG1780984

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	U		0.300	4.00	1	12/07/2021 19:36	WG1786624

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 02:35	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 02:35	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 02:35	WG1780361
Benzene	0.113	E4	0.0941	1.00	1	11/27/2021 02:35	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 02:35	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 02:35	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 02:35	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 02:35	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 02:35	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 02:35	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 02:35	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 02:35	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 02:35	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 02:35	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 02:35	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 02:35	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 02:35	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 02:35	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 02:35	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 02:35	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 02:35	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 02:35	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 02:35	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 02:35	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 02:35	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 02:35	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 02:35	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 02:35	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 02:35	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 02:35	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 02:35	WG1780361
1,1-Dichloroethene	U		0.188	1.00	1	11/30/2021 23:03	WG1782067
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2021 02:35	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 02:35	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 02:35	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 02:35	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 02:35	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 02:35	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 02:35	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 02:35	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 02:35	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 02:35	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 02:35	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 02:35	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 02:35	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 02:35	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 02:35	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 02:35	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 02:35	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 02:35	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	11/30/2021 23:03	WG1782067
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 02:35	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 02:35	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 02:35	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 02:35	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 02:35	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 02:35	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 02:35	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 02:35	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 02:35	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 02:35	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 02:35	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 02:35	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 02:35	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 02:35	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 02:35	WG1780361
Trichloroethene	U		0.190	1.00	1	11/30/2021 23:03	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 02:35	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 02:35	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 02:35	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 02:35	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 02:35	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 02:35	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 02:35	WG1780361
(S) Toluene-d8	*110*			*80.0-120*		*11/27/2021 02:35*	WG1780361
(S) Toluene-d8	*104*			*80.0-120*		*11/30/2021 23:03*	WG1782067
(S) 4-Bromofluorobenzene	*112*			*77.0-126*		*11/27/2021 02:35*	WG1780361
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*11/30/2021 23:03*	WG1782067
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/27/2021 02:35*	WG1780361
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/30/2021 23:03*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/29/2021 10:58	WG1780984
(S) Toluene-d8	*100*			*77.0-127*		*11/29/2021 10:58*	WG1780984

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 02:55	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 02:55	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 02:55	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 02:55	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 02:55	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 02:55	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 02:55	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 02:55	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 02:55	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 02:55	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 02:55	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 02:55	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 02:55	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 02:55	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 02:55	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 02:55	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 02:55	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 02:55	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 02:55	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 02:55	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 02:55	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 02:55	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 02:55	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 02:55	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 02:55	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 02:55	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 02:55	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 02:55	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 02:55	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 02:55	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 02:55	WG1780361
1,1-Dichloroethene	U		0.188	1.00	1	11/30/2021 23:23	WG1782067
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2021 02:55	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 02:55	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 02:55	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 02:55	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 02:55	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 02:55	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 02:55	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 02:55	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 02:55	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 02:55	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 02:55	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 02:55	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 02:55	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 02:55	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 02:55	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 02:55	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 02:55	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 02:55	WG1780361
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 02:55	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 02:55	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 02:55	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 02:55	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 02:55	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 02:55	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Styrene	U		0.118	1.00	1	11/27/2021 02:55	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 02:55	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 02:55	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 02:55	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 02:55	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 02:55	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 02:55	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 02:55	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 02:55	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 02:55	WG1780361
Trichloroethene	U		0.190	1.00	1	11/30/2021 23:23	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 02:55	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 02:55	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 02:55	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 02:55	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 02:55	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 02:55	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 02:55	WG1780361
(S) Toluene-d8	*109*			*80.0-120*		*11/27/2021 02:55*	WG1780361
(S) Toluene-d8	*102*			*80.0-120*		*11/30/2021 23:23*	WG1782067
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*11/27/2021 02:55*	WG1780361
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*11/30/2021 23:23*	WG1782067
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/27/2021 02:55*	WG1780361
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/30/2021 23:23*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/24/2021 19:45	WG1779946
(S) Toluene-d8	*100*			*77.0-127*		*11/24/2021 19:45*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	U		0.300	4.00	1	12/07/2021 20:31	WG1786624

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 03:15	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 03:15	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 03:15	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 03:15	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 03:15	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 03:15	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 03:15	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 03:15	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 03:15	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 03:15	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 03:15	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 03:15	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 03:15	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 03:15	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 03:15	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 03:15	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 03:15	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 03:15	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 03:15	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 03:15	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 03:15	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 03:15	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 03:15	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 03:15	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 03:15	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 03:15	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 03:15	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 03:15	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 03:15	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 03:15	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 03:15	WG1780361
1,1-Dichloroethene	U		0.188	1.00	1	11/30/2021 23:44	WG1782067
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2021 03:15	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 03:15	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 03:15	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 03:15	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 03:15	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 03:15	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 03:15	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 03:15	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 03:15	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 03:15	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 03:15	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 03:15	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 03:15	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 03:15	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 03:15	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 03:15	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 03:15	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 03:15	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 03:15	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 03:15	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 03:15	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 03:15	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 03:15	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 03:15	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 03:15	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 03:15	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 03:15	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 03:15	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 03:15	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 03:15	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 03:15	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 03:15	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 03:15	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 03:15	WG1780361
Trichloroethene	U		0.190	1.00	1	11/30/2021 23:44	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 03:15	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 03:15	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 03:15	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 03:15	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 03:15	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 03:15	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 03:15	WG1780361
(S) Toluene-d8	*109*			*80.0-120*		*11/27/2021 03:15*	WG1780361
(S) Toluene-d8	*104*			*80.0-120*		*11/30/2021 23:44*	WG1782067
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*11/27/2021 03:15*	WG1780361
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*11/30/2021 23:44*	WG1782067
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/27/2021 03:15*	WG1780361
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/30/2021 23:44*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/24/2021 20:05	WG1779946
(S) Toluene-d8	*90.3*			*77.0-127*		*11/24/2021 20:05*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	U		0.300	4.00	1	12/07/2021 21:27	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 03:36	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 03:36	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 03:36	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 03:36	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 03:36	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 03:36	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 03:36	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 03:36	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 03:36	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 03:36	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 03:36	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 03:36	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 03:36	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 03:36	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 03:36	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 03:36	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 03:36	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 03:36	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 03:36	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 03:36	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 03:36	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 03:36	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 03:36	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 03:36	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 03:36	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 03:36	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 03:36	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 03:36	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 03:36	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 03:36	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 03:36	WG1780361
1,1-Dichloroethene	U		0.188	1.00	1	12/01/2021 00:04	WG1782067
cis-1,2-Dichloroethene	1.41		0.126	1.00	1	11/27/2021 03:36	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 03:36	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 03:36	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 03:36	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 03:36	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 03:36	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 03:36	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 03:36	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 03:36	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 03:36	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 03:36	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 03:36	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 03:36	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 03:36	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 03:36	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 03:36	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 03:36	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 03:36	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 03:36	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 03:36	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 03:36	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 03:36	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 03:36	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 03:36	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 03:36	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 03:36	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 03:36	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 03:36	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 03:36	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 03:36	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 03:36	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 03:36	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 03:36	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 03:36	WG1780361
Trichloroethene	3.08		0.190	1.00	1	12/01/2021 00:04	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 03:36	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 03:36	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 03:36	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 03:36	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 03:36	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 03:36	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 03:36	WG1780361
(S) Toluene-d8	*112*			*80.0-120*		*11/27/2021 03:36*	WG1780361
(S) Toluene-d8	*102*			*80.0-120*		*12/01/2021 00:04*	WG1782067
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*11/27/2021 03:36*	WG1780361
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*12/01/2021 00:04*	WG1782067
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/27/2021 03:36*	WG1780361
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*12/01/2021 00:04*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/24/2021 20:25	WG1779946
(S) Toluene-d8	*99.0*			*77.0-127*		*11/24/2021 20:25*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	2520		30.0	400	100	12/08/2021 09:59	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 03:56	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 03:56	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 03:56	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 03:56	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 03:56	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 03:56	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 03:56	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 03:56	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 03:56	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 03:56	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 03:56	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 03:56	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 03:56	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 03:56	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 03:56	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 03:56	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 03:56	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 03:56	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 03:56	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 03:56	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 03:56	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 03:56	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 03:56	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 03:56	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 03:56	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 03:56	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 03:56	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 03:56	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 03:56	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 03:56	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 03:56	WG1780361
1,1-Dichloroethene	0.341	E4	0.188	1.00	1	12/01/2021 00:25	WG1782067
cis-1,2-Dichloroethene	2.48		0.126	1.00	1	11/27/2021 03:56	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 03:56	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 03:56	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 03:56	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 03:56	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 03:56	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 03:56	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 03:56	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 03:56	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 03:56	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 03:56	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 03:56	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 03:56	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 03:56	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 03:56	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 03:56	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 03:56	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 03:56	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	L1	0.430	5.00	1	11/27/2021 03:56	WG1780361
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 03:56	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 03:56	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 03:56	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 03:56	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 03:56	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 03:56	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 03:56	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 03:56	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 03:56	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 03:56	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 03:56	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 03:56	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 03:56	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 03:56	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 03:56	WG1780361
Trichloroethene	10.3		0.190	1.00	1	12/01/2021 00:25	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 03:56	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 03:56	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 03:56	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 03:56	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 03:56	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 03:56	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 03:56	WG1780361
(S) Toluene-d8	*110*			*80.0-120*		*11/27/2021 03:56*	WG1780361
(S) Toluene-d8	*104*			*80.0-120*		*12/01/2021 00:25*	WG1782067
(S) 4-Bromofluorobenzene	*112*			*77.0-126*		*11/27/2021 03:56*	WG1780361
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*12/01/2021 00:25*	WG1782067
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/27/2021 03:56*	WG1780361
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*12/01/2021 00:25*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	5.90		0.597	3.00	1	11/29/2021 11:18	WG1780984
(S) Toluene-d8	*100*			*77.0-127*		*11/29/2021 11:18*	WG1780984

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	879000		3000	40000	10000	12/08/2021 00:15	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 04:17	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 04:17	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 04:17	WG1780361
Benzene	405	E1	0.0941	1.00	1	11/27/2021 04:17	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 04:17	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 04:17	WG1780361
Bromoform	2.94		0.129	1.00	1	11/27/2021 04:17	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 04:17	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 04:17	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 04:17	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 04:17	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 04:17	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 04:17	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 04:17	WG1780361
Chlorobenzene	3.05		0.116	1.00	1	11/27/2021 04:17	WG1780361
Chlorodibromomethane	0.816	E4	0.140	1.00	1	11/27/2021 04:17	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 04:17	WG1780361
Chloroform	119		0.111	5.00	1	11/27/2021 04:17	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 04:17	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 04:17	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 04:17	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 04:17	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 04:17	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 04:17	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 04:17	WG1780361
1,2-Dichlorobenzene	5.04		0.107	1.00	1	11/27/2021 04:17	WG1780361
1,3-Dichlorobenzene	0.411	E4	0.110	1.00	1	11/27/2021 04:17	WG1780361
1,4-Dichlorobenzene	1.14		0.120	1.00	1	11/27/2021 04:17	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 04:17	WG1780361
1,1-Dichloroethane	75.6		0.100	1.00	1	11/27/2021 04:17	WG1780361
1,2-Dichloroethane	41.3		0.0819	1.00	1	11/27/2021 04:17	WG1780361
1,1-Dichloroethene	2820	E4	940	5000	5000	12/01/2021 06:15	WG1782067
cis-1,2-Dichloroethene	17.2		0.126	1.00	1	11/27/2021 04:17	WG1780361
trans-1,2-Dichloroethene	13.3		0.149	1.00	1	11/27/2021 04:17	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 04:17	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 04:17	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 04:17	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 04:17	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 04:17	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 04:17	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 04:17	WG1780361
Di-isopropyl ether	0.575	E4	0.105	1.00	1	11/27/2021 04:17	WG1780361
Ethylbenzene	10.5		0.137	1.00	1	11/27/2021 04:17	WG1780361
4-Ethyltoluene	1.98		0.208	1.00	1	11/27/2021 04:17	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 04:17	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 04:17	WG1780361
Isopropylbenzene	0.705	E4	0.105	1.00	1	11/27/2021 04:17	WG1780361
p-Isopropyltoluene	0.743	B1 E4	0.120	1.00	1	11/27/2021 04:17	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 04:17	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 04:17	WG1780361

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	124000		2150	25000	5000	12/01/2021 06:15	WG1782067
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 04:17	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 04:17	WG1780361
Naphthalene	2.45	E4	1.00	5.00	1	11/27/2021 04:17	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 04:17	WG1780361
n-Propylbenzene	0.456	E4	0.0993	1.00	1	11/27/2021 04:17	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 04:17	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 04:17	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 04:17	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 04:17	WG1780361
Tetrachloroethene	87.4		0.300	1.00	1	11/27/2021 04:17	WG1780361
Toluene	194		0.278	1.00	1	11/27/2021 04:17	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 04:17	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 04:17	WG1780361
1,1,1-Trichloroethane	0.842	E4	0.149	1.00	1	11/27/2021 04:17	WG1780361
1,1,2-Trichloroethane	80.8		0.158	1.00	1	11/27/2021 04:17	WG1780361
Trichloroethene	93200		950	5000	5000	12/01/2021 06:15	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 04:17	WG1780361
1,2,3-Trichloropropane	0.379	E4	0.237	2.50	1	11/27/2021 04:17	WG1780361
1,2,4-Trimethylbenzene	4.29		0.322	1.00	1	11/27/2021 04:17	WG1780361
1,2,3-Trimethylbenzene	4.23		0.104	1.00	1	11/27/2021 04:17	WG1780361
1,3,5-Trimethylbenzene	1.17		0.104	1.00	1	11/27/2021 04:17	WG1780361
Vinyl chloride	0.931	E4	0.234	1.00	1	11/27/2021 04:17	WG1780361
Xylenes, Total	150		0.174	3.00	1	11/27/2021 04:17	WG1780361
(S) Toluene-d8	*105*			*80.0-120*		*11/27/2021 04:17*	WG1780361
(S) Toluene-d8	*97.4*			*80.0-120*		*12/01/2021 06:15*	WG1782067
(S) 4-Bromofluorobenzene	*111*			*77.0-126*		*11/27/2021 04:17*	WG1780361
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*12/01/2021 06:15*	WG1782067
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*11/27/2021 04:17*	WG1780361
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*12/01/2021 06:15*	WG1782067

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	3930		29.9	150	50	11/29/2021 12:17	WG1780984
(S) Toluene-d8	*94.1*			*77.0-127*		*11/29/2021 12:17*	WG1780984

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	219000		1500	20000	5000	12/08/2021 00:43	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 04:37	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 04:37	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 04:37	WG1780361
Benzene	U		0.0941	1.00	1	12/01/2021 00:46	WG1782067
Bromobenzene	U		0.118	1.00	1	11/27/2021 04:37	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 04:37	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 04:37	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 04:37	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 04:37	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 04:37	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 04:37	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 04:37	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 04:37	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 04:37	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 04:37	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 04:37	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 04:37	WG1780361
Chloroform	0.464	E4	0.111	5.00	1	11/27/2021 04:37	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 04:37	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 04:37	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 04:37	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 04:37	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 04:37	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 04:37	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 04:37	WG1780361
1,2-Dichlorobenzene	0.291	E4	0.107	1.00	1	11/27/2021 04:37	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 04:37	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 04:37	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 04:37	WG1780361
1,1-Dichloroethane	0.263	E4	0.100	1.00	1	11/27/2021 04:37	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 04:37	WG1780361
1,1-Dichloroethene	36.7		0.188	1.00	1	12/01/2021 00:46	WG1782067
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2021 04:37	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 04:37	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 04:37	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 04:37	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 04:37	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 04:37	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 04:37	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 04:37	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 04:37	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 04:37	WG1780361
Ethylbenzene	0.161	E4	0.137	1.00	1	11/27/2021 04:37	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 04:37	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 04:37	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 04:37	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 04:37	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 04:37	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 04:37	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 04:37	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	12/01/2021 00:46	WG1782067
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 04:37	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 04:37	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 04:37	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 04:37	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 04:37	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 04:37	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 04:37	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 04:37	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 04:37	WG1780361
Tetrachloroethene	1.40		0.300	1.00	1	11/27/2021 04:37	WG1780361
Toluene	0.491	E4	0.278	1.00	1	11/27/2021 04:37	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 04:37	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 04:37	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 04:37	WG1780361
1,1,2-Trichloroethane	0.515	E4	0.158	1.00	1	11/27/2021 04:37	WG1780361
Trichloroethene	79.0		0.190	1.00	1	12/01/2021 00:46	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 04:37	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 04:37	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 04:37	WG1780361
1,2,3-Trimethylbenzene	0.242	E4	0.104	1.00	1	11/27/2021 04:37	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 04:37	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 04:37	WG1780361
Xylenes, Total	1.94	E4	0.174	3.00	1	11/27/2021 04:37	WG1780361
(S) Toluene-d8	*112*			*80.0-120*		*11/27/2021 04:37*	WG1780361
(S) Toluene-d8	*103*			*80.0-120*		*12/01/2021 00:46*	WG1782067
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*11/27/2021 04:37*	WG1780361
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*12/01/2021 00:46*	WG1782067
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/27/2021 04:37*	WG1780361
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*12/01/2021 00:46*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	112		0.597	3.00	1	11/29/2021 11:38	WG1780984
(S) Toluene-d8	*100*			*77.0-127*		*11/29/2021 11:38*	WG1780984

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	66900		1500	20000	5000	12/08/2021 01:10	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 04:57	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 04:57	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 04:57	WG1780361
Benzene	U		0.471	5.00	5	12/01/2021 01:47	WG1782067
Bromobenzene	U		0.118	1.00	1	11/27/2021 04:57	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 04:57	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 04:57	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 04:57	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 04:57	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 04:57	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 04:57	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 04:57	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 04:57	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 04:57	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 04:57	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 04:57	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 04:57	WG1780361
Chloroform	0.686	E4	0.111	5.00	1	11/27/2021 04:57	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 04:57	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 04:57	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 04:57	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 04:57	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 04:57	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 04:57	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 04:57	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 04:57	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 04:57	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 04:57	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 04:57	WG1780361
1,1-Dichloroethane	0.367	E4	0.100	1.00	1	11/27/2021 04:57	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 04:57	WG1780361
1,1-Dichloroethene	49.9		0.940	5.00	5	12/01/2021 01:47	WG1782067
cis-1,2-Dichloroethene	0.726	E4	0.126	1.00	1	11/27/2021 04:57	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 04:57	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 04:57	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 04:57	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 04:57	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 04:57	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 04:57	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 04:57	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 04:57	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 04:57	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 04:57	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 04:57	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 04:57	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 04:57	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 04:57	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 04:57	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 04:57	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 04:57	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		2.15	25.0	5	12/01/2021 01:47	WG1782067
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 04:57	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 04:57	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 04:57	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 04:57	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 04:57	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 04:57	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 04:57	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 04:57	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 04:57	WG1780361
Tetrachloroethene	0.768	E4	0.300	1.00	1	11/27/2021 04:57	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 04:57	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 04:57	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 04:57	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 04:57	WG1780361
1,1,2-Trichloroethane	0.842	E4	0.158	1.00	1	11/27/2021 04:57	WG1780361
Trichloroethene	238		0.950	5.00	5	12/01/2021 01:47	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 04:57	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 04:57	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 04:57	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 04:57	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 04:57	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 04:57	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 04:57	WG1780361
(S) Toluene-d8	*113*			*80.0-120*		*11/27/2021 04:57*	WG1780361
(S) Toluene-d8	*103*			*80.0-120*		*12/01/2021 01:47*	WG1782067
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*11/27/2021 04:57*	WG1780361
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*12/01/2021 01:47*	WG1782067
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/27/2021 04:57*	WG1780361
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*12/01/2021 01:47*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	158		0.597	3.00	1	11/24/2021 21:44	WG1779946
(S) Toluene-d8	*99.5*			*77.0-127*		*11/24/2021 21:44*	WG1779946

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	434000		1500	20000	5000	12/08/2021 01:38	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 05:18	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 05:18	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 05:18	WG1780361
Benzene	13.8		0.0941	1.00	1	11/27/2021 05:18	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 05:18	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 05:18	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 05:18	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 05:18	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 05:18	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 05:18	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 05:18	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 05:18	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 05:18	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 05:18	WG1780361
Chlorobenzene	0.361	E4	0.116	1.00	1	11/27/2021 05:18	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 05:18	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 05:18	WG1780361
Chloroform	12.4		0.111	5.00	1	11/27/2021 05:18	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 05:18	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 05:18	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 05:18	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 05:18	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 05:18	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 05:18	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 05:18	WG1780361
1,2-Dichlorobenzene	0.446	E4	0.107	1.00	1	11/27/2021 05:18	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 05:18	WG1780361
1,4-Dichlorobenzene	0.384	E4	0.120	1.00	1	11/27/2021 05:18	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 05:18	WG1780361
1,1-Dichloroethane	9.59		0.100	1.00	1	11/27/2021 05:18	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 05:18	WG1780361
1,1-Dichloroethene	1070		18.8	100	100	12/01/2021 21:42	WG1782742
cis-1,2-Dichloroethene	5.39		0.126	1.00	1	11/27/2021 05:18	WG1780361
trans-1,2-Dichloroethene	1.92		0.149	1.00	1	11/27/2021 05:18	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 05:18	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 05:18	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 05:18	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 05:18	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 05:18	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 05:18	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 05:18	WG1780361
Di-isopropyl ether	0.157	E4	0.105	1.00	1	11/27/2021 05:18	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 05:18	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 05:18	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 05:18	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 05:18	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 05:18	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 05:18	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 05:18	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 05:18	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		43.0	500	100	12/01/2021 21:42	WG1782742
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 05:18	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 05:18	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 05:18	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 05:18	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 05:18	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 05:18	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 05:18	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 05:18	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 05:18	WG1780361
Tetrachloroethene	12.0		0.300	1.00	1	11/27/2021 05:18	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 05:18	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 05:18	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 05:18	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 05:18	WG1780361
1,1,2-Trichloroethane	11.4		0.158	1.00	1	11/27/2021 05:18	WG1780361
Trichloroethene	8120		19.0	100	100	12/01/2021 21:42	WG1782742
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 05:18	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 05:18	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 05:18	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 05:18	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 05:18	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 05:18	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 05:18	WG1780361
(S) Toluene-d8	*113*			*80.0-120*		*11/27/2021 05:18*	WG1780361
(S) Toluene-d8	*116*			*80.0-120*		*12/01/2021 21:42*	WG1782742
(S) 4-Bromofluorobenzene	*114*			*77.0-126*		*11/27/2021 05:18*	WG1780361
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*		*12/01/2021 21:42*	WG1782742
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/27/2021 05:18*	WG1780361
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*12/01/2021 21:42*	WG1782742

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	909		2.99	15.0	5	11/29/2021 12:37	WG1780984
(S) Toluene-d8	*97.9*			*77.0-127*		*11/29/2021 12:37*	WG1780984

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	469000		1500	20000	5000	12/08/2021 02:06	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 05:38	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 05:38	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 05:38	WG1780361
Benzene	13.4		0.0941	1.00	1	11/27/2021 05:38	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 05:38	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 05:38	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 05:38	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 05:38	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 05:38	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 05:38	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 05:38	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 05:38	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 05:38	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 05:38	WG1780361
Chlorobenzene	0.340	E4	0.116	1.00	1	11/27/2021 05:38	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 05:38	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 05:38	WG1780361
Chloroform	12.5		0.111	5.00	1	11/27/2021 05:38	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 05:38	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 05:38	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 05:38	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 05:38	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 05:38	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 05:38	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 05:38	WG1780361
1,2-Dichlorobenzene	0.508	E4	0.107	1.00	1	11/27/2021 05:38	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 05:38	WG1780361
1,4-Dichlorobenzene	0.277	E4	0.120	1.00	1	11/27/2021 05:38	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 05:38	WG1780361
1,1-Dichloroethane	9.50		0.100	1.00	1	11/27/2021 05:38	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 05:38	WG1780361
1,1-Dichloroethene	904		18.8	100	100	12/01/2021 22:02	WG1782742
cis-1,2-Dichloroethene	5.42		0.126	1.00	1	11/27/2021 05:38	WG1780361
trans-1,2-Dichloroethene	2.01		0.149	1.00	1	11/27/2021 05:38	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 05:38	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 05:38	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 05:38	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 05:38	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 05:38	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 05:38	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 05:38	WG1780361
Di-isopropyl ether	0.193	E4	0.105	1.00	1	11/27/2021 05:38	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 05:38	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 05:38	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 05:38	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 05:38	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 05:38	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 05:38	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 05:38	WG1780361
Methyl Cyclohexane	115		0.660	1.00	1	11/27/2021 05:38	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		43.0	500	100	12/01/2021 22:02	WG1782742
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 05:38	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 05:38	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 05:38	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 05:38	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 05:38	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 05:38	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 05:38	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 05:38	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 05:38	WG1780361
Tetrachloroethene	12.1		0.300	1.00	1	11/27/2021 05:38	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 05:38	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 05:38	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 05:38	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 05:38	WG1780361
1,1,2-Trichloroethane	11.0		0.158	1.00	1	11/27/2021 05:38	WG1780361
Trichloroethene	8010		19.0	100	100	12/01/2021 22:02	WG1782742
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 05:38	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 05:38	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 05:38	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 05:38	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 05:38	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 05:38	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 05:38	WG1780361
(S) Toluene-d8	*108*			*80.0-120*		*11/27/2021 05:38*	WG1780361
(S) Toluene-d8	*119*			*80.0-120*		*12/01/2021 22:02*	WG1782742
(S) 4-Bromofluorobenzene	*112*			*77.0-126*		*11/27/2021 05:38*	WG1780361
(S) 4-Bromofluorobenzene	*91.9*			*77.0-126*		*12/01/2021 22:02*	WG1782742
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/27/2021 05:38*	WG1780361
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*12/01/2021 22:02*	WG1782742

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	969		2.99	15.0	5	11/29/2021 12:57	WG1780984
(S) Toluene-d8	*98.6*			*77.0-127*		*11/29/2021 12:57*	WG1780984

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	86700		1500	20000	5000	12/08/2021 02:34	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 05:58	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 05:58	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 05:58	WG1780361
Benzene	1.19		0.0941	1.00	1	11/27/2021 05:58	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 05:58	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 05:58	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 05:58	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 05:58	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 05:58	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 05:58	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 05:58	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 05:58	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 05:58	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 05:58	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 05:58	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 05:58	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 05:58	WG1780361
Chloroform	1.66	E4	0.111	5.00	1	11/27/2021 05:58	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 05:58	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 05:58	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 05:58	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 05:58	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 05:58	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 05:58	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 05:58	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 05:58	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 05:58	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 05:58	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 05:58	WG1780361
1,1-Dichloroethane	1.47		0.100	1.00	1	11/27/2021 05:58	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 05:58	WG1780361
1,1-Dichloroethene	85.8		3.76	20.0	20	12/01/2021 02:49	WG1782067
cis-1,2-Dichloroethene	2.76		0.126	1.00	1	11/27/2021 05:58	WG1780361
trans-1,2-Dichloroethene	0.488	E4	0.149	1.00	1	11/27/2021 05:58	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 05:58	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 05:58	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 05:58	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 05:58	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 05:58	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 05:58	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 05:58	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 05:58	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 05:58	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 05:58	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 05:58	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 05:58	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 05:58	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 05:58	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 05:58	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 05:58	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		8.60	100	20	12/01/2021 02:49	WG1782067
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 05:58	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 05:58	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 05:58	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 05:58	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 05:58	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 05:58	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 05:58	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 05:58	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 05:58	WG1780361
Tetrachloroethene	1.29		0.300	1.00	1	11/27/2021 05:58	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 05:58	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 05:58	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 05:58	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 05:58	WG1780361
1,1,2-Trichloroethane	0.850	E4	0.158	1.00	1	11/27/2021 05:58	WG1780361
Trichloroethene	755		3.80	20.0	20	12/01/2021 02:49	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 05:58	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 05:58	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 05:58	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 05:58	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 05:58	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 05:58	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 05:58	WG1780361
(S) Toluene-d8	*111*			*80.0-120*		*11/27/2021 05:58*	WG1780361
(S) Toluene-d8	*101*			*80.0-120*		*12/01/2021 02:49*	WG1782067
(S) 4-Bromofluorobenzene	*113*			*77.0-126*		*11/27/2021 05:58*	WG1780361
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*12/01/2021 02:49*	WG1782067
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/27/2021 05:58*	WG1780361
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*12/01/2021 02:49*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	16.1		0.597	3.00	1	11/26/2021 16:33	WG1780446
(S) Toluene-d8	*98.8*			*77.0-127*		*11/26/2021 16:33*	WG1780446

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	U	R5	0.300	4.00	1	12/08/2021 03:02	WG1784394

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	11/27/2021 06:19	WG1780361
Acrolein	U	M1	2.54	50.0	1	11/27/2021 06:19	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 06:19	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 06:19	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 06:19	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 06:19	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 06:19	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 06:19	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 06:19	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 06:19	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 06:19	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 06:19	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 06:19	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 06:19	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 06:19	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 06:19	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 06:19	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 06:19	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 06:19	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 06:19	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 06:19	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 06:19	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 06:19	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 06:19	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 06:19	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 06:19	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 06:19	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 06:19	WG1780361
Dichlorodifluoromethane	U	M1	0.374	5.00	1	11/27/2021 06:19	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 06:19	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 06:19	WG1780361
1,1-Dichloroethene	U		0.188	1.00	1	12/01/2021 01:06	WG1782067
cis-1,2-Dichloroethene	0.148	E4	0.126	1.00	1	11/27/2021 06:19	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 06:19	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 06:19	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 06:19	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 06:19	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 06:19	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 06:19	WG1780361
2,2-Dichloropropane	U		0.161	1.00	1	11/27/2021 06:19	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 06:19	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 06:19	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 06:19	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 06:19	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 06:19	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 06:19	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 06:19	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 06:19	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 06:19	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 06:19	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	12/01/2021 01:06	WG1782067
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 06:19	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 06:19	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 06:19	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 06:19	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 06:19	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 06:19	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 06:19	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 06:19	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 06:19	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 06:19	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 06:19	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 06:19	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 06:19	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 06:19	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 06:19	WG1780361
Trichloroethene	6.91		0.190	1.00	1	12/01/2021 01:06	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 06:19	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 06:19	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 06:19	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 06:19	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 06:19	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 06:19	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 06:19	WG1780361
(S) Toluene-d8	*111*			*80.0-120*		*11/27/2021 06:19*	WG1780361
(S) Toluene-d8	*102*			*80.0-120*		*12/01/2021 01:06*	WG1782067
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*11/27/2021 06:19*	WG1780361
(S) 4-Bromofluorobenzene	*108*			*77.0-126*		*12/01/2021 01:06*	WG1782067
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/27/2021 06:19*	WG1780361
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*12/01/2021 01:06*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/26/2021 16:53	WG1780446
(S) Toluene-d8	*98.2*			*77.0-127*		*11/26/2021 16:53*	WG1780446

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	40.1		0.300	4.00	1	12/08/2021 05:22	WG1784394

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/27/2021 06:39	WG1780361
Acrolein	U	R5	2.54	50.0	1	11/27/2021 06:39	WG1780361
Acrylonitrile	U		0.671	10.0	1	11/27/2021 06:39	WG1780361
Benzene	U		0.0941	1.00	1	11/27/2021 06:39	WG1780361
Bromobenzene	U		0.118	1.00	1	11/27/2021 06:39	WG1780361
Bromodichloromethane	U		0.136	1.00	1	11/27/2021 06:39	WG1780361
Bromoform	U		0.129	1.00	1	11/27/2021 06:39	WG1780361
Bromomethane	U		0.605	5.00	1	11/27/2021 06:39	WG1780361
1,3-Butadiene	U		0.299	2.00	1	11/27/2021 06:39	WG1780361
n-Butylbenzene	U		0.157	1.00	1	11/27/2021 06:39	WG1780361
sec-Butylbenzene	U		0.125	1.00	1	11/27/2021 06:39	WG1780361
tert-Butylbenzene	U		0.127	1.00	1	11/27/2021 06:39	WG1780361
Carbon tetrachloride	U		0.128	1.00	1	11/27/2021 06:39	WG1780361
Carbon disulfide	U		0.0962	1.00	1	11/27/2021 06:39	WG1780361
Chlorobenzene	U		0.116	1.00	1	11/27/2021 06:39	WG1780361
Chlorodibromomethane	U		0.140	1.00	1	11/27/2021 06:39	WG1780361
Chloroethane	U		0.192	5.00	1	11/27/2021 06:39	WG1780361
Chloroform	U		0.111	5.00	1	11/27/2021 06:39	WG1780361
Chloromethane	U		0.960	2.50	1	11/27/2021 06:39	WG1780361
Cyclohexane	U		0.188	1.00	1	11/27/2021 06:39	WG1780361
2-Chlorotoluene	U		0.106	1.00	1	11/27/2021 06:39	WG1780361
4-Chlorotoluene	U		0.114	1.00	1	11/27/2021 06:39	WG1780361
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/27/2021 06:39	WG1780361
1,2-Dibromoethane	U		0.126	1.00	1	11/27/2021 06:39	WG1780361
Dibromomethane	U		0.122	1.00	1	11/27/2021 06:39	WG1780361
1,2-Dichlorobenzene	U		0.107	1.00	1	11/27/2021 06:39	WG1780361
1,3-Dichlorobenzene	U		0.110	1.00	1	11/27/2021 06:39	WG1780361
1,4-Dichlorobenzene	U		0.120	1.00	1	11/27/2021 06:39	WG1780361
Dichlorodifluoromethane	U		0.374	5.00	1	11/27/2021 06:39	WG1780361
1,1-Dichloroethane	U		0.100	1.00	1	11/27/2021 06:39	WG1780361
1,2-Dichloroethane	U		0.0819	1.00	1	11/27/2021 06:39	WG1780361
1,1-Dichloroethene	U		0.188	1.00	1	12/01/2021 01:27	WG1782067
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/27/2021 06:39	WG1780361
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/27/2021 06:39	WG1780361
1,2-Dichloropropane	U		0.149	1.00	1	11/27/2021 06:39	WG1780361
1,1-Dichloropropene	U		0.142	1.00	1	11/27/2021 06:39	WG1780361
1,3-Dichloropropane	U		0.110	1.00	1	11/27/2021 06:39	WG1780361
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/27/2021 06:39	WG1780361
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/27/2021 06:39	WG1780361
2,2-Dichloropropane	U	R7	0.161	1.00	1	11/27/2021 06:39	WG1780361
Dicyclopentadiene	U		0.253	1.00	1	11/27/2021 06:39	WG1780361
Di-isopropyl ether	U		0.105	1.00	1	11/27/2021 06:39	WG1780361
Ethylbenzene	U		0.137	1.00	1	11/27/2021 06:39	WG1780361
4-Ethyltoluene	U		0.208	1.00	1	11/27/2021 06:39	WG1780361
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/27/2021 06:39	WG1780361
n-Hexane	U		0.749	10.0	1	11/27/2021 06:39	WG1780361
Isopropylbenzene	U		0.105	1.00	1	11/27/2021 06:39	WG1780361
p-Isopropyltoluene	U		0.120	1.00	1	11/27/2021 06:39	WG1780361
2-Butanone (MEK)	U		1.19	10.0	1	11/27/2021 06:39	WG1780361
Methyl Cyclohexane	U		0.660	1.00	1	11/27/2021 06:39	WG1780361

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	12/01/2021 01:27	WG1782067
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/27/2021 06:39	WG1780361
Methyl tert-butyl ether	U		0.101	1.00	1	11/27/2021 06:39	WG1780361
Naphthalene	U		1.00	5.00	1	11/27/2021 06:39	WG1780361
Propene	U		0.936	2.50	1	11/27/2021 06:39	WG1780361
n-Propylbenzene	U		0.0993	1.00	1	11/27/2021 06:39	WG1780361
Styrene	U		0.118	1.00	1	11/27/2021 06:39	WG1780361
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/27/2021 06:39	WG1780361
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/27/2021 06:39	WG1780361
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/27/2021 06:39	WG1780361
Tetrachloroethene	U		0.300	1.00	1	11/27/2021 06:39	WG1780361
Toluene	U		0.278	1.00	1	11/27/2021 06:39	WG1780361
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/27/2021 06:39	WG1780361
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/27/2021 06:39	WG1780361
1,1,1-Trichloroethane	U		0.149	1.00	1	11/27/2021 06:39	WG1780361
1,1,2-Trichloroethane	U		0.158	1.00	1	11/27/2021 06:39	WG1780361
Trichloroethene	U		0.190	1.00	1	12/01/2021 01:27	WG1782067
Trichlorofluoromethane	U		0.160	5.00	1	11/27/2021 06:39	WG1780361
1,2,3-Trichloropropane	U		0.237	2.50	1	11/27/2021 06:39	WG1780361
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/27/2021 06:39	WG1780361
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 06:39	WG1780361
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/27/2021 06:39	WG1780361
Vinyl chloride	U		0.234	1.00	1	11/27/2021 06:39	WG1780361
Xylenes, Total	U		0.174	3.00	1	11/27/2021 06:39	WG1780361
(S) Toluene-d8	*107*			*80.0-120*		*11/27/2021 06:39*	WG1780361
(S) Toluene-d8	*103*			*80.0-120*		*12/01/2021 01:27*	WG1782067
(S) 4-Bromofluorobenzene	*110*			*77.0-126*		*11/27/2021 06:39*	WG1780361
(S) 4-Bromofluorobenzene	*109*			*77.0-126*		*12/01/2021 01:27*	WG1782067
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/27/2021 06:39*	WG1780361
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*12/01/2021 01:27*	WG1782067

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/29/2021 13:36	WG1780650
(S) Toluene-d8	*100*			*77.0-127*		*11/29/2021 13:36*	WG1780650

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	U		0.300	4.00	1	12/10/2021 18:17	WG1789817

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/28/2021 13:03	WG1780831
Acrolein	U		2.54	50.0	1	11/28/2021 13:03	WG1780831
Acrylonitrile	U		0.671	10.0	1	11/28/2021 13:03	WG1780831
Benzene	U		0.0941	1.00	1	11/28/2021 13:03	WG1780831
Bromobenzene	U		0.118	1.00	1	11/28/2021 13:03	WG1780831
Bromodichloromethane	U		0.136	1.00	1	11/28/2021 13:03	WG1780831
Bromoform	U		0.129	1.00	1	11/28/2021 13:03	WG1780831
Bromomethane	U		0.605	5.00	1	11/28/2021 13:03	WG1780831
1,3-Butadiene	U		0.299	2.00	1	11/28/2021 13:03	WG1780831
n-Butylbenzene	U		0.157	1.00	1	11/28/2021 13:03	WG1780831
sec-Butylbenzene	U		0.125	1.00	1	11/28/2021 13:03	WG1780831
tert-Butylbenzene	U		0.127	1.00	1	11/28/2021 13:03	WG1780831
Carbon tetrachloride	U		0.128	1.00	1	11/28/2021 13:03	WG1780831
Carbon disulfide	U		0.0962	1.00	1	11/28/2021 13:03	WG1780831
Chlorobenzene	U		0.116	1.00	1	11/28/2021 13:03	WG1780831
Chlorodibromomethane	U		0.140	1.00	1	11/28/2021 13:03	WG1780831
Chloroethane	U		0.192	5.00	1	11/28/2021 13:03	WG1780831
Chloroform	U		0.111	5.00	1	11/28/2021 13:03	WG1780831
Chloromethane	U		0.960	2.50	1	11/28/2021 13:03	WG1780831
Cyclohexane	U		0.188	1.00	1	11/28/2021 13:03	WG1780831
2-Chlorotoluene	U		0.106	1.00	1	11/28/2021 13:03	WG1780831
4-Chlorotoluene	U		0.114	1.00	1	11/28/2021 13:03	WG1780831
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2021 13:03	WG1780831
1,2-Dibromoethane	U		0.126	1.00	1	11/28/2021 13:03	WG1780831
Dibromomethane	U		0.122	1.00	1	11/28/2021 13:03	WG1780831
1,2-Dichlorobenzene	U		0.107	1.00	1	11/28/2021 13:03	WG1780831
1,3-Dichlorobenzene	U		0.110	1.00	1	11/28/2021 13:03	WG1780831
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2021 13:03	WG1780831
Dichlorodifluoromethane	U		0.374	5.00	1	11/28/2021 13:03	WG1780831
1,1-Dichloroethane	U		0.100	1.00	1	11/28/2021 13:03	WG1780831
1,2-Dichloroethane	U		0.0819	1.00	1	11/28/2021 13:03	WG1780831
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2021 13:03	WG1780831
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/28/2021 13:03	WG1780831
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/28/2021 13:03	WG1780831
1,2-Dichloropropane	U		0.149	1.00	1	11/28/2021 13:03	WG1780831
1,1-Dichloropropene	U		0.142	1.00	1	11/28/2021 13:03	WG1780831
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2021 13:03	WG1780831
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/28/2021 13:03	WG1780831
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2021 13:03	WG1780831
2,2-Dichloropropane	U		0.161	1.00	1	11/28/2021 13:03	WG1780831
Dicyclopentadiene	U		0.253	1.00	1	11/28/2021 13:03	WG1780831
Di-isopropyl ether	U		0.105	1.00	1	11/28/2021 13:03	WG1780831
Ethylbenzene	U		0.137	1.00	1	11/28/2021 13:03	WG1780831
4-Ethyltoluene	U		0.208	1.00	1	11/28/2021 13:03	WG1780831
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2021 13:03	WG1780831
n-Hexane	U		0.749	10.0	1	11/28/2021 13:03	WG1780831
Isopropylbenzene	U		0.105	1.00	1	11/28/2021 13:03	WG1780831
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2021 13:03	WG1780831
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2021 13:03	WG1780831
Methyl Cyclohexane	U		0.660	1.00	1	11/28/2021 13:03	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	11/28/2021 13:03	WG1780831
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2021 13:03	WG1780831
Methyl tert-butyl ether	U		0.101	1.00	1	11/28/2021 13:03	WG1780831
Naphthalene	U		1.00	5.00	1	11/28/2021 13:03	WG1780831
Propene	U		0.936	2.50	1	11/28/2021 13:03	WG1780831
n-Propylbenzene	U		0.0993	1.00	1	11/28/2021 13:03	WG1780831
Styrene	U		0.118	1.00	1	11/28/2021 13:03	WG1780831
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/28/2021 13:03	WG1780831
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2021 13:03	WG1780831
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/28/2021 13:03	WG1780831
Tetrachloroethene	U		0.300	1.00	1	11/28/2021 13:03	WG1780831
Toluene	U		0.278	1.00	1	11/28/2021 13:03	WG1780831
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2021 13:03	WG1780831
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2021 13:03	WG1780831
1,1,1-Trichloroethane	U		0.149	1.00	1	11/28/2021 13:03	WG1780831
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2021 13:03	WG1780831
Trichloroethene	U		0.190	1.00	1	11/28/2021 13:03	WG1780831
Trichlorofluoromethane	U		0.160	5.00	1	11/28/2021 13:03	WG1780831
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2021 13:03	WG1780831
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/28/2021 13:03	WG1780831
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/28/2021 13:03	WG1780831
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/28/2021 13:03	WG1780831
Vinyl chloride	U		0.234	1.00	1	11/28/2021 13:03	WG1780831
Xylenes, Total	U		0.174	3.00	1	11/28/2021 13:03	WG1780831
(S) Toluene-d8	*103*			*80.0-120*		*11/28/2021 13:03*	WG1780831
(S) 4-Bromofluorobenzene	*99.5*			*77.0-126*		*11/28/2021 13:03*	WG1780831
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/28/2021 13:03*	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/26/2021 17:33	WG1780446
(S) Toluene-d8	*93.5*			*77.0-127*		*11/26/2021 17:33*	WG1780446

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	161	M3	3.00	40.0	10	12/10/2021 19:14	WG1784397

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.3	50.0	1	11/28/2021 13:24	WG1780831
Acrolein	U	R5	2.54	50.0	1	11/28/2021 13:24	WG1780831
Acrylonitrile	U		0.671	10.0	1	11/28/2021 13:24	WG1780831
Benzene	U	R5	0.0941	1.00	1	11/28/2021 13:24	WG1780831
Bromobenzene	U	R5	0.118	1.00	1	11/28/2021 13:24	WG1780831
Bromodichloromethane	U	R5	0.136	1.00	1	11/28/2021 13:24	WG1780831
Bromoform	U		0.129	1.00	1	11/28/2021 13:24	WG1780831
Bromomethane	U	R5	0.605	5.00	1	11/28/2021 13:24	WG1780831
1,3-Butadiene	U		0.299	2.00	1	11/28/2021 13:24	WG1780831
n-Butylbenzene	U		0.157	1.00	1	11/28/2021 13:24	WG1780831
sec-Butylbenzene	U	R5	0.125	1.00	1	11/28/2021 13:24	WG1780831
tert-Butylbenzene	U	R5	0.127	1.00	1	11/28/2021 13:24	WG1780831
Carbon tetrachloride	U	R5	0.128	1.00	1	11/28/2021 13:24	WG1780831
Carbon disulfide	U	R5	0.0962	1.00	1	11/28/2021 13:24	WG1780831
Chlorobenzene	U		0.116	1.00	1	11/28/2021 13:24	WG1780831
Chlorodibromomethane	U		0.140	1.00	1	11/28/2021 13:24	WG1780831
Chloroethane	U	R5	0.192	5.00	1	11/28/2021 13:24	WG1780831
Chloroform	U	R5	0.111	5.00	1	11/28/2021 13:24	WG1780831
Chloromethane	U	R5	0.960	2.50	1	11/28/2021 13:24	WG1780831
Cyclohexane	U	R5	0.188	1.00	1	11/28/2021 13:24	WG1780831
2-Chlorotoluene	U	R5	0.106	1.00	1	11/28/2021 13:24	WG1780831
4-Chlorotoluene	U	R5	0.114	1.00	1	11/28/2021 13:24	WG1780831
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2021 13:24	WG1780831
1,2-Dibromoethane	U	R5	0.126	1.00	1	11/28/2021 13:24	WG1780831
Dibromomethane	U		0.122	1.00	1	11/28/2021 13:24	WG1780831
1,2-Dichlorobenzene	U	R5	0.107	1.00	1	11/28/2021 13:24	WG1780831
1,3-Dichlorobenzene	U	R5	0.110	1.00	1	11/28/2021 13:24	WG1780831
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2021 13:24	WG1780831
Dichlorodifluoromethane	U	R5	0.374	5.00	1	11/28/2021 13:24	WG1780831
1,1-Dichloroethane	U	R5	0.100	1.00	1	11/28/2021 13:24	WG1780831
1,2-Dichloroethane	U	R5	0.0819	1.00	1	11/28/2021 13:24	WG1780831
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2021 13:24	WG1780831
cis-1,2-Dichloroethene	U	R5	0.126	1.00	1	11/28/2021 13:24	WG1780831
trans-1,2-Dichloroethene	U	R5	0.149	1.00	1	11/28/2021 13:24	WG1780831
1,2-Dichloropropane	U	R5	0.149	1.00	1	11/28/2021 13:24	WG1780831
1,1-Dichloropropene	U	R5	0.142	1.00	1	11/28/2021 13:24	WG1780831
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2021 13:24	WG1780831
cis-1,3-Dichloropropene	U	R5	0.111	1.00	1	11/28/2021 13:24	WG1780831
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2021 13:24	WG1780831
2,2-Dichloropropane	U	R5	0.161	1.00	1	11/28/2021 13:24	WG1780831
Dicyclopentadiene	U	M2 R5	0.253	1.00	1	11/28/2021 13:24	WG1780831
Di-isopropyl ether	U	R5	0.105	1.00	1	11/28/2021 13:24	WG1780831
Ethylbenzene	U		0.137	1.00	1	11/28/2021 13:24	WG1780831
4-Ethyltoluene	U	R5	0.208	1.00	1	11/28/2021 13:24	WG1780831
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2021 13:24	WG1780831
n-Hexane	U		0.749	10.0	1	11/28/2021 13:24	WG1780831
Isopropylbenzene	U	R5	0.105	1.00	1	11/28/2021 13:24	WG1780831
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2021 13:24	WG1780831
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2021 13:24	WG1780831
Methyl Cyclohexane	U	R5	0.660	1.00	1	11/28/2021 13:24	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U	R5	0.430	5.00	1	11/28/2021 13:24	WG1780831
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2021 13:24	WG1780831
Methyl tert-butyl ether	U	M2 R5	0.101	1.00	1	11/28/2021 13:24	WG1780831
Naphthalene	U		1.00	5.00	1	11/28/2021 13:24	WG1780831
Propene	U	R5	0.936	2.50	1	11/28/2021 13:24	WG1780831
n-Propylbenzene	U		0.0993	1.00	1	11/28/2021 13:24	WG1780831
Styrene	U	R5	0.118	1.00	1	11/28/2021 13:24	WG1780831
1,1,1,2-Tetrachloroethane	U	R5	0.147	1.00	1	11/28/2021 13:24	WG1780831
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2021 13:24	WG1780831
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/28/2021 13:24	WG1780831
Tetrachloroethene	U	R5	0.300	1.00	1	11/28/2021 13:24	WG1780831
Toluene	U	R5	0.278	1.00	1	11/28/2021 13:24	WG1780831
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2021 13:24	WG1780831
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2021 13:24	WG1780831
1,1,1-Trichloroethane	U	R5	0.149	1.00	1	11/28/2021 13:24	WG1780831
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2021 13:24	WG1780831
Trichloroethene	U	R5	0.190	1.00	1	11/28/2021 13:24	WG1780831
Trichlorofluoromethane	U	R5	0.160	5.00	1	11/28/2021 13:24	WG1780831
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2021 13:24	WG1780831
1,2,4-Trimethylbenzene	U	R5	0.322	1.00	1	11/28/2021 13:24	WG1780831
1,2,3-Trimethylbenzene	U	R5	0.104	1.00	1	11/28/2021 13:24	WG1780831
1,3,5-Trimethylbenzene	U	R5	0.104	1.00	1	11/28/2021 13:24	WG1780831
Vinyl chloride	U	R5	0.234	1.00	1	11/28/2021 13:24	WG1780831
Xylenes, Total	U	R5	0.174	3.00	1	11/28/2021 13:24	WG1780831
(S) Toluene-d8	*101*			*80.0-120*		*11/28/2021 13:24*	WG1780831
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*11/28/2021 13:24*	WG1780831
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/28/2021 13:24*	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/26/2021 17:53	WG1780446
(S) Toluene-d8	*99.6*			*77.0-127*		*11/26/2021 17:53*	WG1780446

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	10.5	R8	0.300	4.00	1	12/10/2021 21:36	WG1789817

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/28/2021 13:44	WG1780831
Acrolein	U		2.54	50.0	1	11/28/2021 13:44	WG1780831
Acrylonitrile	U		0.671	10.0	1	11/28/2021 13:44	WG1780831
Benzene	0.122	E4	0.0941	1.00	1	11/28/2021 13:44	WG1780831
Bromobenzene	U		0.118	1.00	1	11/28/2021 13:44	WG1780831
Bromodichloromethane	U		0.136	1.00	1	11/28/2021 13:44	WG1780831
Bromoform	U		0.129	1.00	1	11/28/2021 13:44	WG1780831
Bromomethane	U		0.605	5.00	1	11/28/2021 13:44	WG1780831
1,3-Butadiene	U		0.299	2.00	1	11/28/2021 13:44	WG1780831
n-Butylbenzene	U		0.157	1.00	1	11/28/2021 13:44	WG1780831
sec-Butylbenzene	U		0.125	1.00	1	11/28/2021 13:44	WG1780831
tert-Butylbenzene	U		0.127	1.00	1	11/28/2021 13:44	WG1780831
Carbon tetrachloride	U		0.128	1.00	1	11/28/2021 13:44	WG1780831
Carbon disulfide	U		0.0962	1.00	1	11/28/2021 13:44	WG1780831
Chlorobenzene	U		0.116	1.00	1	11/28/2021 13:44	WG1780831
Chlorodibromomethane	U		0.140	1.00	1	11/28/2021 13:44	WG1780831
Chloroethane	U		0.192	5.00	1	11/28/2021 13:44	WG1780831
Chloroform	U		0.111	5.00	1	11/28/2021 13:44	WG1780831
Chloromethane	U		0.960	2.50	1	11/28/2021 13:44	WG1780831
Cyclohexane	U		0.188	1.00	1	11/28/2021 13:44	WG1780831
2-Chlorotoluene	U		0.106	1.00	1	11/28/2021 13:44	WG1780831
4-Chlorotoluene	U		0.114	1.00	1	11/28/2021 13:44	WG1780831
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2021 13:44	WG1780831
1,2-Dibromoethane	U		0.126	1.00	1	11/28/2021 13:44	WG1780831
Dibromomethane	U		0.122	1.00	1	11/28/2021 13:44	WG1780831
1,2-Dichlorobenzene	U		0.107	1.00	1	11/28/2021 13:44	WG1780831
1,3-Dichlorobenzene	U		0.110	1.00	1	11/28/2021 13:44	WG1780831
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2021 13:44	WG1780831
Dichlorodifluoromethane	U		0.374	5.00	1	11/28/2021 13:44	WG1780831
1,1-Dichloroethane	U		0.100	1.00	1	11/28/2021 13:44	WG1780831
1,2-Dichloroethane	U		0.0819	1.00	1	11/28/2021 13:44	WG1780831
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2021 13:44	WG1780831
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/28/2021 13:44	WG1780831
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/28/2021 13:44	WG1780831
1,2-Dichloropropane	U		0.149	1.00	1	11/28/2021 13:44	WG1780831
1,1-Dichloropropene	U		0.142	1.00	1	11/28/2021 13:44	WG1780831
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2021 13:44	WG1780831
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/28/2021 13:44	WG1780831
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2021 13:44	WG1780831
2,2-Dichloropropane	U		0.161	1.00	1	11/28/2021 13:44	WG1780831
Dicyclopentadiene	U		0.253	1.00	1	11/28/2021 13:44	WG1780831
Di-isopropyl ether	U		0.105	1.00	1	11/28/2021 13:44	WG1780831
Ethylbenzene	U		0.137	1.00	1	11/28/2021 13:44	WG1780831
4-Ethyltoluene	U		0.208	1.00	1	11/28/2021 13:44	WG1780831
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2021 13:44	WG1780831
n-Hexane	U		0.749	10.0	1	11/28/2021 13:44	WG1780831
Isopropylbenzene	0.186	E4	0.105	1.00	1	11/28/2021 13:44	WG1780831
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2021 13:44	WG1780831
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2021 13:44	WG1780831
Methyl Cyclohexane	U		0.660	1.00	1	11/28/2021 13:44	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	11/28/2021 13:44	WG1780831
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2021 13:44	WG1780831
Methyl tert-butyl ether	U		0.101	1.00	1	11/28/2021 13:44	WG1780831
Naphthalene	U		1.00	5.00	1	11/28/2021 13:44	WG1780831
Propene	U		0.936	2.50	1	11/28/2021 13:44	WG1780831
n-Propylbenzene	U		0.0993	1.00	1	11/28/2021 13:44	WG1780831
Styrene	U		0.118	1.00	1	11/28/2021 13:44	WG1780831
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/28/2021 13:44	WG1780831
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2021 13:44	WG1780831
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/28/2021 13:44	WG1780831
Tetrachloroethene	U		0.300	1.00	1	11/28/2021 13:44	WG1780831
Toluene	1.19		0.278	1.00	1	11/28/2021 13:44	WG1780831
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2021 13:44	WG1780831
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2021 13:44	WG1780831
1,1,1-Trichloroethane	U		0.149	1.00	1	11/28/2021 13:44	WG1780831
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2021 13:44	WG1780831
Trichloroethene	U		0.190	1.00	1	11/28/2021 13:44	WG1780831
Trichlorofluoromethane	U		0.160	5.00	1	11/28/2021 13:44	WG1780831
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2021 13:44	WG1780831
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/28/2021 13:44	WG1780831
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/28/2021 13:44	WG1780831
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/28/2021 13:44	WG1780831
Vinyl chloride	U		0.234	1.00	1	11/28/2021 13:44	WG1780831
Xylenes, Total	0.253	E4	0.174	3.00	1	11/28/2021 13:44	WG1780831
(S) Toluene-d8	*101*			*80.0-120*		*11/28/2021 13:44*	WG1780831
(S) 4-Bromofluorobenzene	*98.6*			*77.0-126*		*11/28/2021 13:44*	WG1780831
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/28/2021 13:44*	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/26/2021 18:12	WG1780446
(S) Toluene-d8	*100*			*77.0-127*		*11/26/2021 18:12*	WG1780446

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

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	14.8		0.300	4.00	1	12/10/2021 22:33	WG1789817

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/28/2021 14:05	WG1780831
Acrolein	U		2.54	50.0	1	11/28/2021 14:05	WG1780831
Acrylonitrile	U		0.671	10.0	1	11/28/2021 14:05	WG1780831
Benzene	U		0.0941	1.00	1	11/28/2021 14:05	WG1780831
Bromobenzene	U		0.118	1.00	1	11/28/2021 14:05	WG1780831
Bromodichloromethane	U		0.136	1.00	1	11/28/2021 14:05	WG1780831
Bromoform	U		0.129	1.00	1	11/28/2021 14:05	WG1780831
Bromomethane	U		0.605	5.00	1	11/28/2021 14:05	WG1780831
1,3-Butadiene	U		0.299	2.00	1	11/28/2021 14:05	WG1780831
n-Butylbenzene	U		0.157	1.00	1	11/28/2021 14:05	WG1780831
sec-Butylbenzene	U		0.125	1.00	1	11/28/2021 14:05	WG1780831
tert-Butylbenzene	U		0.127	1.00	1	11/28/2021 14:05	WG1780831
Carbon tetrachloride	U		0.128	1.00	1	11/28/2021 14:05	WG1780831
Carbon disulfide	U		0.0962	1.00	1	11/28/2021 14:05	WG1780831
Chlorobenzene	U		0.116	1.00	1	11/28/2021 14:05	WG1780831
Chlorodibromomethane	U		0.140	1.00	1	11/28/2021 14:05	WG1780831
Chloroethane	U		0.192	5.00	1	11/28/2021 14:05	WG1780831
Chloroform	U		0.111	5.00	1	11/28/2021 14:05	WG1780831
Chloromethane	U		0.960	2.50	1	11/28/2021 14:05	WG1780831
Cyclohexane	U		0.188	1.00	1	11/28/2021 14:05	WG1780831
2-Chlorotoluene	U		0.106	1.00	1	11/28/2021 14:05	WG1780831
4-Chlorotoluene	U		0.114	1.00	1	11/28/2021 14:05	WG1780831
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2021 14:05	WG1780831
1,2-Dibromoethane	U		0.126	1.00	1	11/28/2021 14:05	WG1780831
Dibromomethane	U		0.122	1.00	1	11/28/2021 14:05	WG1780831
1,2-Dichlorobenzene	U		0.107	1.00	1	11/28/2021 14:05	WG1780831
1,3-Dichlorobenzene	U		0.110	1.00	1	11/28/2021 14:05	WG1780831
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2021 14:05	WG1780831
Dichlorodifluoromethane	U		0.374	5.00	1	11/28/2021 14:05	WG1780831
1,1-Dichloroethane	U		0.100	1.00	1	11/28/2021 14:05	WG1780831
1,2-Dichloroethane	U		0.0819	1.00	1	11/28/2021 14:05	WG1780831
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2021 14:05	WG1780831
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/28/2021 14:05	WG1780831
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/28/2021 14:05	WG1780831
1,2-Dichloropropane	U		0.149	1.00	1	11/28/2021 14:05	WG1780831
1,1-Dichloropropene	U		0.142	1.00	1	11/28/2021 14:05	WG1780831
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2021 14:05	WG1780831
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/28/2021 14:05	WG1780831
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2021 14:05	WG1780831
2,2-Dichloropropane	U		0.161	1.00	1	11/28/2021 14:05	WG1780831
Dicyclopentadiene	U		0.253	1.00	1	11/28/2021 14:05	WG1780831
Di-isopropyl ether	U		0.105	1.00	1	11/28/2021 14:05	WG1780831
Ethylbenzene	U		0.137	1.00	1	11/28/2021 14:05	WG1780831
4-Ethyltoluene	U		0.208	1.00	1	11/28/2021 14:05	WG1780831
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2021 14:05	WG1780831
n-Hexane	U		0.749	10.0	1	11/28/2021 14:05	WG1780831
Isopropylbenzene	U		0.105	1.00	1	11/28/2021 14:05	WG1780831
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2021 14:05	WG1780831
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2021 14:05	WG1780831
Methyl Cyclohexane	U		0.660	1.00	1	11/28/2021 14:05	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	11/28/2021 14:05	WG1780831
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2021 14:05	WG1780831
Methyl tert-butyl ether	U		0.101	1.00	1	11/28/2021 14:05	WG1780831
Naphthalene	U		1.00	5.00	1	11/28/2021 14:05	WG1780831
Propene	U		0.936	2.50	1	11/28/2021 14:05	WG1780831
n-Propylbenzene	U		0.0993	1.00	1	11/28/2021 14:05	WG1780831
Styrene	U		0.118	1.00	1	11/28/2021 14:05	WG1780831
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/28/2021 14:05	WG1780831
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2021 14:05	WG1780831
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/28/2021 14:05	WG1780831
Tetrachloroethene	U		0.300	1.00	1	11/28/2021 14:05	WG1780831
Toluene	U		0.278	1.00	1	11/28/2021 14:05	WG1780831
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2021 14:05	WG1780831
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2021 14:05	WG1780831
1,1,1-Trichloroethane	U		0.149	1.00	1	11/28/2021 14:05	WG1780831
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2021 14:05	WG1780831
Trichloroethene	U		0.190	1.00	1	11/28/2021 14:05	WG1780831
Trichlorofluoromethane	U		0.160	5.00	1	11/28/2021 14:05	WG1780831
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2021 14:05	WG1780831
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/28/2021 14:05	WG1780831
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/28/2021 14:05	WG1780831
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/28/2021 14:05	WG1780831
Vinyl chloride	U		0.234	1.00	1	11/28/2021 14:05	WG1780831
Xylenes, Total	U		0.174	3.00	1	11/28/2021 14:05	WG1780831
(S) Toluene-d8	*105*			*80.0-120*		*11/28/2021 14:05*	WG1780831
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*11/28/2021 14:05*	WG1780831
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/28/2021 14:05*	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	U		0.597	3.00	1	11/26/2021 18:32	WG1780446
(S) Toluene-d8	*100*			*77.0-127*		*11/26/2021 18:32*	WG1780446

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	11/28/2021 12:42	WG1780831
Acrolein	U		2.54	50.0	1	11/28/2021 12:42	WG1780831
Acrylonitrile	U		0.671	10.0	1	11/28/2021 12:42	WG1780831
Benzene	U		0.0941	1.00	1	11/28/2021 12:42	WG1780831
Bromobenzene	U		0.118	1.00	1	11/28/2021 12:42	WG1780831
Bromodichloromethane	U		0.136	1.00	1	11/28/2021 12:42	WG1780831
Bromoform	U		0.129	1.00	1	11/28/2021 12:42	WG1780831
Bromomethane	U		0.605	5.00	1	11/28/2021 12:42	WG1780831
1,3-Butadiene	U		0.299	2.00	1	11/28/2021 12:42	WG1780831
n-Butylbenzene	U		0.157	1.00	1	11/28/2021 12:42	WG1780831
sec-Butylbenzene	U		0.125	1.00	1	11/28/2021 12:42	WG1780831
tert-Butylbenzene	U		0.127	1.00	1	11/28/2021 12:42	WG1780831
Carbon tetrachloride	U		0.128	1.00	1	11/28/2021 12:42	WG1780831
Carbon disulfide	U		0.0962	1.00	1	11/28/2021 12:42	WG1780831
Chlorobenzene	U		0.116	1.00	1	11/28/2021 12:42	WG1780831
Chlorodibromomethane	U		0.140	1.00	1	11/28/2021 12:42	WG1780831
Chloroethane	U		0.192	5.00	1	11/28/2021 12:42	WG1780831
Chloroform	U		0.111	5.00	1	11/28/2021 12:42	WG1780831
Chloromethane	U		0.960	2.50	1	11/28/2021 12:42	WG1780831
Cyclohexane	U		0.188	1.00	1	11/28/2021 12:42	WG1780831
2-Chlorotoluene	U		0.106	1.00	1	11/28/2021 12:42	WG1780831
4-Chlorotoluene	U		0.114	1.00	1	11/28/2021 12:42	WG1780831
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	11/28/2021 12:42	WG1780831
1,2-Dibromoethane	U		0.126	1.00	1	11/28/2021 12:42	WG1780831
Dibromomethane	U		0.122	1.00	1	11/28/2021 12:42	WG1780831
1,2-Dichlorobenzene	U		0.107	1.00	1	11/28/2021 12:42	WG1780831
1,3-Dichlorobenzene	U		0.110	1.00	1	11/28/2021 12:42	WG1780831
1,4-Dichlorobenzene	U		0.120	1.00	1	11/28/2021 12:42	WG1780831
Dichlorodifluoromethane	U		0.374	5.00	1	11/28/2021 12:42	WG1780831
1,1-Dichloroethane	U		0.100	1.00	1	11/28/2021 12:42	WG1780831
1,2-Dichloroethane	U		0.0819	1.00	1	11/28/2021 12:42	WG1780831
1,1-Dichloroethene	U		0.188	1.00	1	11/28/2021 12:42	WG1780831
cis-1,2-Dichloroethene	U		0.126	1.00	1	11/28/2021 12:42	WG1780831
trans-1,2-Dichloroethene	U		0.149	1.00	1	11/28/2021 12:42	WG1780831
1,2-Dichloropropane	U		0.149	1.00	1	11/28/2021 12:42	WG1780831
1,1-Dichloropropene	U		0.142	1.00	1	11/28/2021 12:42	WG1780831
1,3-Dichloropropane	U		0.110	1.00	1	11/28/2021 12:42	WG1780831
cis-1,3-Dichloropropene	U		0.111	1.00	1	11/28/2021 12:42	WG1780831
trans-1,3-Dichloropropene	U		0.118	1.00	1	11/28/2021 12:42	WG1780831
2,2-Dichloropropane	U		0.161	1.00	1	11/28/2021 12:42	WG1780831
Dicyclopentadiene	U		0.253	1.00	1	11/28/2021 12:42	WG1780831
Di-isopropyl ether	U		0.105	1.00	1	11/28/2021 12:42	WG1780831
Ethylbenzene	U		0.137	1.00	1	11/28/2021 12:42	WG1780831
4-Ethyltoluene	U		0.208	1.00	1	11/28/2021 12:42	WG1780831
Hexachloro-1,3-butadiene	U		0.337	1.00	1	11/28/2021 12:42	WG1780831
n-Hexane	U		0.749	10.0	1	11/28/2021 12:42	WG1780831
Isopropylbenzene	U		0.105	1.00	1	11/28/2021 12:42	WG1780831
p-Isopropyltoluene	U		0.120	1.00	1	11/28/2021 12:42	WG1780831
2-Butanone (MEK)	U		1.19	10.0	1	11/28/2021 12:42	WG1780831
Methyl Cyclohexane	U		0.660	1.00	1	11/28/2021 12:42	WG1780831
Methylene Chloride	U		0.430	5.00	1	11/28/2021 12:42	WG1780831
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	11/28/2021 12:42	WG1780831
Methyl tert-butyl ether	U		0.101	1.00	1	11/28/2021 12:42	WG1780831
Naphthalene	U		1.00	5.00	1	11/28/2021 12:42	WG1780831
Propene	U		0.936	2.50	1	11/28/2021 12:42	WG1780831
n-Propylbenzene	U		0.0993	1.00	1	11/28/2021 12:42	WG1780831

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Styrene	U		0.118	1.00	1	11/28/2021 12:42	WG1780831
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	11/28/2021 12:42	WG1780831
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	11/28/2021 12:42	WG1780831
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	11/28/2021 12:42	WG1780831
Tetrachloroethene	U		0.300	1.00	1	11/28/2021 12:42	WG1780831
Toluene	U		0.278	1.00	1	11/28/2021 12:42	WG1780831
1,2,3-Trichlorobenzene	U		0.230	1.00	1	11/28/2021 12:42	WG1780831
1,2,4-Trichlorobenzene	U		0.481	1.00	1	11/28/2021 12:42	WG1780831
1,1,1-Trichloroethane	U		0.149	1.00	1	11/28/2021 12:42	WG1780831
1,1,2-Trichloroethane	U		0.158	1.00	1	11/28/2021 12:42	WG1780831
Trichloroethene	U		0.190	1.00	1	11/28/2021 12:42	WG1780831
Trichlorofluoromethane	U		0.160	5.00	1	11/28/2021 12:42	WG1780831
1,2,3-Trichloropropane	U		0.237	2.50	1	11/28/2021 12:42	WG1780831
1,2,4-Trimethylbenzene	U		0.322	1.00	1	11/28/2021 12:42	WG1780831
1,2,3-Trimethylbenzene	U		0.104	1.00	1	11/28/2021 12:42	WG1780831
1,3,5-Trimethylbenzene	U		0.104	1.00	1	11/28/2021 12:42	WG1780831
Vinyl chloride	U		0.234	1.00	1	11/28/2021 12:42	WG1780831
Xylenes, Total	U		0.174	3.00	1	11/28/2021 12:42	WG1780831
(S) Toluene-d8	*101*			*80.0-120*		*11/28/2021 12:42*	WG1780831
(S) 4-Bromofluorobenzene	*97.6*			*77.0-126*		*11/28/2021 12:42*	WG1780831
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/28/2021 12:42*	WG1780831

QUALITY CONTROL SUMMARY

L1433723-03,04,05,06,07,11,12,13,14,15,16,17,18,19,20

Method Blank (MB)

(MB) R3738779-1 12/07/21 11:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

L1433723-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1433723-11 12/07/21 21:27 • (DUP) R3738779-3 12/07/21 22:51

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	U	U	1	0.000		15

L1433723-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1433723-20 12/08/21 05:22 • (DUP) R3738779-6 12/08/21 05:50

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	40.1	38.7	1	3.52		15

Laboratory Control Sample (LCS)

(LCS) R3738779-2 12/07/21 12:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	9.63	96.3	90.0-110	

L1433723-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433723-19 12/08/21 03:02 • (MS) R3738779-4 12/08/21 04:26 • (MSD) R3738779-5 12/08/21 04:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Perchlorate	10.0	U	9.80	11.5	98.0	115	1	80.0-120		R5	16.1	15

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

Method Blank (MB)

(MB) R3740926-1 12/10/21 15:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Perchlorate	U		0.300	4.00

L1434064-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1434064-01 12/10/21 23:58 • (DUP) R3740926-5 12/11/21 00:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Perchlorate	8.95	8.65	1	3.37		15

Laboratory Control Sample (LCS)

(LCS) R3740926-2 12/10/21 16:52

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Perchlorate	10.0	9.68	96.8	90.0-110	

L1433723-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433723-22 12/10/21 19:14 • (MS) R3740926-3 12/10/21 19:43 • (MSD) R3740926-4 12/10/21 20:11

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Perchlorate	10.0	161	167	164	58.5	26.7	10	80.0-120	M3	M3	1.93	15

QUALITY CONTROL SUMMARY

L1433723-01,02,08,10

Method Blank (MB)

(MB) R3738792-2 12/07/21 12:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

Laboratory Control Sample (LCS)

(LCS) R3738792-1 12/07/21 12:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	9.63	96.3	90.0-110	

L1433723-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1433723-01 12/07/21 14:29 • (MS) R3738792-3 12/07/21 14:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	6.41	15.5	90.9	1	80.0-120	

L1433723-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1433723-02 12/07/21 15:24 • (MS) R3738792-4 12/07/21 15:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	6.59	16.0	93.7	1	80.0-120	

L1433723-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1433723-08 12/07/21 19:36 • (MS) R3738792-5 12/07/21 20:03

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	9.79	97.9	1	80.0-120	

L1433723-10 Original Sample (OS) • Matrix Spike (MS)

(OS) L1433723-10 12/07/21 20:31 • (MS) R3738792-6 12/07/21 20:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	9.90	99.0	1	80.0-120	

QUALITY CONTROL SUMMARY

L1433723-21,23,24

Method Blank (MB)

(MB) R3740927-2 12/10/21 17:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

L1433723-23 Original Sample (OS) • Duplicate (DUP)

(OS) L1433723-23 12/10/21 21:36 • (DUP) R3740927-4 12/10/21 22:05

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	10.5	12.3	1	16.5	R8	15

Laboratory Control Sample (LCS)

(LCS) R3740927-1 12/10/21 16:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	9.68	96.8	90.0-110	

L1433723-21 Original Sample (OS) • Matrix Spike (MS)

(OS) L1433723-21 12/10/21 18:17 • (MS) R3740927-3 12/10/21 18:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.7	107	1	80.0-120	

L1433723-23 Original Sample (OS) • Matrix Spike (MS)

(OS) L1433723-23 12/10/21 21:36 • (MS) R3740927-5 12/11/21 08:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	10.5	20.9	105	1	80.0-120	

L1434171-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-03 12/11/21 00:55 • (MS) R3740927-6 12/11/21 09:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	2.27	13.0	107	1	80.0-120	

L1434171-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-04 12/11/21 01:24 • (MS) R3740927-7 12/11/21 10:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	12.7	127	1	80.0-120	M1

L1434171-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-05 12/11/21 01:52 • (MS) R3740927-8 12/11/21 10:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	3.55	13.9	104	1	80.0-120	

L1434171-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-06 12/11/21 03:17 • (MS) R3740927-9 12/11/21 11:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	3.26	14.6	113	1	80.0-120	

L1434171-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-07 12/11/21 03:46 • (MS) R3740927-10 12/11/21 11:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	3.46	14.2	107	1	80.0-120	

L1434171-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-08 12/11/21 04:14 • (MS) R3740927-11 12/11/21 12:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	3.99	14.7	107	1	80.0-120	

L1434171-09 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-09 12/11/21 04:42 • (MS) R3740927-12 12/11/21 12:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	3.31	13.8	105	1	80.0-120	

L1434171-10 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-10 12/11/21 05:11 • (MS) R3740927-13 12/11/21 13:14

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	3.34	13.8	105	1	80.0-120	

L1434171-100 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-100 12/11/21 05:39 • (MS) R3740927-14 12/11/21 14:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	3.15	13.6	105	1	80.0-120	

L1434171-102 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-102 12/11/21 06:36 • (MS) R3740927-15 12/11/21 15:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	2.86	13.2	103	1	80.0-120	

L1434171-103 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-103 12/11/21 07:05 • (MS) R3740927-16 12/11/21 15:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	0.999	11.7	107	1	80.0-120	

L1434171-104 Original Sample (OS) • Matrix Spike (MS)

(OS) L1434171-104 12/11/21 07:33 • (MS) R3740927-17 12/11/21 16:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	7.99	18.5	105	1	80.0-120	

Method Blank (MB)

(MB) R3735465-3 11/26/21 23:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
1,3-Butadiene	U		0.299	2.00
n-Butylbenzene	0.197	E4	0.157	1.00
sec-Butylbenzene	0.163	E4	0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
Cyclohexane	U		0.188	1.00
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00

Method Blank (MB)

(MB) R3735465-3 11/26/21 23:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dicyclopentadiene	U		0.253	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
4-Ethyltoluene	U		0.208	1.00
Hexachloro-1,3-butadiene	0.584	E4	0.337	1.00
n-Hexane	U		0.749	10.0
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	0.124	E4	0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methyl Cyclohexane	U		0.660	1.00
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
Propene	U		0.936	2.50
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
1,2,3-Trichlorobenzene	0.520	E4	0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,3-Trimethylbenzene	U		0.104	1.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*110*			*80.0-120*
(S) 4-Bromofluorobenzene	*111*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

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

(LCS) R3735465-1 11/26/21 22:51 • (LCSD) R3735465-2 11/26/21 23:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	24.0	26.7	96.0	107	19.0-160			10.7	27
Acrolein	25.0	28.9	20.4	116	81.6	30.0-160		R7	34.5	26
Acrylonitrile	25.0	26.0	26.3	104	105	55.0-149			1.15	20
Benzene	5.00	5.08	5.32	102	106	70.0-123			4.62	20
Bromobenzene	5.00	4.59	4.91	91.8	98.2	73.0-121			6.74	20
Bromodichloromethane	5.00	5.33	5.42	107	108	75.0-120			1.67	20
Bromoform	5.00	5.05	5.14	101	103	68.0-132			1.77	20
Bromomethane	5.00	4.85	5.21	97.0	104	30.0-160			7.16	25
1,3-Butadiene	5.00	5.38	6.33	108	127	45.0-147			16.2	20
n-Butylbenzene	5.00	4.68	5.44	93.6	109	73.0-125			15.0	20
sec-Butylbenzene	5.00	4.59	5.51	91.8	110	75.0-125			18.2	20
tert-Butylbenzene	5.00	4.92	5.47	98.4	109	76.0-124			10.6	20
Carbon disulfide	5.00	5.20	5.21	104	104	61.0-128			0.192	20
Carbon tetrachloride	5.00	5.38	5.89	108	118	68.0-126			9.05	20
Chlorobenzene	5.00	5.02	5.58	100	112	80.0-121			10.6	20
Chlorodibromomethane	5.00	5.02	5.28	100	106	77.0-125			5.05	20
Chloroethane	5.00	4.97	5.42	99.4	108	47.0-150			8.66	20
Chloroform	5.00	5.16	5.47	103	109	73.0-120			5.83	20
Chloromethane	5.00	5.96	5.04	119	101	41.0-142			16.7	20
Cyclohexane	5.00	5.03	5.53	101	111	71.0-124			9.47	20
2-Chlorotoluene	5.00	4.58	4.95	91.6	99.0	76.0-123			7.76	20
4-Chlorotoluene	5.00	4.77	4.91	95.4	98.2	75.0-122			2.89	20
1,2-Dibromo-3-Chloropropane	5.00	4.89	5.36	97.8	107	58.0-134			9.17	20
1,2-Dibromoethane	5.00	5.33	5.21	107	104	80.0-122			2.28	20
Dibromomethane	5.00	5.40	5.43	108	109	80.0-120			0.554	20
1,2-Dichlorobenzene	5.00	5.21	5.41	104	108	79.0-121			3.77	20
1,3-Dichlorobenzene	5.00	4.84	5.36	96.8	107	79.0-120			10.2	20
1,4-Dichlorobenzene	5.00	4.59	4.90	91.8	98.0	79.0-120			6.53	20
Dichlorodifluoromethane	5.00	5.65	6.12	113	122	51.0-149			7.99	20
1,1-Dichloroethane	5.00	4.94	5.51	98.8	110	70.0-126			10.9	20
1,2-Dichloroethane	5.00	4.99	5.19	99.8	104	70.0-128			3.93	20
1,1-Dichloroethene	5.00	5.04	5.71	101	114	71.0-124			12.5	20
cis-1,2-Dichloroethene	5.00	5.01	5.62	100	112	73.0-120			11.5	20
trans-1,2-Dichloroethene	5.00	5.02	5.82	100	116	73.0-120			14.8	20
1,2-Dichloropropane	5.00	4.96	5.24	99.2	105	77.0-125			5.49	20
1,1-Dichloropropene	5.00	5.31	5.74	106	115	74.0-126			7.78	20
1,3-Dichloropropane	5.00	5.20	5.19	104	104	80.0-120			0.192	20
cis-1,3-Dichloropropene	5.00	5.38	4.89	108	97.8	80.0-123			9.54	20
trans-1,3-Dichloropropene	5.00	4.88	4.91	97.6	98.2	78.0-124			0.613	20
2,2-Dichloropropane	5.00	5.55	3.91	111	78.2	58.0-130		R7	34.7	20

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

(LCS) R3735465-1 11/26/21 22:51 • (LCSD) R3735465-2 11/26/21 23:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dicyclopentadiene	5.00	4.75	5.50	95.0	110	74.0-126			14.6	20
Di-isopropyl ether	5.00	5.40	5.69	108	114	58.0-138			5.23	20
Ethylbenzene	5.00	5.01	5.67	100	113	79.0-123			12.4	20
4-Ethyltoluene	5.00	4.74	5.39	94.8	108	74.0-127			12.8	20
Hexachloro-1,3-butadiene	5.00	5.55	6.02	111	120	54.0-138			8.12	20
n-Hexane	5.00	4.96	4.54	99.2	90.8	57.0-133			8.84	20
Isopropylbenzene	5.00	5.09	5.78	102	116	76.0-127			12.7	20
p-Isopropyltoluene	5.00	4.81	5.56	96.2	111	76.0-125			14.5	20
2-Butanone (MEK)	25.0	25.5	27.3	102	109	44.0-160			6.82	20
Methyl Cyclohexane	5.00	4.75	5.33	95.0	107	68.0-126			11.5	20
Methylene Chloride	5.00	5.79	6.13	116	123	67.0-120		L1	5.70	20
4-Methyl-2-pentanone (MIBK)	25.0	25.1	26.5	100	106	68.0-142			5.43	20
Methyl tert-butyl ether	5.00	5.41	5.68	108	114	68.0-125			4.87	20
Naphthalene	5.00	5.22	5.77	104	115	54.0-135			10.0	20
Propene	5.00	4.00	4.39	80.0	87.8	30.0-160			9.30	20
n-Propylbenzene	5.00	4.52	5.16	90.4	103	77.0-124			13.2	20
Styrene	5.00	4.92	5.51	98.4	110	73.0-130			11.3	20
1,1,1,2-Tetrachloroethane	5.00	5.21	5.48	104	110	75.0-125			5.05	20
1,1,2,2-Tetrachloroethane	5.00	4.98	4.20	99.6	84.0	65.0-130			17.0	20
Tetrachloroethene	5.00	4.77	5.78	95.4	116	72.0-132			19.1	20
Toluene	5.00	4.88	5.31	97.6	106	79.0-120			8.44	20
1,1,2-Trichlorotrifluoroethane	5.00	4.77	5.55	95.4	111	69.0-132			15.1	20
1,2,3-Trichlorobenzene	5.00	5.67	6.21	113	124	50.0-138			9.09	20
1,2,4-Trichlorobenzene	5.00	5.06	5.72	101	114	57.0-137			12.2	20
1,1,1-Trichloroethane	5.00	5.17	5.82	103	116	73.0-124			11.8	20
1,1,2-Trichloroethane	5.00	5.00	5.02	100	100	80.0-120			0.399	20
Trichloroethene	5.00	4.98	6.28	99.6	126	78.0-124		L1 R7	23.1	20
Trichlorofluoromethane	5.00	5.05	5.80	101	116	59.0-147			13.8	20
1,2,3-Trichloropropane	5.00	4.71	5.11	94.2	102	73.0-130			8.15	20
1,2,3-Trimethylbenzene	5.00	4.87	5.19	97.4	104	77.0-120			6.36	20
1,2,4-Trimethylbenzene	5.00	5.03	5.47	101	109	76.0-121			8.38	20
1,3,5-Trimethylbenzene	5.00	4.92	5.38	98.4	108	76.0-122			8.93	20
Vinyl chloride	5.00	4.80	5.36	96.0	107	67.0-131			11.0	20
Xylenes, Total	15.0	15.8	16.9	105	113	79.0-123			6.73	20
(S) Toluene-d8				*110*	*106*	*80.0-120*				
(S) 4-Bromofluorobenzene				*114*	*114*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*106*	*106*	*70.0-130*				

L1433723-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433723-19 11/27/21 06:19 • (MS) R3735465-4 11/27/21 06:59 • (MSD) R3735465-5 11/27/21 07:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	U	26.2	28.2	105	113	1	10.0-160			7.35	35
Acrolein	25.0	U	44.9	48.5	180	194	1	10.0-160	M1	M1	7.71	39
Acrylonitrile	25.0	U	29.2	30.8	117	123	1	21.0-160			5.33	32
Benzene	5.00	U	6.09	6.32	122	126	1	17.0-158			3.71	27
Bromobenzene	5.00	U	5.34	5.50	107	110	1	30.0-149			2.95	28
Bromodichloromethane	5.00	U	6.65	6.81	133	136	1	31.0-150			2.38	27
Bromoform	5.00	U	5.60	6.12	112	122	1	29.0-150			8.87	29
Bromomethane	5.00	U	6.37	6.37	127	127	1	10.0-160			0.000	38
1,3-Butadiene	5.00	U	7.64	7.08	153	142	1	10.0-160			7.61	22
n-Butylbenzene	5.00	U	5.68	6.35	114	127	1	31.0-150			11.1	30
sec-Butylbenzene	5.00	U	6.13	6.35	123	127	1	33.0-155			3.53	29
tert-Butylbenzene	5.00	U	6.20	6.49	124	130	1	34.0-153			4.57	28
Carbon disulfide	5.00	U	5.63	5.58	113	112	1	10.0-156			0.892	28
Carbon tetrachloride	5.00	U	7.43	7.20	149	144	1	23.0-159			3.14	28
Chlorobenzene	5.00	U	6.24	6.41	125	128	1	33.0-152			2.69	27
Chlorodibromomethane	5.00	U	6.18	6.21	124	124	1	37.0-149			0.484	27
Chloroethane	5.00	U	5.96	6.01	119	120	1	10.0-160			0.835	30
Chloroform	5.00	U	6.21	6.54	124	131	1	29.0-154			5.18	28
Chloromethane	5.00	U	6.06	6.27	121	125	1	10.0-160			3.41	29
Cyclohexane	5.00	U	6.37	6.11	127	122	1	19.0-160			4.17	23
2-Chlorotoluene	5.00	U	5.81	5.87	116	117	1	32.0-153			1.03	28
4-Chlorotoluene	5.00	U	5.56	5.96	111	119	1	32.0-150			6.94	28
1,2-Dibromo-3-Chloropropane	5.00	U	5.52	5.60	110	112	1	22.0-151			1.44	34
1,2-Dibromoethane	5.00	U	6.04	6.38	121	128	1	34.0-147			5.48	27
Dibromomethane	5.00	U	6.47	6.43	129	129	1	30.0-151			0.620	27
1,2-Dichlorobenzene	5.00	U	5.97	6.20	119	124	1	34.0-149			3.78	28
1,3-Dichlorobenzene	5.00	U	5.79	6.09	116	122	1	36.0-146			5.05	27
1,4-Dichlorobenzene	5.00	U	5.48	5.83	110	117	1	35.0-142			6.19	27
Dichlorodifluoromethane	5.00	U	8.11	7.46	162	149	1	10.0-160	M1		8.35	29
1,1-Dichloroethane	5.00	U	6.32	6.54	126	131	1	25.0-158			3.42	27
1,2-Dichloroethane	5.00	U	6.55	6.56	131	131	1	29.0-151			0.153	27
1,1-Dichloroethene	5.00	0.842	6.88	6.61	121	115	1	11.0-160			4.00	29
cis-1,2-Dichloroethene	5.00	0.148	6.72	6.59	131	129	1	10.0-160			1.95	27
trans-1,2-Dichloroethene	5.00	U	6.29	6.61	126	132	1	17.0-153			4.96	27
1,2-Dichloropropane	5.00	U	5.90	6.25	118	125	1	30.0-156			5.76	27
1,1-Dichloropropene	5.00	U	6.98	6.52	140	130	1	25.0-158			6.81	27
1,3-Dichloropropane	5.00	U	5.54	6.26	111	125	1	38.0-147			12.2	27
cis-1,3-Dichloropropene	5.00	U	5.79	6.06	116	121	1	34.0-149			4.56	28
trans-1,3-Dichloropropene	5.00	U	5.64	5.74	113	115	1	32.0-149			1.76	28
2,2-Dichloropropane	5.00	U	6.18	6.15	124	123	1	24.0-152			0.487	29

L1433723-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433723-19 11/27/21 06:19 • (MS) R3735465-4 11/27/21 06:59 • (MSD) R3735465-5 11/27/21 07:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Dicyclopentadiene	5.00	U	5.92	6.03	118	121	1	51.0-139			1.84	20
Di-isopropyl ether	5.00	U	6.24	6.52	125	130	1	21.0-160			4.39	28
Ethylbenzene	5.00	U	6.14	6.50	123	130	1	30.0-155			5.70	27
4-Ethyltoluene	5.00	U	5.65	6.15	113	123	1	10.0-160			8.47	20
Hexachloro-1,3-butadiene	5.00	U	6.36	5.99	127	120	1	20.0-154			5.99	34
n-Hexane	5.00	U	5.79	5.80	116	116	1	10.0-153			0.173	28
Isopropylbenzene	5.00	U	6.40	6.96	128	139	1	28.0-157			8.38	27
p-Isopropyltoluene	5.00	U	6.08	6.36	122	127	1	30.0-154			4.50	29
2-Butanone (MEK)	25.0	U	29.1	30.4	116	122	1	10.0-160			4.37	32
Methyl Cyclohexane	5.00	U	6.27	6.31	125	126	1	11.0-160			0.636	24
Methylene Chloride	5.00	11.5	13.7	12.9	44.0	28.0	1	23.0-144			6.02	28
4-Methyl-2-pentanone (MIBK)	25.0	U	27.9	30.8	112	123	1	29.0-160			9.88	29
Methyl tert-butyl ether	5.00	U	6.91	7.06	138	141	1	28.0-150			2.15	29
Naphthalene	5.00	U	5.06	6.15	101	123	1	12.0-156			19.4	35
Propene	5.00	U	6.27	5.57	125	111	1	10.0-160			11.8	29
n-Propylbenzene	5.00	U	5.57	5.93	111	119	1	31.0-154			6.26	28
Styrene	5.00	U	5.88	6.53	118	131	1	33.0-155			10.5	28
1,1,1,2-Tetrachloroethane	5.00	U	6.13	6.65	123	133	1	36.0-151			8.14	29
1,1,2,2-Tetrachloroethane	5.00	U	6.17	6.24	123	125	1	33.0-150			1.13	28
Tetrachloroethene	5.00	U	6.25	6.78	125	136	1	10.0-160			8.14	27
Toluene	5.00	U	5.82	6.22	116	124	1	26.0-154			6.64	28
1,1,2-Trichlorotrifluoroethane	5.00	U	7.00	7.00	140	140	1	23.0-160			0.000	30
1,2,3-Trichlorobenzene	5.00	U	5.75	6.72	115	134	1	17.0-150			15.6	36
1,2,4-Trichlorobenzene	5.00	U	5.60	6.42	112	128	1	24.0-150			13.6	33
1,1,1-Trichloroethane	5.00	U	6.96	7.36	139	147	1	23.0-160			5.59	28
1,1,2-Trichloroethane	5.00	U	5.64	6.09	113	122	1	35.0-147			7.67	27
Trichloroethene	5.00	23.4	20.5	19.4	0.000	0.000	1	10.0-160	M3	M3	5.51	25
Trichlorofluoromethane	5.00	U	7.38	7.33	148	147	1	17.0-160			0.680	31
1,2,3-Trichloropropane	5.00	U	5.13	5.21	103	104	1	34.0-151			1.55	29
1,2,3-Trimethylbenzene	5.00	U	5.74	5.95	115	119	1	32.0-149			3.59	28
1,2,4-Trimethylbenzene	5.00	U	5.90	6.39	118	128	1	26.0-154			7.97	27
1,3,5-Trimethylbenzene	5.00	U	5.99	6.43	120	129	1	28.0-153			7.09	27
Vinyl chloride	5.00	U	6.36	6.36	127	127	1	10.0-160			0.000	27
Xylenes, Total	15.0	U	18.2	19.7	121	131	1	29.0-154			7.92	28
(S) Toluene-d8					*108*	*108*		*80.0-120*				
(S) 4-Bromofluorobenzene					*109*	*115*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*112*	*109*		*70.0-130*				

Method Blank (MB)

(MB) R3735912-3 11/28/21 11:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
1,3-Butadiene	U		0.299	2.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
Cyclohexane	U		0.188	1.00
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00

Method Blank (MB)

(MB) R3735912-3 11/28/21 11:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dicyclopentadiene	U		0.253	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
4-Ethyltoluene	U		0.208	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00
n-Hexane	U		0.749	10.0
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methyl Cyclohexane	U		0.660	1.00
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
Propene	U		0.936	2.50
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,3-Trimethylbenzene	U		0.104	1.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*106*			*80.0-120*
(S) 4-Bromofluorobenzene	*100*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*

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

(LCS) R3735912-1 11/28/21 10:57 • (LCSD) R3735912-2 11/28/21 11:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	31.8	25.2	127	101	19.0-160			23.2	27
Acrolein	25.0	19.9	15.9	79.6	63.6	30.0-160			22.3	26
Acrylonitrile	25.0	25.5	24.8	102	99.2	55.0-149			2.78	20
Benzene	5.00	4.38	4.25	87.6	85.0	70.0-123			3.01	20
Bromobenzene	5.00	4.82	4.83	96.4	96.6	73.0-121			0.207	20
Bromodichloromethane	5.00	4.75	4.73	95.0	94.6	75.0-120			0.422	20
Bromoform	5.00	6.28	5.62	126	112	68.0-132			11.1	20
Bromomethane	5.00	4.66	4.63	93.2	92.6	30.0-160			0.646	25
1,3-Butadiene	5.00	3.85	3.47	77.0	69.4	45.0-147			10.4	20
n-Butylbenzene	5.00	4.65	4.70	93.0	94.0	73.0-125			1.07	20
sec-Butylbenzene	5.00	4.89	4.81	97.8	96.2	75.0-125			1.65	20
tert-Butylbenzene	5.00	5.06	4.85	101	97.0	76.0-124			4.24	20
Carbon disulfide	5.00	4.48	4.00	89.6	80.0	61.0-128			11.3	20
Carbon tetrachloride	5.00	6.06	5.55	121	111	68.0-126			8.79	20
Chlorobenzene	5.00	4.80	4.81	96.0	96.2	80.0-121			0.208	20
Chlorodibromomethane	5.00	5.03	4.57	101	91.4	77.0-125			9.58	20
Chloroethane	5.00	4.03	4.79	80.6	95.8	47.0-150			17.2	20
Chloroform	5.00	4.82	4.87	96.4	97.4	73.0-120			1.03	20
Chloromethane	5.00	5.03	4.41	101	88.2	41.0-142			13.1	20
Cyclohexane	5.00	5.13	4.22	103	84.4	71.0-124			19.5	20
2-Chlorotoluene	5.00	5.11	4.75	102	95.0	76.0-123			7.30	20
4-Chlorotoluene	5.00	4.60	4.45	92.0	89.0	75.0-122			3.31	20
1,2-Dibromo-3-Chloropropane	5.00	5.79	5.63	116	113	58.0-134			2.80	20
1,2-Dibromoethane	5.00	5.42	5.04	108	101	80.0-122			7.27	20
Dibromomethane	5.00	5.01	4.65	100	93.0	80.0-120			7.45	20
1,2-Dichlorobenzene	5.00	4.87	4.90	97.4	98.0	79.0-121			0.614	20
1,3-Dichlorobenzene	5.00	4.99	4.70	99.8	94.0	79.0-120			5.99	20
1,4-Dichlorobenzene	5.00	4.54	4.87	90.8	97.4	79.0-120			7.01	20
Dichlorodifluoromethane	5.00	4.84	4.97	96.8	99.4	51.0-149			2.65	20
1,1-Dichloroethane	5.00	5.19	4.81	104	96.2	70.0-126			7.60	20
1,2-Dichloroethane	5.00	5.18	5.08	104	102	70.0-128			1.95	20
1,1-Dichloroethene	5.00	4.56	4.58	91.2	91.6	71.0-124			0.438	20
cis-1,2-Dichloroethene	5.00	5.29	4.62	106	92.4	73.0-120			13.5	20
trans-1,2-Dichloroethene	5.00	5.02	4.49	100	89.8	73.0-120			11.1	20
1,2-Dichloropropane	5.00	4.67	4.30	93.4	86.0	77.0-125			8.25	20
1,1-Dichloropropene	5.00	4.77	4.50	95.4	90.0	74.0-126			5.83	20
1,3-Dichloropropane	5.00	4.89	4.86	97.8	97.2	80.0-120			0.615	20
cis-1,3-Dichloropropene	5.00	5.18	4.71	104	94.2	80.0-123			9.50	20
trans-1,3-Dichloropropene	5.00	5.20	5.25	104	105	78.0-124			0.957	20
2,2-Dichloropropane	5.00	4.95	4.47	99.0	89.4	58.0-130			10.2	20

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

(LCS) R3735912-1 11/28/21 10:57 • (LCSD) R3735912-2 11/28/21 11:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dicyclopentadiene	5.00	4.73	4.62	94.6	92.4	74.0-126			2.35	20
Di-isopropyl ether	5.00	4.16	3.92	83.2	78.4	58.0-138			5.94	20
Ethylbenzene	5.00	4.88	4.93	97.6	98.6	79.0-123			1.02	20
4-Ethyltoluene	5.00	4.94	4.84	98.8	96.8	74.0-127			2.04	20
Hexachloro-1,3-butadiene	5.00	5.09	4.95	102	99.0	54.0-138			2.79	20
n-Hexane	5.00	3.59	3.78	71.8	75.6	57.0-133			5.16	20
Isopropylbenzene	5.00	5.18	5.10	104	102	76.0-127			1.56	20
p-Isopropyltoluene	5.00	5.19	5.10	104	102	76.0-125			1.75	20
2-Butanone (MEK)	25.0	26.7	25.7	107	103	44.0-160			3.82	20
Methyl Cyclohexane	5.00	5.57	5.85	111	117	68.0-126			4.90	20
Methylene Chloride	5.00	4.50	4.11	90.0	82.2	67.0-120			9.06	20
4-Methyl-2-pentanone (MIBK)	25.0	27.1	25.4	108	102	68.0-142			6.48	20
Methyl tert-butyl ether	5.00	5.84	4.80	117	96.0	68.0-125			19.5	20
Naphthalene	5.00	4.98	5.14	99.6	103	54.0-135			3.16	20
Propene	5.00	4.10	3.43	82.0	68.6	30.0-160			17.8	20
n-Propylbenzene	5.00	4.76	4.73	95.2	94.6	77.0-124			0.632	20
Styrene	5.00	5.09	5.18	102	104	73.0-130			1.75	20
1,1,1,2-Tetrachloroethane	5.00	4.92	4.75	98.4	95.0	75.0-125			3.52	20
1,1,2,2-Tetrachloroethane	5.00	4.46	4.29	89.2	85.8	65.0-130			3.89	20
Tetrachloroethene	5.00	4.80	4.38	96.0	87.6	72.0-132			9.15	20
Toluene	5.00	5.21	5.06	104	101	79.0-120			2.92	20
1,1,2-Trichlorotrifluoroethane	5.00	3.65	3.57	73.0	71.4	69.0-132			2.22	20
1,2,3-Trichlorobenzene	5.00	5.43	5.07	109	101	50.0-138			6.86	20
1,2,4-Trichlorobenzene	5.00	4.63	4.85	92.6	97.0	57.0-137			4.64	20
1,1,1-Trichloroethane	5.00	5.66	5.07	113	101	73.0-124			11.0	20
1,1,2-Trichloroethane	5.00	4.62	4.78	92.4	95.6	80.0-120			3.40	20
Trichloroethene	5.00	4.39	4.49	87.8	89.8	78.0-124			2.25	20
Trichlorofluoromethane	5.00	5.04	5.16	101	103	59.0-147			2.35	20
1,2,3-Trichloropropane	5.00	4.97	5.24	99.4	105	73.0-130			5.29	20
1,2,3-Trimethylbenzene	5.00	4.64	4.71	92.8	94.2	77.0-120			1.50	20
1,2,4-Trimethylbenzene	5.00	4.88	4.91	97.6	98.2	76.0-121			0.613	20
1,3,5-Trimethylbenzene	5.00	4.76	4.82	95.2	96.4	76.0-122			1.25	20
Vinyl chloride	5.00	4.55	4.18	91.0	83.6	67.0-131			8.48	20
Xylenes, Total	15.0	14.9	14.1	99.3	94.0	79.0-123			5.52	20
(S) Toluene-d8				*102*	*99.7*	*80.0-120*				
(S) 4-Bromofluorobenzene				*101*	*100*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*114*	*113*	*70.0-130*				

L1433723-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433723-22 11/28/21 13:24 • (MS) R3735912-4 11/28/21 19:31 • (MSD) R3735912-5 11/28/21 19:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	U	25.9	30.7	104	123	1	10.0-160			17.0	35
Acrolein	25.0	U	10.0	19.2	40.0	76.8	1	10.0-160		R5	63.0	39
Acrylonitrile	25.0	U	20.0	24.6	80.0	98.4	1	21.0-160			20.6	32
Benzene	5.00	U	2.25	3.07	45.0	61.4	1	17.0-158		R5	30.8	27
Bromobenzene	5.00	U	2.90	3.99	58.0	79.8	1	30.0-149		R5	31.6	28
Bromodichloromethane	5.00	U	2.62	3.56	52.4	71.2	1	31.0-150		R5	30.4	27
Bromoform	5.00	U	4.43	5.40	88.6	108	1	29.0-150			19.7	29
Bromomethane	5.00	U	1.47	2.67	29.4	53.4	1	10.0-160		R5	58.0	38
1,3-Butadiene	5.00	U	2.44	2.31	48.8	46.2	1	10.0-160			5.47	22
n-Butylbenzene	5.00	U	2.07	2.71	41.4	54.2	1	31.0-150			26.8	30
sec-Butylbenzene	5.00	U	2.37	3.33	47.4	66.6	1	33.0-155		R5	33.7	29
tert-Butylbenzene	5.00	U	2.64	3.63	52.8	72.6	1	34.0-153		R5	31.6	28
Carbon disulfide	5.00	U	2.08	2.76	41.6	55.2	1	10.0-156		R5	28.1	28
Carbon tetrachloride	5.00	U	2.89	4.17	57.8	83.4	1	23.0-159		R5	36.3	28
Chlorobenzene	5.00	U	2.71	3.42	54.2	68.4	1	33.0-152			23.2	27
Chlorodibromomethane	5.00	U	3.14	4.03	62.8	80.6	1	37.0-149			24.8	27
Chloroethane	5.00	U	1.68	2.55	33.6	51.0	1	10.0-160		R5	41.1	30
Chloroform	5.00	U	2.63	3.79	52.6	75.8	1	29.0-154		R5	36.1	28
Chloromethane	5.00	U	2.12	3.20	42.4	64.0	1	10.0-160		R5	40.6	29
Cyclohexane	5.00	U	1.68	2.95	33.6	59.0	1	19.0-160		R5	54.9	23
2-Chlorotoluene	5.00	U	2.60	3.86	52.0	77.2	1	32.0-153		R5	39.0	28
4-Chlorotoluene	5.00	U	2.54	3.39	50.8	67.8	1	32.0-150		R5	28.7	28
1,2-Dibromo-3-Chloropropane	5.00	U	4.21	4.99	84.2	99.8	1	22.0-151			17.0	34
1,2-Dibromoethane	5.00	U	3.49	4.69	69.8	93.8	1	34.0-147		R5	29.3	27
Dibromomethane	5.00	U	3.06	3.90	61.2	78.0	1	30.0-151			24.1	27
1,2-Dichlorobenzene	5.00	U	3.14	4.28	62.8	85.6	1	34.0-149		R5	30.7	28
1,3-Dichlorobenzene	5.00	U	2.75	3.67	55.0	73.4	1	36.0-146		R5	28.7	27
1,4-Dichlorobenzene	5.00	U	3.01	3.50	60.2	70.0	1	35.0-142			15.1	27
Dichlorodifluoromethane	5.00	U	1.95	2.79	39.0	55.8	1	10.0-160		R5	35.4	29
1,1-Dichloroethane	5.00	U	2.44	3.77	48.8	75.4	1	25.0-158		R5	42.8	27
1,2-Dichloroethane	5.00	U	2.97	4.40	59.4	88.0	1	29.0-151		R5	38.8	27
1,1-Dichloroethene	5.00	U	1.96	2.53	39.2	50.6	1	11.0-160			25.4	29
cis-1,2-Dichloroethene	5.00	U	2.64	3.80	52.8	76.0	1	10.0-160		R5	36.0	27
trans-1,2-Dichloroethene	5.00	U	2.43	3.76	48.6	75.2	1	17.0-153		R5	43.0	27
1,2-Dichloropropane	5.00	U	2.49	3.55	49.8	71.0	1	30.0-156		R5	35.1	27
1,1-Dichloropropene	5.00	U	2.06	3.16	41.2	63.2	1	25.0-158		R5	42.1	27
1,3-Dichloropropane	5.00	U	3.40	3.93	68.0	78.6	1	38.0-147			14.5	27
cis-1,3-Dichloropropene	5.00	U	2.64	3.81	52.8	76.2	1	34.0-149		R5	36.3	28
trans-1,3-Dichloropropene	5.00	U	3.40	4.31	68.0	86.2	1	32.0-149			23.6	28
2,2-Dichloropropane	5.00	U	2.36	3.39	47.2	67.8	1	24.0-152		R5	35.8	29

L1433723-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433723-22 11/28/21 13:24 • (MS) R3735912-4 11/28/21 19:31 • (MSD) R3735912-5 11/28/21 19:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Dicyclopentadiene	5.00	U	1.00	1.98	20.0	39.6	1	51.0-139	M2	M2 R5	65.8	20
Di-isopropyl ether	5.00	U	2.42	3.26	48.4	65.2	1	21.0-160		R5	29.6	28
Ethylbenzene	5.00	U	2.65	3.25	53.0	65.0	1	30.0-155			20.3	27
4-Ethyltoluene	5.00	U	2.44	3.27	48.8	65.4	1	10.0-160		R5	29.1	20
Hexachloro-1,3-butadiene	5.00	U	2.20	2.98	44.0	59.6	1	20.0-154			30.1	34
n-Hexane	5.00	U	1.82	2.27	36.4	45.4	1	10.0-153			22.0	28
Isopropylbenzene	5.00	U	2.59	3.46	51.8	69.2	1	28.0-157		R5	28.8	27
p-Isopropyltoluene	5.00	U	2.53	3.34	50.6	66.8	1	30.0-154			27.6	29
2-Butanone (MEK)	25.0	U	21.4	26.2	85.6	105	1	10.0-160			20.2	32
Methyl Cyclohexane	5.00	U	2.05	3.10	41.0	62.0	1	11.0-160		R5	40.8	24
Methylene Chloride	5.00	U	2.02	3.57	40.4	71.4	1	23.0-144		R5	55.5	28
4-Methyl-2-pentanone (MIBK)	25.0	U	20.8	24.0	83.2	96.0	1	29.0-160			14.3	29
Methyl tert-butyl ether	5.00	U	3.61	U	72.2	0.000	1	28.0-150		M2 R5	200	29
Naphthalene	5.00	U	3.74	4.57	74.8	91.4	1	12.0-156			20.0	35
Propene	5.00	U	1.57	2.61	31.4	52.2	1	10.0-160		R5	49.8	29
n-Propylbenzene	5.00	U	2.32	3.00	46.4	60.0	1	31.0-154			25.6	28
Styrene	5.00	U	2.54	3.43	50.8	68.6	1	33.0-155		R5	29.8	28
1,1,1,2-Tetrachloroethane	5.00	U	2.92	4.12	58.4	82.4	1	36.0-151		R5	34.1	29
1,1,2,2-Tetrachloroethane	5.00	U	3.60	4.33	72.0	86.6	1	33.0-150			18.4	28
Tetrachloroethene	5.00	U	4.75	3.20	95.0	64.0	1	10.0-160		R5	39.0	27
Toluene	5.00	U	2.66	3.54	53.2	70.8	1	26.0-154		R5	28.4	28
1,1,2-Trichlorotrifluoroethane	5.00	U	2.20	2.72	44.0	54.4	1	23.0-160			21.1	30
1,2,3-Trichlorobenzene	5.00	U	3.51	3.96	70.2	79.2	1	17.0-150			12.0	36
1,2,4-Trichlorobenzene	5.00	U	2.47	3.30	49.4	66.0	1	24.0-150			28.8	33
1,1,1-Trichloroethane	5.00	U	2.64	3.90	52.8	78.0	1	23.0-160		R5	38.5	28
1,1,2-Trichloroethane	5.00	U	3.25	3.76	65.0	75.2	1	35.0-147			14.6	27
Trichloroethene	5.00	U	2.16	3.09	43.2	61.8	1	10.0-160		R5	35.4	25
Trichlorofluoromethane	5.00	U	2.21	3.31	44.2	66.2	1	17.0-160		R5	39.9	31
1,2,3-Trichloropropane	5.00	U	4.15	4.37	83.0	87.4	1	34.0-151			5.16	29
1,2,3-Trimethylbenzene	5.00	U	2.62	3.74	52.4	74.8	1	32.0-149		R5	35.2	28
1,2,4-Trimethylbenzene	5.00	U	2.40	3.48	48.0	69.6	1	26.0-154		R5	36.7	27
1,3,5-Trimethylbenzene	5.00	U	2.32	3.40	46.4	68.0	1	28.0-153		R5	37.8	27
Vinyl chloride	5.00	U	1.81	2.88	36.2	57.6	1	10.0-160		R5	45.6	27
Xylenes, Total	15.0	U	7.37	10.4	49.1	69.3	1	29.0-154		R5	34.1	28
(S) Toluene-d8					*100*	*99.2*		*80.0-120*				
(S) 4-Bromofluorobenzene					*105*	*98.0*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*114*	*116*		*70.0-130*				

Method Blank (MB)

(MB) R3736006-3 11/30/21 20:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0941	1.00
1,1-Dichloroethene	U		0.188	1.00
Methylene Chloride	U		0.430	5.00
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	*105*			*80.0-120*
(S) 4-Bromofluorobenzene	*111*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

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

(LCS) R3736006-1 11/30/21 19:36 • (LCSD) R3736006-2 11/30/21 19:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	4.29	4.63	85.8	92.6	70.0-123			7.62	20
1,1-Dichloroethene	5.00	4.30	4.73	86.0	94.6	71.0-124			9.52	20
Methylene Chloride	5.00	4.77	5.22	95.4	104	67.0-120			9.01	20
Trichloroethene	5.00	5.10	5.65	102	113	78.0-124			10.2	20
(S) Toluene-d8				*100*	*100*	*80.0-120*				
(S) 4-Bromofluorobenzene				*106*	*107*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*110*	*111*	*70.0-130*				

Method Blank (MB)

(MB) R3736099-3 12/01/21 17:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1-Dichloroethene	U		0.188	1.00
Methylene Chloride	U		0.430	5.00
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	*113*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.3*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*

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

(LCS) R3736099-1 12/01/21 16:17 • (LCSD) R3736099-2 12/01/21 16:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	5.00	5.42	5.51	108	110	71.0-124			1.65	20
Methylene Chloride	5.00	5.87	5.56	117	111	67.0-120			5.42	20
Trichloroethene	5.00	5.88	5.92	118	118	78.0-124			0.678	20
(S) Toluene-d8				*116*	*113*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.4*	*100*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*94.1*	*97.8*	*70.0-130*				

Method Blank (MB)

(MB) R3734498-3 11/24/21 11:11

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	*101*			*77.0-127*

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

(LCS) R3734498-1 11/24/21 10:12 • (LCSD) R3734498-2 11/24/21 10:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	50.0	45.2	44.4	90.4	88.8	55.0-138			1.79	24
(S) Toluene-d8				*101*	*102*	*77.0-127*				

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

Method Blank (MB)

(MB) R3734241-3 11/26/21 11:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	*99.8*			*77.0-127*

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

(LCS) R3734241-1 11/26/21 10:21 • (LCSD) R3734241-2 11/26/21 10:42

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
1,4-Dioxane	50.0	47.8	40.6	95.6	81.2	55.0-138			16.3	24
(S) Toluene-d8				*100*	*101*	*77.0-127*				

L1433723-19 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433723-19 11/26/21 16:53 • (MS) R3734241-4 11/26/21 19:52 • (MSD) R3734241-5 11/26/21 20:12

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
1,4-Dioxane	50.0	U	43.6	36.3	87.2	72.6	1	13.0-160			18.3	31
(S) Toluene-d8					*102*	*101*		*77.0-127*				

L1433723-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1433723-22 11/26/21 17:53 • (MS) R3734241-6 11/26/21 20:32 • (MSD) R3734241-7 11/26/21 20:52

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
1,4-Dioxane	50.0	U	37.2	35.5	74.4	71.0	1	13.0-160			4.68	31
(S) Toluene-d8					*90.7*	*101*		*77.0-127*				

Method Blank (MB)

(MB) R3735638-3 11/29/21 09:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	*93.3*			*77.0-127*

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

(LCS) R3735638-1 11/29/21 08:00 • (LCSD) R3735638-2 11/29/21 08:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	50.0	56.0	50.9	112	102	55.0-138			9.54	24
(S) Toluene-d8				*101*	*101*	*77.0-127*				

Method Blank (MB)

(MB) R3735639-3 11/29/21 09:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	*93.3*			*77.0-127*

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

(LCS) R3735639-1 11/29/21 08:00 • (LCSD) R3735639-2 11/29/21 08:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,4-Dioxane	50.0	56.0	50.9	112	102	55.0-138			9.54	24
(S) Toluene-d8				*101*	*101*	*77.0-127*				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS20 • File ID: 1201A_04

12/01/21 16:17

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	1201A_04	280187	100955	159471
Upper Limit		560374	201910	318942
Lower Limit		140094	50478	79736
LCS R3736099-1 WG1782742 1x	1201A_04LCS	280187	100955	159471
LCSD R3736099-2 WG1782742 1x	1201A_05	269506	102985	166064
BLANK R3736099-3 WG1782742 1x	1201A_08	222771	83522	142886
L1433723-16 WG1782742 100x	1201A_19	197336	70778	108860
L1433723-17 WG1782742 100x	1201A_20	214468	78525	106775
L1433723-07 WG1782742 200x	1201A_21	198917	70558	106311

Instrument: VOCMS26 • File ID: 1126_36

11/26/21 22:51

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	1126_36	251350	136001	101675
Upper Limit		502700	272002	203350
Lower Limit		125675	68001	50838
LCS R3735465-1 WG1780361 1x	1126_36LCS	251350	136001	101675
LCSD R3735465-2 WG1780361 1x	1126_37	250691	134167	101904
BLANK R3735465-3 WG1780361 1x	1126_39	245607	131003	96463
L1433723-01 WG1780361 1x	1126_40	243082	127833	94288
L1433723-02 WG1780361 1x	1126_41	240746	130653	91919
L1433723-03 WG1780361 1x	1126_42	235854	124681	91917
L1433723-04 WG1780361 1x	1126_43	233999	123476	93111
L1433723-05 WG1780361 1x	1126_44	231843	121582	88613
L1433723-06 WG1780361 1x	1126_45	222090	123267	86159
L1433723-07 WG1780361 1x	1126_46	241926	132537	101354
L1433723-08 WG1780361 1x	1126_47	223297	119615	89285
L1433723-09 WG1780361 1x	1126_48	228767	120874	89452
L1433723-10 WG1780361 1x	1126_49	221873	118492	88861
L1433723-11 WG1780361 1x	1126_50	214948	114906	85099
L1433723-12 WG1780361 1x	1126_51	215057	115176	84658
L1433723-13 WG1780361 1x	1126_52	246099	150031	112403
L1433723-14 WG1780361 1x	1126_53	253068	133402	97370
L1433723-15 WG1780361 1x	1126_54	245452	129247	96495

INTERNAL STANDARD SUMMARY

Instrument: VOCMS26 • File ID: 1126_36

11/26/21 22:51

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
L1433723-16 WG1780361 1x	1126_55	244633	131211	100827
L1433723-17 WG1780361 1x	1126_56	244173	131577	95808
L1433723-18 WG1780361 1x	1126_57	229920	123040	94002
L1433723-19 WG1780361 1x	1126_58	229614	122176	91039
L1433723-20 WG1780361 1x	1126_59	227282	121455	89278
MS R3735465-4 WG1780361 1x	1126_60	228224	125654	93265
MSD R3735465-5 WG1780361 1x	1126_61	230619	124265	97632

Instrument: VOCMS33 • File ID: 1130_31

11/30/21 19:36

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	1130_31	210273	104078	102139
Upper Limit		420546	208156	204278
Lower Limit		105137	52039	51070
LCS R3736006-1 WG1782067 1x	1130_31LCS	210273	104078	102139
LCSD R3736006-2 WG1782067 1x	1130_32	205181	105485	103320
BLANK R3736006-3 WG1782067 1x	1130_35	209280	98220	95710
L1433723-08 WG1782067 1x	1130_39	204545	99689	91060
L1433723-09 WG1782067 1x	1130_40	205472	99779	91129
L1433723-10 WG1782067 1x	1130_41	197396	95657	88609
L1433723-11 WG1782067 1x	1130_42	201455	97262	92697
L1433723-12 WG1782067 1x	1130_43	200213	95808	89654
L1433723-14 WG1782067 1x	1130_44	199230	97824	90013
L1433723-19 WG1782067 1x	1130_45	194970	95980	89065
L1433723-20 WG1782067 1x	1130_46	195706	94629	87439
L1433723-15 WG1782067 5x	1130_47	197190	96839	87481
L1433723-18 WG1782067 20x	1130_50	188705	92947	85556
L1433723-04 WG1782067 50x	1130_56	188767	95353	88655
L1433723-05 WG1782067 25x	1130_57	185589	94087	84066
L1433723-06 WG1782067 25x	1130_58	189603	92976	87287
L1433723-13 WG1782067 5000x	1130_60	185256	92845	84926

INTERNAL STANDARD SUMMARY

Instrument: VOCMS39 • File ID: 1128_02

11/28/21 10:57

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	1128_02	442396	200250.70	179947.90
Upper Limit		884792	400501	359896
Lower Limit		221198	100125	89974
LCS R3735912-1 WG1780831 1x	1128_02LCS	442396	200250.70	179947.90
LCSD R3735912-2 WG1780831 1x	1128_03	442955.10	204151.40	179051.60
BLANK R3735912-3 WG1780831 1x	1128_05	452029.60	193175.30	172401.70
L1433723-25 WG1780831 1x	1128_06	465872.20	212929.80	176319.20
L1433723-21 WG1780831 1x	1128_07	450732.50	202616	173570.10
L1433723-22 WG1780831 1x	1128_08	461859.70	208326.60	180680.90
L1433723-23 WG1780831 1x	1128_09	463396.10	205868.60	175312.60
L1433723-24 WG1780831 1x	1128_10	474085.60	204023.60	182677
MS R3735912-4 WG1780831 1x	1128_26	439158.20	192211.50	171431.70
MSD R3735912-5 WG1780831 1x	1128_27	428213.30	200785.50	171502.10

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 1124_03

11/24/21 09:52

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	1124_03	731467
Upper Limit		1462934
Lower Limit		365734
LCS R3734498-1 WG1779946 1x	1124_04	720110
LCSD R3734498-2 WG1779946 1x	1124_05	681830
BLANK R3734498-3 WG1779946 1x	1124_07	684306
L1433723-02 WG1779946 1x	1124_12	652012
L1433723-03 WG1779946 1x	1124_13	639125
L1433723-04 WG1779946 1x	1124_14	666692
L1433723-05 WG1779946 1x	1124_15	665768
L1433723-06 WG1779946 1x	1124_16	735530
L1433723-09 WG1779946 1x	1124_19	578207
L1433723-10 WG1779946 1x	1124_20	679560
L1433723-11 WG1779946 1x	1124_21	603004
L1433723-15 WG1779946 1x	1124_25	586395

Instrument: VOCMS27 • File ID: 1126_03

11/26/21 10:01

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	1126_03	818673
Upper Limit		1637346
Lower Limit		409337
LCS R3734241-1 WG1780446 1x	1126_04A	552255
LCSD R3734241-2 WG1780446 1x	1126_05A	541364
BLANK R3734241-3 WG1780446 1x	1126_07A	547054
L1433723-18 WG1780446 1x	1126_11	571704
L1433723-19 WG1780446 1x	1126_12	568502
L1433723-21 WG1780446 1x	1126_14	742765
L1433723-22 WG1780446 1x	1126_15	533607
L1433723-23 WG1780446 1x	1126_16	554251
L1433723-24 WG1780446 1x	1126_17	537440
MS R3734241-4 WG1780446 1x	1126_21	580362
MSD R3734241-5 WG1780446 1x	1126_22	574607
MS R3734241-6 WG1780446 1x	1126_23	678860

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 1126_03

11/26/21 10:01

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
MSD R3734241-7 WG1780446 1x	1126_24	586943

Instrument: VOCMS27 • File ID: 1129_03

11/29/21 07:41

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	1129_03	751296
Upper Limit		1502592
Lower Limit		375648
LCS R3735639-1 WG1780984 1x	1129_04	594674
LCS R3735638-1 WG1780650 1x	1129_04A	594674
LCSD R3735639-2 WG1780984 1x	1129_05	586990
LCSD R3735638-2 WG1780650 1x	1129_05A	586990
BLANK R3735639-3 WG1780984 1x	1129_07	853352
BLANK R3735638-3 WG1780650 1x	1129_07A	853352
L1433723-01 WG1780984 1x	1129_08	602803
L1433723-08 WG1780984 1x	1129_09	573881
L1433723-12 WG1780984 1x	1129_10	563149
L1433723-14 WG1780984 1x	1129_11	558058
L1433723-07 WG1780984 20x	1129_12	730167
L1433723-13 WG1780984 50x	1129_13	607483
L1433723-16 WG1780984 5x	1129_14	566583
L1433723-17 WG1780984 5x	1129_15	569221
L1433723-20 WG1780650 1x	1129_17	530578

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B1	Target analyte detected in method blank at or above the method reporting limit.
E1	Concentration estimated. Analyte exceeded calibration range. Reanalysis not possible due to insufficient sample.
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
L1	The associated blank spike recovery was above laboratory acceptance limits.
M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
M2	Matrix spike recovery was low, the method control sample recovery was acceptable.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The associated blank spike recovery was acceptable.
R5	MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
R7	LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
R8	Sample RPD exceeded the method acceptance limit.

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Geosyntec
11811 N. Tatum Blvd.,
Suite P186
Phoenix, AZ 85028

Billing Information:
Accounts Payable
11811 N Tatum Blvd, Ste P186,
Phoenix, Arizona 85028

CC: tluttermoser@geosyntec.com

Pres Chk

Report to: **Tory Luttermoser; Fabrizio Mascioni**

Email To: **FMascioni@Geosyntec.com**

Project Description: **Nammo Defense Systems, Inc.** **NDS TTU Sampling**

City/State Collected: **Mesa, AZ**

Phone: **602.513.5830**
Fax:

Client Project # **SP0101GW21/02**

Lab Project #

Collected by (print): Ryan Ayala

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # **GEOSYNPAZ052019S**

Date Results Needed: Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Perchlorate 314.0/ 125mL HDPE/ No Pres	VOC 8260B/ 40mL amber/ HCl	1,4 Dioxane V8260LL14D/40mL amb/ HCl	Remarks	Sample # (lab only)
TTU-9A-61-20211117	Grab	GW	61	11-17-21	1435	5	X	X	X		01
TTU-9A-61-20211117-Dup			61		1435		X	X	X		02
TTU-13-51-20211118			51	11-18-21	1017		X	X	X		03
TTU-14-69-20211118			69		1038		X	X	X		04
TTU-12-82-20211118			82		1100		X	X	X		05
TTU-12-82-20211118-Dup			82		1100		X	X	X		06
TTU-20-73-20211118			73		1123		X	X	X		07
TTU-10-147-20211118			147		1235		X	X	X		08
PFAS-400-20211118			400		1312	4		X	X		09
TTU-8-164-20211118			164		1345	6	X	X	X		10

Chain of Custody Page 2 of 3

Pace Analytical® National Center for Testing & Innovation

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

L # L1433723

Table #

Acctnum: **GEOSYNPAZ**

Template:

Prelogin:

TSR: **Chris Ward**

PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11-18-21	1555	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	11-18-21	1800	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: BAA4 3.7 3.7 129

Date: 11/19/21 Time: 1230

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

PM 17

Geosyntec
11811 N. Tatum Blvd.,
Suite P186
Phoenix, AZ 85028

Billing Information:
Accounts Payable
11811 N Tatum Blvd, Ste P186,
Phoenix, Arizona 85028

CC: tluttermoser@geosyntec.com

Pres Chk

Report to: **Tory Luttermoser; Fabrizio Mascioni**

Email To: **FMascioni@Geosyntec.com**

Project Description: **Nammo Defense Systems, Inc.** **NDS TTU Sampling**

City/State Collected: **Mesa, AZ**

Phone: **480-748-6283**
Fax:

Client Project # **SP0101GW21/02**

Lab Project #

Collected by (print): Ryan Ayala

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # **GEOSYNPAZ052019S**

Date Results Needed: Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Perchlorate 314.0/125mL HDPE/No Pres	VOC 8260B/40mL amber/HCl	1,4 Dioxane V8260LL14D/40mL amb/HCl	Remarks	Sample # (lab only)
TTU-17-80-20211117	Grab	GW	80	11-17-21	1127	5	X	X	X		11
TTU-15-75-20211117			75		1147		X	X	X		12
TTU-16-80-20211117			80		1203		X	X	X		13
TTU-EX-1-69-20211117			69		1227		X	X	X		14
TTU-EX-2-74-20211117			74		1255		X	X	X		15
TTU-EX-3-76-20211117			76		1315		X	X	X		16
TTU-EX-3-76-20211117-Rep			76		1315		X	X	X		17
TTU-EX-4-77-20211117			77		1335		X	X	X		18
TTU-EX-5-80-20211117			80		1357	10	X	X	X	MS/MSD	19
TTU-5-110-20211117			110		1415	5	X	X	X		20

Chain of Custody Page 1 of 3

Pace Analytical® National Center for Testing & Innovation

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

L # L433723

Table #

Acctnum: **GEOSYNPAZ**

Template:

Prelogin:

TSR: **Chris Ward**

PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11-18-21	1555	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11-18-21	1805	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received:
BAA 3.7 +0 =3.7 129

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Date: 11/19/21 Time: 1230

PM A2

Geosyntec
11811 N. Tatum Blvd.,
Suite P186
Phoenix, AZ 85028

Billing Information:
Accounts Payable
11811 N Tatum Blvd, Ste P186,
Phoenix, Arizona 85028

CC: tluttermoser@geosyntec.com

Pres Chk

Report to:
Tory Luttermoser; Fabrizio Mascioni

Email To:
FMascioni@Geosyntec.com

Project **Nammo Defense Systems, Inc.**
Description: **NDS TTU Sampling**

City/State Collected: **Mesa, AZ**

Phone: **480-748-6283**
Fax:

Client Project # **SP0101GW21/02**

Lab Project #

Collected by (print): Ryan Ayala

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # **GEOSYNPAZ052019S**

Date Results Needed: Standard

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Perchlorate 314.0/ 125mL HDPE/ No Pres	VOC 8260B/ 40mL amber/ HCl	1,4 Dioxane V8260LL14D/40mL amb/ HCl	Remarks	Sample # (lab only)
TTU-4-57-20211118	Grab	GW	57	11-18-21	1405	5	X	X	X		21
TTU-3-108-20211118			108		1425	10	X	X	X	MS/MSD	22
TTU-7-345-20211118			345		1447	5	X	X	X		23
TTU-6-143-20211118			143		1507	5	X	X	X		27
Trip Blank						1		X			28

Chain of Custody Page 3 of 3

Pace Analytical® National Center for Testing & Innovation

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

L # L1433724

Table #

Acctnum: **GEOSYNPAZ**

Template:

Prelogin:

TSR: **Chris Ward**

PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11-18-21	1555	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11-18-21	1899	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCl / MeOH
TBR

Temp: °C Bottles Received:
BAG 3.7 $\frac{t}{b}$ = 3.7 129

Date: 11/19/21 Time: 1230

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

January 05, 2022

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

GeoSyntec, Inc. - AZ

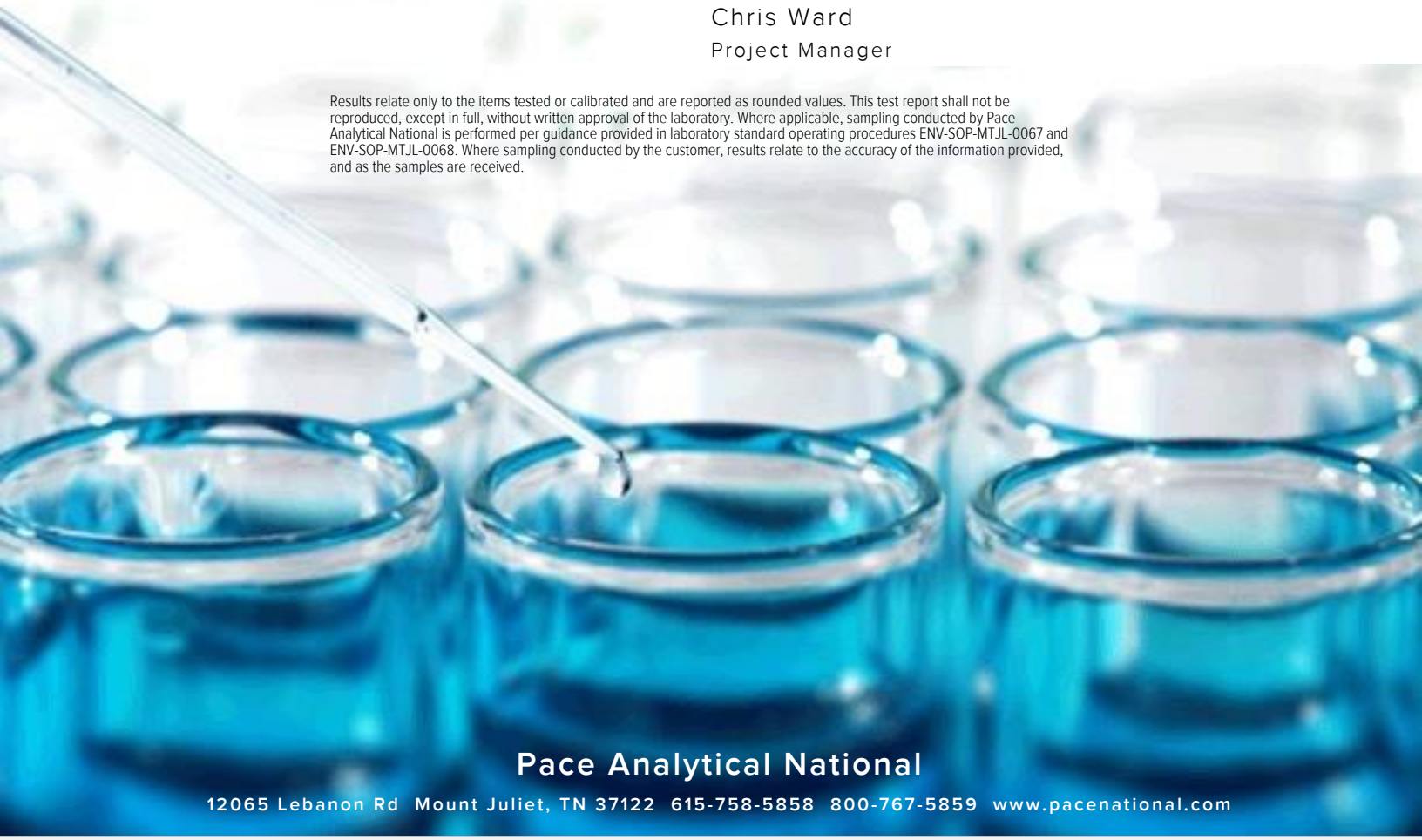
Sample Delivery Group:	L1445691
Samples Received:	12/23/2021
Project Number:	SP0101GW21/02
Description:	Nammo Defense Systems, Inc. NDS TTU Sampling

Report To: Fabrizio Mascioni
11811 N Tatum Blvd, Ste P186
Phoenix, AZ 85028

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

TABLE OF CONTENTS

TTU-1-2021122 L1445691-01 GW

Collected by: Ryan Ayala | Collected date/time: 12/22/21 12:36 | Received date/time: 12/23/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1797425	500	01/04/22 11:38	01/04/22 11:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1796559	1	12/30/21 17:12	12/30/21 17:12	JTO	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1795312	1	12/27/21 21:32	12/27/21 21:32	ACG	Mt. Juliet, TN

TTU-2-2021122 L1445691-02 GW

Collected by: Ryan Ayala | Collected date/time: 12/22/21 12:58 | Received date/time: 12/23/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1797425	5000	01/04/22 12:34	01/04/22 12:34	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1796559	1	12/30/21 20:00	12/30/21 20:00	JTO	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1796911	25	12/31/21 12:12	12/31/21 12:12	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1795312	1	12/27/21 21:52	12/27/21 21:52	ACG	Mt. Juliet, TN

TTU-2-2021122-DUP L1445691-03 GW

Collected by: Ryan Ayala | Collected date/time: 12/22/21 12:58 | Received date/time: 12/23/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1797425	5000	01/04/22 13:03	01/04/22 13:03	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1796559	1	12/30/21 20:21	12/30/21 20:21	JTO	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1796911	25	12/31/21 12:32	12/31/21 12:32	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1795312	1	12/27/21 22:12	12/27/21 22:12	ACG	Mt. Juliet, TN

TRIP BLANK L1445691-04 GW

Collected by: Ryan Ayala | Collected date/time: 12/22/21 00:00 | Received date/time: 12/23/21 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1796559	1	12/30/21 14:44	12/30/21 14:44	JTO	Mt. Juliet, TN

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

CASE NARRATIVE

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

Chris Ward
Project Manager

Sample Delivery Group (SDG) Narrative

Insufficient sample volume to perform MS/MSD analyses per method QC requirements.

Lab Sample ID	Project Sample ID	Method
L1445691-02	TTU-2-2021122	8260B
L1445691-03	TTU-2-2021122-DUP	8260B

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	21100		150	2000	500	01/04/2022 11:38	WG1797425

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	12/30/2021 17:12	WG1796559
Acrolein	U	L1	2.54	50.0	1	12/30/2021 17:12	WG1796559
Acrylonitrile	U		0.671	10.0	1	12/30/2021 17:12	WG1796559
Benzene	U		0.0941	1.00	1	12/30/2021 17:12	WG1796559
Bromobenzene	U		0.118	1.00	1	12/30/2021 17:12	WG1796559
Bromodichloromethane	U		0.136	1.00	1	12/30/2021 17:12	WG1796559
Bromoform	U		0.129	1.00	1	12/30/2021 17:12	WG1796559
Bromomethane	U		0.605	5.00	1	12/30/2021 17:12	WG1796559
1,3-Butadiene	U		0.299	2.00	1	12/30/2021 17:12	WG1796559
n-Butylbenzene	U		0.157	1.00	1	12/30/2021 17:12	WG1796559
sec-Butylbenzene	U		0.125	1.00	1	12/30/2021 17:12	WG1796559
tert-Butylbenzene	U		0.127	1.00	1	12/30/2021 17:12	WG1796559
Carbon tetrachloride	U		0.128	1.00	1	12/30/2021 17:12	WG1796559
Carbon disulfide	U	L1 R7	0.0962	1.00	1	12/30/2021 17:12	WG1796559
Chlorobenzene	U		0.116	1.00	1	12/30/2021 17:12	WG1796559
Chlorodibromomethane	U		0.140	1.00	1	12/30/2021 17:12	WG1796559
Chloroethane	U		0.192	5.00	1	12/30/2021 17:12	WG1796559
Chloroform	U		0.111	5.00	1	12/30/2021 17:12	WG1796559
Chloromethane	U		0.960	2.50	1	12/30/2021 17:12	WG1796559
Cyclohexane	U		0.188	1.00	1	12/30/2021 17:12	WG1796559
2-Chlorotoluene	U		0.106	1.00	1	12/30/2021 17:12	WG1796559
4-Chlorotoluene	U		0.114	1.00	1	12/30/2021 17:12	WG1796559
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/30/2021 17:12	WG1796559
1,2-Dibromoethane	U		0.126	1.00	1	12/30/2021 17:12	WG1796559
Dibromomethane	U		0.122	1.00	1	12/30/2021 17:12	WG1796559
1,2-Dichlorobenzene	U		0.107	1.00	1	12/30/2021 17:12	WG1796559
1,3-Dichlorobenzene	U		0.110	1.00	1	12/30/2021 17:12	WG1796559
1,4-Dichlorobenzene	U		0.120	1.00	1	12/30/2021 17:12	WG1796559
Dichlorodifluoromethane	U		0.374	5.00	1	12/30/2021 17:12	WG1796559
1,1-Dichloroethane	U		0.100	1.00	1	12/30/2021 17:12	WG1796559
1,2-Dichloroethane	U		0.0819	1.00	1	12/30/2021 17:12	WG1796559
1,1-Dichloroethene	2.80	L1 R7	0.188	1.00	1	12/30/2021 17:12	WG1796559
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/30/2021 17:12	WG1796559
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/30/2021 17:12	WG1796559
1,2-Dichloropropane	U		0.149	1.00	1	12/30/2021 17:12	WG1796559
1,1-Dichloropropene	U		0.142	1.00	1	12/30/2021 17:12	WG1796559
1,3-Dichloropropane	U		0.110	1.00	1	12/30/2021 17:12	WG1796559
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/30/2021 17:12	WG1796559
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/30/2021 17:12	WG1796559
2,2-Dichloropropane	U		0.161	1.00	1	12/30/2021 17:12	WG1796559
Dicyclopentadiene	U		0.253	1.00	1	12/30/2021 17:12	WG1796559
Di-isopropyl ether	U		0.105	1.00	1	12/30/2021 17:12	WG1796559
Ethylbenzene	U		0.137	1.00	1	12/30/2021 17:12	WG1796559
4-Ethyltoluene	U		0.208	1.00	1	12/30/2021 17:12	WG1796559
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/30/2021 17:12	WG1796559
n-Hexane	U		0.749	10.0	1	12/30/2021 17:12	WG1796559
Isopropylbenzene	U		0.105	1.00	1	12/30/2021 17:12	WG1796559
p-Isopropyltoluene	U		0.120	1.00	1	12/30/2021 17:12	WG1796559
2-Butanone (MEK)	U		1.19	10.0	1	12/30/2021 17:12	WG1796559
Methyl Cyclohexane	U		0.660	1.00	1	12/30/2021 17:12	WG1796559

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		0.430	5.00	1	12/30/2021 17:12	WG1796559
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/30/2021 17:12	WG1796559
Methyl tert-butyl ether	U		0.101	1.00	1	12/30/2021 17:12	WG1796559
Naphthalene	U		1.00	5.00	1	12/30/2021 17:12	WG1796559
Propene	U		0.936	2.50	1	12/30/2021 17:12	WG1796559
n-Propylbenzene	U		0.0993	1.00	1	12/30/2021 17:12	WG1796559
Styrene	U		0.118	1.00	1	12/30/2021 17:12	WG1796559
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/30/2021 17:12	WG1796559
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/30/2021 17:12	WG1796559
1,1,2-Trichlorotrifluoroethane	U	L1 R7	0.180	1.00	1	12/30/2021 17:12	WG1796559
Tetrachloroethene	U		0.300	1.00	1	12/30/2021 17:12	WG1796559
Toluene	U		0.278	1.00	1	12/30/2021 17:12	WG1796559
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/30/2021 17:12	WG1796559
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/30/2021 17:12	WG1796559
1,1,1-Trichloroethane	U		0.149	1.00	1	12/30/2021 17:12	WG1796559
1,1,2-Trichloroethane	U		0.158	1.00	1	12/30/2021 17:12	WG1796559
Trichloroethene	8.82		0.190	1.00	1	12/30/2021 17:12	WG1796559
Trichlorofluoromethane	U		0.160	5.00	1	12/30/2021 17:12	WG1796559
1,2,3-Trichloropropane	U		0.237	2.50	1	12/30/2021 17:12	WG1796559
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/30/2021 17:12	WG1796559
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/30/2021 17:12	WG1796559
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/30/2021 17:12	WG1796559
Vinyl chloride	U		0.234	1.00	1	12/30/2021 17:12	WG1796559
Xylenes, Total	U		0.174	3.00	1	12/30/2021 17:12	WG1796559
(S) Toluene-d8	*113*			*80.0-120*		*12/30/2021 17:12*	WG1796559
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*12/30/2021 17:12*	WG1796559
(S) 1,2-Dichloroethane-d4	*125*			*70.0-130*		*12/30/2021 17:12*	WG1796559

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,4-Dioxane	11.1		0.597	3.00	1	12/27/2021 21:32	WG1795312
(S) Toluene-d8	*99.5*			*77.0-127*		*12/27/2021 21:32*	WG1795312

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	171000		1500	20000	5000	01/04/2022 12:34	WG1797425

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	12/30/2021 20:00	WG1796559
Acrolein	U	L1	2.54	50.0	1	12/30/2021 20:00	WG1796559
Acrylonitrile	U		0.671	10.0	1	12/30/2021 20:00	WG1796559
Benzene	1.49		0.0941	1.00	1	12/30/2021 20:00	WG1796559
Bromobenzene	U		0.118	1.00	1	12/30/2021 20:00	WG1796559
Bromodichloromethane	U		0.136	1.00	1	12/30/2021 20:00	WG1796559
Bromoform	U		0.129	1.00	1	12/30/2021 20:00	WG1796559
Bromomethane	U		0.605	5.00	1	12/30/2021 20:00	WG1796559
1,3-Butadiene	U		0.299	2.00	1	12/30/2021 20:00	WG1796559
n-Butylbenzene	U		0.157	1.00	1	12/30/2021 20:00	WG1796559
sec-Butylbenzene	U		0.125	1.00	1	12/30/2021 20:00	WG1796559
tert-Butylbenzene	U		0.127	1.00	1	12/30/2021 20:00	WG1796559
Carbon tetrachloride	U		0.128	1.00	1	12/30/2021 20:00	WG1796559
Carbon disulfide	U	L1 R7	0.0962	1.00	1	12/30/2021 20:00	WG1796559
Chlorobenzene	U		0.116	1.00	1	12/30/2021 20:00	WG1796559
Chlorodibromomethane	U		0.140	1.00	1	12/30/2021 20:00	WG1796559
Chloroethane	U		0.192	5.00	1	12/30/2021 20:00	WG1796559
Chloroform	2.44	E4	0.111	5.00	1	12/30/2021 20:00	WG1796559
Chloromethane	U		0.960	2.50	1	12/30/2021 20:00	WG1796559
Cyclohexane	U		0.188	1.00	1	12/30/2021 20:00	WG1796559
2-Chlorotoluene	U		0.106	1.00	1	12/30/2021 20:00	WG1796559
4-Chlorotoluene	U		0.114	1.00	1	12/30/2021 20:00	WG1796559
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/30/2021 20:00	WG1796559
1,2-Dibromoethane	U		0.126	1.00	1	12/30/2021 20:00	WG1796559
Dibromomethane	U		0.122	1.00	1	12/30/2021 20:00	WG1796559
1,2-Dichlorobenzene	U		0.107	1.00	1	12/30/2021 20:00	WG1796559
1,3-Dichlorobenzene	U		0.110	1.00	1	12/30/2021 20:00	WG1796559
1,4-Dichlorobenzene	U		0.120	1.00	1	12/30/2021 20:00	WG1796559
Dichlorodifluoromethane	U		0.374	5.00	1	12/30/2021 20:00	WG1796559
1,1-Dichloroethane	1.64		0.100	1.00	1	12/30/2021 20:00	WG1796559
1,2-Dichloroethane	U		0.0819	1.00	1	12/30/2021 20:00	WG1796559
1,1-Dichloroethene	166	L1 R7	0.188	1.00	1	12/30/2021 20:00	WG1796559
cis-1,2-Dichloroethene	1.76		0.126	1.00	1	12/30/2021 20:00	WG1796559
trans-1,2-Dichloroethene	0.442	E4	0.149	1.00	1	12/30/2021 20:00	WG1796559
1,2-Dichloropropane	U		0.149	1.00	1	12/30/2021 20:00	WG1796559
1,1-Dichloropropene	U		0.142	1.00	1	12/30/2021 20:00	WG1796559
1,3-Dichloropropane	U		0.110	1.00	1	12/30/2021 20:00	WG1796559
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/30/2021 20:00	WG1796559
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/30/2021 20:00	WG1796559
2,2-Dichloropropane	U		0.161	1.00	1	12/30/2021 20:00	WG1796559
Dicyclopentadiene	U		0.253	1.00	1	12/30/2021 20:00	WG1796559
Di-isopropyl ether	U		0.105	1.00	1	12/30/2021 20:00	WG1796559
Ethylbenzene	0.686	E4	0.137	1.00	1	12/30/2021 20:00	WG1796559
4-Ethyltoluene	0.500	E4	0.208	1.00	1	12/30/2021 20:00	WG1796559
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/30/2021 20:00	WG1796559
n-Hexane	U		0.749	10.0	1	12/30/2021 20:00	WG1796559
Isopropylbenzene	U		0.105	1.00	1	12/30/2021 20:00	WG1796559
p-Isopropyltoluene	U		0.120	1.00	1	12/30/2021 20:00	WG1796559
2-Butanone (MEK)	U		1.19	10.0	1	12/30/2021 20:00	WG1796559
Methyl Cyclohexane	U		0.660	1.00	1	12/30/2021 20:00	WG1796559

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	12/30/2021 20:00	WG1796559
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/30/2021 20:00	WG1796559
Methyl tert-butyl ether	U		0.101	1.00	1	12/30/2021 20:00	WG1796559
Naphthalene	U		1.00	5.00	1	12/30/2021 20:00	WG1796559
Propene	U		0.936	2.50	1	12/30/2021 20:00	WG1796559
n-Propylbenzene	0.101	E4	0.0993	1.00	1	12/30/2021 20:00	WG1796559
Styrene	U		0.118	1.00	1	12/30/2021 20:00	WG1796559
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/30/2021 20:00	WG1796559
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/30/2021 20:00	WG1796559
1,1,2-Trichlorotrifluoroethane	U	L1 R7	0.180	1.00	1	12/30/2021 20:00	WG1796559
Tetrachloroethene	1.34		0.300	1.00	1	12/30/2021 20:00	WG1796559
Toluene	0.844	E4	0.278	1.00	1	12/30/2021 20:00	WG1796559
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/30/2021 20:00	WG1796559
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/30/2021 20:00	WG1796559
1,1,1-Trichloroethane	U		0.149	1.00	1	12/30/2021 20:00	WG1796559
1,1,2-Trichloroethane	1.92		0.158	1.00	1	12/30/2021 20:00	WG1796559
Trichloroethene	627		4.75	25.0	25	12/31/2021 12:12	WG1796911
Trichlorofluoromethane	U		0.160	5.00	1	12/30/2021 20:00	WG1796559
1,2,3-Trichloropropane	U		0.237	2.50	1	12/30/2021 20:00	WG1796559
1,2,4-Trimethylbenzene	0.551	E4	0.322	1.00	1	12/30/2021 20:00	WG1796559
1,2,3-Trimethylbenzene	0.291	E4	0.104	1.00	1	12/30/2021 20:00	WG1796559
1,3,5-Trimethylbenzene	0.212	E4	0.104	1.00	1	12/30/2021 20:00	WG1796559
Vinyl chloride	U		0.234	1.00	1	12/30/2021 20:00	WG1796559
Xylenes, Total	2.15	E4	0.174	3.00	1	12/30/2021 20:00	WG1796559
(S) Toluene-d8	*118*			*80.0-120*		*12/30/2021 20:00*	WG1796559
(S) Toluene-d8	*99.9*			*80.0-120*		*12/31/2021 12:12*	WG1796911
(S) 4-Bromofluorobenzene	*105*			*77.0-126*		*12/30/2021 20:00*	WG1796559
(S) 4-Bromofluorobenzene	*97.3*			*77.0-126*		*12/31/2021 12:12*	WG1796911
(S) 1,2-Dichloroethane-d4	*129*			*70.0-130*		*12/30/2021 20:00*	WG1796559
(S) 1,2-Dichloroethane-d4	*87.6*			*70.0-130*		*12/31/2021 12:12*	WG1796911

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	280		0.597	3.00	1	12/27/2021 21:52	WG1795312
(S) Toluene-d8	*105*			*77.0-127*		*12/27/2021 21:52*	WG1795312

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	198000		1500	20000	5000	01/04/2022 13:03	WG1797425

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	12/30/2021 20:21	WG1796559
Acrolein	U	L1	2.54	50.0	1	12/30/2021 20:21	WG1796559
Acrylonitrile	U		0.671	10.0	1	12/30/2021 20:21	WG1796559
Benzene	1.51		0.0941	1.00	1	12/30/2021 20:21	WG1796559
Bromobenzene	U		0.118	1.00	1	12/30/2021 20:21	WG1796559
Bromodichloromethane	U		0.136	1.00	1	12/30/2021 20:21	WG1796559
Bromoform	U		0.129	1.00	1	12/30/2021 20:21	WG1796559
Bromomethane	U		0.605	5.00	1	12/30/2021 20:21	WG1796559
1,3-Butadiene	U		0.299	2.00	1	12/30/2021 20:21	WG1796559
n-Butylbenzene	U		0.157	1.00	1	12/30/2021 20:21	WG1796559
sec-Butylbenzene	U		0.125	1.00	1	12/30/2021 20:21	WG1796559
tert-Butylbenzene	U		0.127	1.00	1	12/30/2021 20:21	WG1796559
Carbon tetrachloride	U		0.128	1.00	1	12/30/2021 20:21	WG1796559
Carbon disulfide	U	L1 R7	0.0962	1.00	1	12/30/2021 20:21	WG1796559
Chlorobenzene	U		0.116	1.00	1	12/30/2021 20:21	WG1796559
Chlorodibromomethane	U		0.140	1.00	1	12/30/2021 20:21	WG1796559
Chloroethane	U		0.192	5.00	1	12/30/2021 20:21	WG1796559
Chloroform	2.30	E4	0.111	5.00	1	12/30/2021 20:21	WG1796559
Chloromethane	U		0.960	2.50	1	12/30/2021 20:21	WG1796559
Cyclohexane	U		0.188	1.00	1	12/30/2021 20:21	WG1796559
2-Chlorotoluene	U		0.106	1.00	1	12/30/2021 20:21	WG1796559
4-Chlorotoluene	U		0.114	1.00	1	12/30/2021 20:21	WG1796559
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/30/2021 20:21	WG1796559
1,2-Dibromoethane	U		0.126	1.00	1	12/30/2021 20:21	WG1796559
Dibromomethane	U		0.122	1.00	1	12/30/2021 20:21	WG1796559
1,2-Dichlorobenzene	U		0.107	1.00	1	12/30/2021 20:21	WG1796559
1,3-Dichlorobenzene	U		0.110	1.00	1	12/30/2021 20:21	WG1796559
1,4-Dichlorobenzene	U		0.120	1.00	1	12/30/2021 20:21	WG1796559
Dichlorodifluoromethane	U		0.374	5.00	1	12/30/2021 20:21	WG1796559
1,1-Dichloroethane	1.34		0.100	1.00	1	12/30/2021 20:21	WG1796559
1,2-Dichloroethane	U		0.0819	1.00	1	12/30/2021 20:21	WG1796559
1,1-Dichloroethene	162	L1 R7	0.188	1.00	1	12/30/2021 20:21	WG1796559
cis-1,2-Dichloroethene	1.78		0.126	1.00	1	12/30/2021 20:21	WG1796559
trans-1,2-Dichloroethene	0.409	E4	0.149	1.00	1	12/30/2021 20:21	WG1796559
1,2-Dichloropropane	U		0.149	1.00	1	12/30/2021 20:21	WG1796559
1,1-Dichloropropene	U		0.142	1.00	1	12/30/2021 20:21	WG1796559
1,3-Dichloropropane	U		0.110	1.00	1	12/30/2021 20:21	WG1796559
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/30/2021 20:21	WG1796559
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/30/2021 20:21	WG1796559
2,2-Dichloropropane	U		0.161	1.00	1	12/30/2021 20:21	WG1796559
Dicyclopentadiene	U		0.253	1.00	1	12/30/2021 20:21	WG1796559
Di-isopropyl ether	U		0.105	1.00	1	12/30/2021 20:21	WG1796559
Ethylbenzene	U		0.137	1.00	1	12/30/2021 20:21	WG1796559
4-Ethyltoluene	U		0.208	1.00	1	12/30/2021 20:21	WG1796559
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/30/2021 20:21	WG1796559
n-Hexane	U		0.749	10.0	1	12/30/2021 20:21	WG1796559
Isopropylbenzene	U		0.105	1.00	1	12/30/2021 20:21	WG1796559
p-Isopropyltoluene	U		0.120	1.00	1	12/30/2021 20:21	WG1796559
2-Butanone (MEK)	U		1.19	10.0	1	12/30/2021 20:21	WG1796559
Methyl Cyclohexane	U		0.660	1.00	1	12/30/2021 20:21	WG1796559

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		0.430	5.00	1	12/30/2021 20:21	WG1796559
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/30/2021 20:21	WG1796559
Methyl tert-butyl ether	U		0.101	1.00	1	12/30/2021 20:21	WG1796559
Naphthalene	U		1.00	5.00	1	12/30/2021 20:21	WG1796559
Propene	U		0.936	2.50	1	12/30/2021 20:21	WG1796559
n-Propylbenzene	U		0.0993	1.00	1	12/30/2021 20:21	WG1796559
Styrene	U		0.118	1.00	1	12/30/2021 20:21	WG1796559
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/30/2021 20:21	WG1796559
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/30/2021 20:21	WG1796559
1,1,2-Trichlorotrifluoroethane	U	L1 R7	0.180	1.00	1	12/30/2021 20:21	WG1796559
Tetrachloroethene	1.62		0.300	1.00	1	12/30/2021 20:21	WG1796559
Toluene	U		0.278	1.00	1	12/30/2021 20:21	WG1796559
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/30/2021 20:21	WG1796559
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/30/2021 20:21	WG1796559
1,1,1-Trichloroethane	U		0.149	1.00	1	12/30/2021 20:21	WG1796559
1,1,2-Trichloroethane	2.12		0.158	1.00	1	12/30/2021 20:21	WG1796559
Trichloroethene	653		4.75	25.0	25	12/31/2021 12:32	WG1796911
Trichlorofluoromethane	U		0.160	5.00	1	12/30/2021 20:21	WG1796559
1,2,3-Trichloropropane	U		0.237	2.50	1	12/30/2021 20:21	WG1796559
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/30/2021 20:21	WG1796559
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/30/2021 20:21	WG1796559
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/30/2021 20:21	WG1796559
Vinyl chloride	U		0.234	1.00	1	12/30/2021 20:21	WG1796559
Xylenes, Total	U		0.174	3.00	1	12/30/2021 20:21	WG1796559
(S) Toluene-d8	*123*	S10		*80.0-120*		*12/30/2021 20:21*	WG1796559
(S) Toluene-d8	*99.4*			*80.0-120*		*12/31/2021 12:32*	WG1796911
(S) 4-Bromofluorobenzene	*107*			*77.0-126*		*12/30/2021 20:21*	WG1796559
(S) 4-Bromofluorobenzene	*94.7*			*77.0-126*		*12/31/2021 12:32*	WG1796911
(S) 1,2-Dichloroethane-d4	*132*	S10		*70.0-130*		*12/30/2021 20:21*	WG1796559
(S) 1,2-Dichloroethane-d4	*86.8*			*70.0-130*		*12/31/2021 12:32*	WG1796911

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,4-Dioxane	281		0.597	3.00	1	12/27/2021 22:12	WG1795312
(S) Toluene-d8	*106*			*77.0-127*		*12/27/2021 22:12*	WG1795312

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.3	50.0	1	12/30/2021 14:44	WG1796559
Acrolein	U	L1	2.54	50.0	1	12/30/2021 14:44	WG1796559
Acrylonitrile	U		0.671	10.0	1	12/30/2021 14:44	WG1796559
Benzene	U		0.0941	1.00	1	12/30/2021 14:44	WG1796559
Bromobenzene	U		0.118	1.00	1	12/30/2021 14:44	WG1796559
Bromodichloromethane	U		0.136	1.00	1	12/30/2021 14:44	WG1796559
Bromoform	U		0.129	1.00	1	12/30/2021 14:44	WG1796559
Bromomethane	U		0.605	5.00	1	12/30/2021 14:44	WG1796559
1,3-Butadiene	U		0.299	2.00	1	12/30/2021 14:44	WG1796559
n-Butylbenzene	U		0.157	1.00	1	12/30/2021 14:44	WG1796559
sec-Butylbenzene	U		0.125	1.00	1	12/30/2021 14:44	WG1796559
tert-Butylbenzene	U		0.127	1.00	1	12/30/2021 14:44	WG1796559
Carbon tetrachloride	U		0.128	1.00	1	12/30/2021 14:44	WG1796559
Carbon disulfide	U	L1 R7	0.0962	1.00	1	12/30/2021 14:44	WG1796559
Chlorobenzene	U		0.116	1.00	1	12/30/2021 14:44	WG1796559
Chlorodibromomethane	U		0.140	1.00	1	12/30/2021 14:44	WG1796559
Chloroethane	U		0.192	5.00	1	12/30/2021 14:44	WG1796559
Chloroform	U		0.111	5.00	1	12/30/2021 14:44	WG1796559
Chloromethane	U		0.960	2.50	1	12/30/2021 14:44	WG1796559
Cyclohexane	U		0.188	1.00	1	12/30/2021 14:44	WG1796559
2-Chlorotoluene	U		0.106	1.00	1	12/30/2021 14:44	WG1796559
4-Chlorotoluene	U		0.114	1.00	1	12/30/2021 14:44	WG1796559
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	12/30/2021 14:44	WG1796559
1,2-Dibromoethane	U		0.126	1.00	1	12/30/2021 14:44	WG1796559
Dibromomethane	U		0.122	1.00	1	12/30/2021 14:44	WG1796559
1,2-Dichlorobenzene	U		0.107	1.00	1	12/30/2021 14:44	WG1796559
1,3-Dichlorobenzene	U		0.110	1.00	1	12/30/2021 14:44	WG1796559
1,4-Dichlorobenzene	U		0.120	1.00	1	12/30/2021 14:44	WG1796559
Dichlorodifluoromethane	U		0.374	5.00	1	12/30/2021 14:44	WG1796559
1,1-Dichloroethane	U		0.100	1.00	1	12/30/2021 14:44	WG1796559
1,2-Dichloroethane	U		0.0819	1.00	1	12/30/2021 14:44	WG1796559
1,1-Dichloroethene	U	L1 R7	0.188	1.00	1	12/30/2021 14:44	WG1796559
cis-1,2-Dichloroethene	U		0.126	1.00	1	12/30/2021 14:44	WG1796559
trans-1,2-Dichloroethene	U		0.149	1.00	1	12/30/2021 14:44	WG1796559
1,2-Dichloropropane	U		0.149	1.00	1	12/30/2021 14:44	WG1796559
1,1-Dichloropropene	U		0.142	1.00	1	12/30/2021 14:44	WG1796559
1,3-Dichloropropane	U		0.110	1.00	1	12/30/2021 14:44	WG1796559
cis-1,3-Dichloropropene	U		0.111	1.00	1	12/30/2021 14:44	WG1796559
trans-1,3-Dichloropropene	U		0.118	1.00	1	12/30/2021 14:44	WG1796559
2,2-Dichloropropane	U		0.161	1.00	1	12/30/2021 14:44	WG1796559
Dicyclopentadiene	U		0.253	1.00	1	12/30/2021 14:44	WG1796559
Di-isopropyl ether	U		0.105	1.00	1	12/30/2021 14:44	WG1796559
Ethylbenzene	U		0.137	1.00	1	12/30/2021 14:44	WG1796559
4-Ethyltoluene	U		0.208	1.00	1	12/30/2021 14:44	WG1796559
Hexachloro-1,3-butadiene	U		0.337	1.00	1	12/30/2021 14:44	WG1796559
n-Hexane	U		0.749	10.0	1	12/30/2021 14:44	WG1796559
Isopropylbenzene	U		0.105	1.00	1	12/30/2021 14:44	WG1796559
p-Isopropyltoluene	U		0.120	1.00	1	12/30/2021 14:44	WG1796559
2-Butanone (MEK)	U		1.19	10.0	1	12/30/2021 14:44	WG1796559
Methyl Cyclohexane	U		0.660	1.00	1	12/30/2021 14:44	WG1796559
Methylene Chloride	U		0.430	5.00	1	12/30/2021 14:44	WG1796559
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	12/30/2021 14:44	WG1796559
Methyl tert-butyl ether	U		0.101	1.00	1	12/30/2021 14:44	WG1796559
Naphthalene	U		1.00	5.00	1	12/30/2021 14:44	WG1796559
Propene	U		0.936	2.50	1	12/30/2021 14:44	WG1796559
n-Propylbenzene	U		0.0993	1.00	1	12/30/2021 14:44	WG1796559

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Styrene	U		0.118	1.00	1	12/30/2021 14:44	WG1796559
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	12/30/2021 14:44	WG1796559
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	12/30/2021 14:44	WG1796559
1,1,2-Trichlorotrifluoroethane	U	L1 R7	0.180	1.00	1	12/30/2021 14:44	WG1796559
Tetrachloroethene	U		0.300	1.00	1	12/30/2021 14:44	WG1796559
Toluene	U		0.278	1.00	1	12/30/2021 14:44	WG1796559
1,2,3-Trichlorobenzene	U		0.230	1.00	1	12/30/2021 14:44	WG1796559
1,2,4-Trichlorobenzene	U		0.481	1.00	1	12/30/2021 14:44	WG1796559
1,1,1-Trichloroethane	U		0.149	1.00	1	12/30/2021 14:44	WG1796559
1,1,2-Trichloroethane	U		0.158	1.00	1	12/30/2021 14:44	WG1796559
Trichloroethene	U		0.190	1.00	1	12/30/2021 14:44	WG1796559
Trichlorofluoromethane	U		0.160	5.00	1	12/30/2021 14:44	WG1796559
1,2,3-Trichloropropane	U		0.237	2.50	1	12/30/2021 14:44	WG1796559
1,2,4-Trimethylbenzene	U		0.322	1.00	1	12/30/2021 14:44	WG1796559
1,2,3-Trimethylbenzene	U		0.104	1.00	1	12/30/2021 14:44	WG1796559
1,3,5-Trimethylbenzene	U		0.104	1.00	1	12/30/2021 14:44	WG1796559
Vinyl chloride	U		0.234	1.00	1	12/30/2021 14:44	WG1796559
Xylenes, Total	U		0.174	3.00	1	12/30/2021 14:44	WG1796559
(S) Toluene-d8	*117*			*80.0-120*		*12/30/2021 14:44*	WG1796559
(S) 4-Bromofluorobenzene	*104*			*77.0-126*		*12/30/2021 14:44*	WG1796559
(S) 1,2-Dichloroethane-d4	*122*			*70.0-130*		*12/30/2021 14:44*	WG1796559

Method Blank (MB)

(MB) R3747549-1 01/03/22 13:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Perchlorate	U		0.300	4.00

L1445691-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1445691-01 01/04/22 11:38 • (DUP) R3747549-3 01/04/22 12:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	21100	22600	500	7.12		15

Laboratory Control Sample (LCS)

(LCS) R3747549-2 01/03/22 14:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	10.1	101	90.0-110	

Method Blank (MB)

(MB) R3746515-3 12/30/21 10:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	50.0
Acrolein	U		2.54	50.0
Acrylonitrile	U		0.671	10.0
Benzene	U		0.0941	1.00
Bromobenzene	U		0.118	1.00
Bromodichloromethane	U		0.136	1.00
Bromoform	U		0.129	1.00
Bromomethane	U		0.605	5.00
1,3-Butadiene	U		0.299	2.00
n-Butylbenzene	U		0.157	1.00
sec-Butylbenzene	U		0.125	1.00
tert-Butylbenzene	U		0.127	1.00
Carbon disulfide	U		0.0962	1.00
Carbon tetrachloride	U		0.128	1.00
Chlorobenzene	U		0.116	1.00
Chlorodibromomethane	U		0.140	1.00
Chloroethane	U		0.192	5.00
Chloroform	U		0.111	5.00
Chloromethane	U		0.960	2.50
Cyclohexane	U		0.188	1.00
2-Chlorotoluene	U		0.106	1.00
4-Chlorotoluene	U		0.114	1.00
1,2-Dibromo-3-Chloropropane	U		0.276	5.00
1,2-Dibromoethane	U		0.126	1.00
Dibromomethane	U		0.122	1.00
1,2-Dichlorobenzene	U		0.107	1.00
1,3-Dichlorobenzene	U		0.110	1.00
1,4-Dichlorobenzene	U		0.120	1.00
Dichlorodifluoromethane	U		0.374	5.00
1,1-Dichloroethane	U		0.100	1.00
1,2-Dichloroethane	U		0.0819	1.00
1,1-Dichloroethene	U		0.188	1.00
cis-1,2-Dichloroethene	U		0.126	1.00
trans-1,2-Dichloroethene	U		0.149	1.00
1,2-Dichloropropane	U		0.149	1.00
1,1-Dichloropropene	U		0.142	1.00
1,3-Dichloropropane	U		0.110	1.00
cis-1,3-Dichloropropene	U		0.111	1.00
trans-1,3-Dichloropropene	U		0.118	1.00
2,2-Dichloropropane	U		0.161	1.00

Method Blank (MB)

(MB) R3746515-3 12/30/21 10:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Dicyclopentadiene	U		0.253	1.00
Di-isopropyl ether	U		0.105	1.00
Ethylbenzene	U		0.137	1.00
4-Ethyltoluene	U		0.208	1.00
Hexachloro-1,3-butadiene	U		0.337	1.00
n-Hexane	U		0.749	10.0
Isopropylbenzene	U		0.105	1.00
p-Isopropyltoluene	U		0.120	1.00
2-Butanone (MEK)	U		1.19	10.0
Methyl Cyclohexane	U		0.660	1.00
Methylene Chloride	U		0.430	5.00
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0
Methyl tert-butyl ether	U		0.101	1.00
Naphthalene	U		1.00	5.00
Propene	U		0.936	2.50
n-Propylbenzene	U		0.0993	1.00
Styrene	U		0.118	1.00
1,1,1,2-Tetrachloroethane	U		0.147	1.00
1,1,2,2-Tetrachloroethane	U		0.133	1.00
Tetrachloroethene	U		0.300	1.00
Toluene	U		0.278	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
1,2,3-Trichlorobenzene	U		0.230	1.00
1,2,4-Trichlorobenzene	U		0.481	1.00
1,1,1-Trichloroethane	U		0.149	1.00
1,1,2-Trichloroethane	U		0.158	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
1,2,3-Trichloropropane	U		0.237	2.50
1,2,3-Trimethylbenzene	U		0.104	1.00
1,2,4-Trimethylbenzene	U		0.322	1.00
1,3,5-Trimethylbenzene	U		0.104	1.00
Vinyl chloride	U		0.234	1.00
Xylenes, Total	U		0.174	3.00
(S) Toluene-d8	*119*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*121*			*70.0-130*

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

(LCS) R3746515-1 12/30/21 09:29 • (LCSD) R3746515-2 12/30/21 09:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	25.5	33.0	102	132	19.0-160			25.6	27
Acrolein	25.0	33.2	40.9	133	164	30.0-160		L1	20.8	26
Acrylonitrile	25.0	25.4	26.1	102	104	55.0-149			2.72	20
Benzene	5.00	5.04	5.30	101	106	70.0-123			5.03	20
Bromobenzene	5.00	4.55	5.13	91.0	103	73.0-121			12.0	20
Bromodichloromethane	5.00	5.11	5.01	102	100	75.0-120			1.98	20
Bromoform	5.00	5.14	5.01	103	100	68.0-132			2.56	20
Bromomethane	5.00	2.83	2.87	56.6	57.4	30.0-160			1.40	25
1,3-Butadiene	5.00	6.50	5.92	130	118	45.0-147			9.34	20
n-Butylbenzene	5.00	4.37	4.52	87.4	90.4	73.0-125			3.37	20
sec-Butylbenzene	5.00	4.67	4.79	93.4	95.8	75.0-125			2.54	20
tert-Butylbenzene	5.00	4.93	4.98	98.6	99.6	76.0-124			1.01	20
Carbon disulfide	5.00	4.76	6.71	95.2	134	61.0-128		L1 R7	34.0	20
Carbon tetrachloride	5.00	5.11	5.82	102	116	68.0-126			13.0	20
Chlorobenzene	5.00	5.08	5.14	102	103	80.0-121			1.17	20
Chlorodibromomethane	5.00	5.34	5.19	107	104	77.0-125			2.85	20
Chloroethane	5.00	6.47	7.24	129	145	47.0-150			11.2	20
Chloroform	5.00	5.21	5.23	104	105	73.0-120			0.383	20
Chloromethane	5.00	3.32	3.51	66.4	70.2	41.0-142			5.56	20
Cyclohexane	5.00	4.47	4.71	89.4	94.2	71.0-124			5.23	20
2-Chlorotoluene	5.00	5.01	5.14	100	103	76.0-123			2.56	20
4-Chlorotoluene	5.00	4.71	4.95	94.2	99.0	75.0-122			4.97	20
1,2-Dibromo-3-Chloropropane	5.00	4.51	4.42	90.2	88.4	58.0-134			2.02	20
1,2-Dibromoethane	5.00	5.33	5.05	107	101	80.0-122			5.39	20
Dibromomethane	5.00	5.17	5.38	103	108	80.0-120			3.98	20
1,2-Dichlorobenzene	5.00	4.81	5.16	96.2	103	79.0-121			7.02	20
1,3-Dichlorobenzene	5.00	4.77	5.10	95.4	102	79.0-120			6.69	20
1,4-Dichlorobenzene	5.00	4.82	5.20	96.4	104	79.0-120			7.58	20
Dichlorodifluoromethane	5.00	5.35	5.80	107	116	51.0-149			8.07	20
1,1-Dichloroethane	5.00	5.02	5.15	100	103	70.0-126			2.56	20
1,2-Dichloroethane	5.00	4.90	5.19	98.0	104	70.0-128			5.75	20
1,1-Dichloroethene	5.00	4.93	6.31	98.6	126	71.0-124		L1 R7	24.6	20
cis-1,2-Dichloroethene	5.00	4.79	4.85	95.8	97.0	73.0-120			1.24	20
trans-1,2-Dichloroethene	5.00	5.05	5.55	101	111	73.0-120			9.43	20
1,2-Dichloropropane	5.00	4.88	4.85	97.6	97.0	77.0-125			0.617	20
1,1-Dichloropropene	5.00	4.95	5.29	99.0	106	74.0-126			6.64	20
1,3-Dichloropropane	5.00	4.83	5.03	96.6	101	80.0-120			4.06	20
cis-1,3-Dichloropropene	5.00	5.10	5.14	102	103	80.0-123			0.781	20
trans-1,3-Dichloropropene	5.00	4.96	5.20	99.2	104	78.0-124			4.72	20
2,2-Dichloropropane	5.00	4.76	4.83	95.2	96.6	58.0-130			1.46	20

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

(LCS) R3746515-1 12/30/21 09:29 • (LCSD) R3746515-2 12/30/21 09:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Dicyclopentadiene	5.00	4.95	4.88	99.0	97.6	74.0-126			1.42	20
Di-isopropyl ether	5.00	4.85	5.00	97.0	100	58.0-138			3.05	20
Ethylbenzene	5.00	5.06	5.04	101	101	79.0-123			0.396	20
4-Ethyltoluene	5.00	4.74	4.92	94.8	98.4	74.0-127			3.73	20
Hexachloro-1,3-butadiene	5.00	4.37	5.31	87.4	106	54.0-138			19.4	20
n-Hexane	5.00	3.77	4.50	75.4	90.0	57.0-133			17.7	20
Isopropylbenzene	5.00	4.92	5.03	98.4	101	76.0-127			2.21	20
p-Isopropyltoluene	5.00	4.91	4.96	98.2	99.2	76.0-125			1.01	20
2-Butanone (MEK)	25.0	26.5	27.4	106	110	44.0-160			3.34	20
Methyl Cyclohexane	5.00	4.34	4.71	86.8	94.2	68.0-126			8.18	20
Methylene Chloride	5.00	4.91	5.77	98.2	115	67.0-120			16.1	20
4-Methyl-2-pentanone (MIBK)	25.0	26.8	25.9	107	104	68.0-142			3.42	20
Methyl tert-butyl ether	5.00	5.25	5.31	105	106	68.0-125			1.14	20
Naphthalene	5.00	4.15	4.58	83.0	91.6	54.0-135			9.85	20
Propene	5.00	3.50	3.55	70.0	71.0	30.0-160			1.42	20
n-Propylbenzene	5.00	4.30	4.94	86.0	98.8	77.0-124			13.9	20
Styrene	5.00	4.72	4.98	94.4	99.6	73.0-130			5.36	20
1,1,1,2-Tetrachloroethane	5.00	5.45	5.37	109	107	75.0-125			1.48	20
1,1,2,2-Tetrachloroethane	5.00	4.57	4.67	91.4	93.4	65.0-130			2.16	20
Tetrachloroethene	5.00	5.14	5.47	103	109	72.0-132			6.22	20
Toluene	5.00	5.10	5.20	102	104	79.0-120			1.94	20
1,1,2-Trichlorotrifluoroethane	5.00	5.39	7.06	108	141	69.0-132		L1 R7	26.8	20
1,2,3-Trichlorobenzene	5.00	4.83	5.22	96.6	104	50.0-138			7.76	20
1,2,4-Trichlorobenzene	5.00	4.26	4.80	85.2	96.0	57.0-137			11.9	20
1,1,1-Trichloroethane	5.00	5.24	5.47	105	109	73.0-124			4.30	20
1,1,2-Trichloroethane	5.00	5.21	5.30	104	106	80.0-120			1.71	20
Trichloroethene	5.00	5.45	5.53	109	111	78.0-124			1.46	20
Trichlorofluoromethane	5.00	6.18	6.79	124	136	59.0-147			9.41	20
1,2,3-Trichloropropane	5.00	5.21	5.32	104	106	73.0-130			2.09	20
1,2,3-Trimethylbenzene	5.00	4.90	4.81	98.0	96.2	77.0-120			1.85	20
1,2,4-Trimethylbenzene	5.00	4.74	4.98	94.8	99.6	76.0-121			4.94	20
1,3,5-Trimethylbenzene	5.00	4.98	5.14	99.6	103	76.0-122			3.16	20
Vinyl chloride	5.00	5.24	5.43	105	109	67.0-131			3.56	20
Xylenes, Total	15.0	15.1	15.3	101	102	79.0-123			1.32	20
(S) Toluene-d8				*117*	*114*	*80.0-120*				
(S) 4-Bromofluorobenzene				*108*	*106*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*120*	*123*	*70.0-130*				

L1445615-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1445615-02 12/30/21 16:30 • (MS) R3746515-4 12/30/21 21:03 • (MSD) R3746515-5 12/30/21 21:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	U	31.8	30.7	127	123	1	10.0-160			3.52	35
Acrolein	25.0	U	35.5	35.3	142	141	1	10.0-160			0.565	39
Acrylonitrile	25.0	U	31.0	29.9	124	120	1	21.0-160			3.61	32
Benzene	5.00	3.14	9.29	9.15	123	120	1	17.0-158			1.52	27
Bromobenzene	5.00	U	5.64	5.59	113	112	1	30.0-149			0.890	28
Bromodichloromethane	5.00	U	6.41	5.97	128	119	1	31.0-150			7.11	27
Bromoform	5.00	U	5.70	5.98	114	120	1	29.0-150			4.79	29
Bromomethane	5.00	U	2.38	2.76	47.6	55.2	1	10.0-160			14.8	38
1,3-Butadiene	5.00	U	6.98	6.82	140	136	1	10.0-160			2.32	22
n-Butylbenzene	5.00	U	5.21	5.33	104	107	1	31.0-150			2.28	30
sec-Butylbenzene	5.00	0.172	5.72	5.73	111	111	1	33.0-155			0.175	29
tert-Butylbenzene	5.00	U	5.71	5.65	114	113	1	34.0-153			1.06	28
Carbon disulfide	5.00	U	4.71	4.75	94.2	95.0	1	10.0-156			0.846	28
Carbon tetrachloride	5.00	U	7.04	6.62	141	132	1	23.0-159			6.15	28
Chlorobenzene	5.00	U	5.66	5.70	113	114	1	33.0-152			0.704	27
Chlorodibromomethane	5.00	U	5.83	6.03	117	121	1	37.0-149			3.37	27
Chloroethane	5.00	U	7.62	7.27	152	145	1	10.0-160			4.70	30
Chloroform	5.00	U	6.27	6.31	125	126	1	29.0-154			0.636	28
Chloromethane	5.00	U	3.83	3.84	76.6	76.8	1	10.0-160			0.261	29
Cyclohexane	5.00	5.93	11.8	11.3	117	107	1	19.0-160			4.33	23
2-Chlorotoluene	5.00	U	5.69	5.53	114	111	1	32.0-153			2.85	28
4-Chlorotoluene	5.00	U	5.20	5.38	104	108	1	32.0-150			3.40	28
1,2-Dibromo-3-Chloropropane	5.00	U	5.31	5.32	106	106	1	22.0-151			0.188	34
1,2-Dibromoethane	5.00	U	5.65	5.93	113	119	1	34.0-147			4.84	27
Dibromomethane	5.00	U	6.24	6.17	125	123	1	30.0-151			1.13	27
1,2-Dichlorobenzene	5.00	U	5.51	5.48	110	110	1	34.0-149			0.546	28
1,3-Dichlorobenzene	5.00	U	5.28	5.67	106	113	1	36.0-146			7.12	27
1,4-Dichlorobenzene	5.00	U	5.34	5.43	107	109	1	35.0-142			1.67	27
Dichlorodifluoromethane	5.00	U	7.14	6.96	143	139	1	10.0-160			2.55	29
1,1-Dichloroethane	5.00	U	6.08	6.15	122	123	1	25.0-158			1.14	27
1,2-Dichloroethane	5.00	0.199	5.93	5.79	115	112	1	29.0-151			2.39	27
1,1-Dichloroethene	5.00	U	5.79	5.99	116	120	1	11.0-160			3.40	29
cis-1,2-Dichloroethene	5.00	U	5.81	5.52	116	110	1	10.0-160			5.12	27
trans-1,2-Dichloroethene	5.00	U	5.75	5.95	115	119	1	17.0-153			3.42	27
1,2-Dichloropropane	5.00	U	5.59	5.50	112	110	1	30.0-156			1.62	27
1,1-Dichloropropene	5.00	U	6.30	6.28	126	126	1	25.0-158			0.318	27
1,3-Dichloropropane	5.00	U	5.56	5.33	111	107	1	38.0-147			4.22	27
cis-1,3-Dichloropropene	5.00	U	5.65	5.59	113	112	1	34.0-149			1.07	28
trans-1,3-Dichloropropene	5.00	U	5.53	5.69	111	114	1	32.0-149			2.85	28
2,2-Dichloropropane	5.00	U	6.10	6.17	122	123	1	24.0-152			1.14	29

L1445615-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1445615-02 12/30/21 16:30 • (MS) R3746515-4 12/30/21 21:03 • (MSD) R3746515-5 12/30/21 21:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Dicyclopentadiene	5.00	U	5.16	5.18	103	104	1	51.0-139			0.387	20
Di-isopropyl ether	5.00	U	5.85	5.71	117	114	1	21.0-160			2.42	28
Ethylbenzene	5.00	3.47	16.2	9.76	255	126	1	30.0-155	M1	R5	49.6	27
4-Ethyltoluene	5.00	U	5.40	5.50	108	110	1	10.0-160			1.83	20
Hexachloro-1,3-butadiene	5.00	U	5.86	6.23	117	125	1	20.0-154			6.12	34
Isopropylbenzene	5.00	0.754	6.95	6.81	124	121	1	28.0-157			2.03	27
p-Isopropyltoluene	5.00	U	5.62	5.71	112	114	1	30.0-154			1.59	29
2-Butanone (MEK)	25.0	U	29.4	29.8	118	119	1	10.0-160			1.35	32
Methyl Cyclohexane	5.00	1.66	6.58	6.18	98.4	90.4	1	11.0-160			6.27	24
Methylene Chloride	5.00	U	5.43	5.35	109	107	1	23.0-144			1.48	28
4-Methyl-2-pentanone (MIBK)	25.0	U	30.6	30.4	122	122	1	29.0-160			0.656	29
Methyl tert-butyl ether	5.00	2.74	9.32	9.15	132	128	1	28.0-150			1.84	29
Naphthalene	5.00	U	18.4	7.24	368	145	1	12.0-156	M1	R5	87.1	35
Propene	5.00	1.17	4.82	4.73	73.0	71.2	1	10.0-160			1.88	29
n-Propylbenzene	5.00	1.98	8.27	7.56	126	112	1	31.0-154			8.97	28
Styrene	5.00	U	5.49	5.45	110	109	1	33.0-155			0.731	28
1,1,1,2-Tetrachloroethane	5.00	U	6.19	5.99	124	120	1	36.0-151			3.28	29
1,1,2,2-Tetrachloroethane	5.00	U	5.42	5.53	108	111	1	33.0-150			2.01	28
Tetrachloroethene	5.00	U	6.21	6.22	124	124	1	10.0-160			0.161	27
Toluene	5.00	U	5.72	5.89	114	118	1	26.0-154			2.93	28
1,1,2-Trichlorotrifluoroethane	5.00	U	6.68	7.28	134	146	1	23.0-160			8.60	30
1,2,3-Trichlorobenzene	5.00	U	5.28	5.75	106	115	1	17.0-150			8.52	36
1,2,4-Trichlorobenzene	5.00	U	5.10	4.97	102	99.4	1	24.0-150			2.58	33
1,1,1-Trichloroethane	5.00	U	6.33	6.71	127	134	1	23.0-160			5.83	28
1,1,2-Trichloroethane	5.00	U	5.87	5.91	117	118	1	35.0-147			0.679	27
Trichloroethene	5.00	U	6.22	6.26	124	125	1	10.0-160			0.641	25
Trichlorofluoromethane	5.00	U	8.11	8.37	162	167	1	17.0-160	M1	M1	3.16	31
1,2,3-Trichloropropane	5.00	U	5.90	5.53	118	111	1	34.0-151			6.47	29
1,2,3-Trimethylbenzene	5.00	0.446	5.71	5.67	105	104	1	32.0-149			0.703	28
1,2,4-Trimethylbenzene	5.00	U	5.25	5.29	105	106	1	26.0-154			0.759	27
1,3,5-Trimethylbenzene	5.00	0.211	5.79	5.77	112	111	1	28.0-153			0.346	27
n-Hexane	5.00	U	4.43	4.46	88.6	89.2	1	10.0-153			0.675	28
Vinyl chloride	5.00	U	6.41	6.19	128	124	1	10.0-160			3.49	27
Xylenes, Total	15.0	U	17.2	17.6	115	117	1	29.0-154			2.30	28
(S) Toluene-d8					*113*	*113*		*80.0-120*				
(S) 4-Bromofluorobenzene					*105*	*107*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*122*	*125*		*70.0-130*				

Method Blank (MB)

(MB) R3746877-3 12/31/21 11:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	*102*			*80.0-120*
(S) 4-Bromofluorobenzene	*93.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*

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

(LCS) R3746877-1 12/31/21 09:29 • (LCSD) R3746877-2 12/31/21 09:49

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Trichloroethene	5.00	4.40	4.18	88.0	83.6	78.0-124			5.13	20
(S) Toluene-d8				*99.0*	*98.1*	*80.0-120*				
(S) 4-Bromofluorobenzene				*94.4*	*94.2*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*89.8*	*91.4*	*70.0-130*				

Method Blank (MB)

(MB) R3746007-3 12/27/21 20:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
1,4-Dioxane	U		0.597	3.00
(S) Toluene-d8	*98.4*			*77.0-127*

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

(LCS) R3746007-1 12/27/21 18:13 • (LCSD) R3746007-2 12/27/21 18:33

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
1,4-Dioxane	50.0	45.6	46.1	91.2	92.2	55.0-138			1.09	24
(S) Toluene-d8				*99.7*	*99.3*	*77.0-127*				

L1444886-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1444886-06 12/27/21 21:12 • (MS) R3746007-4 12/27/21 22:32 • (MSD) R3746007-5 12/27/21 22:51

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
1,4-Dioxane	50.0	4.68	39.6	36.2	69.8	63.0	1	13.0-160			8.97	31
(S) Toluene-d8					*98.6*	*98.1*		*77.0-127*				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS16 • File ID: 1231_02

12/31/21 09:29

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	1231_02	710651	272275	158680
Upper Limit		1421302	544550	317360
Lower Limit		355326	136138	79340
LCS R3746877-1 WG1796911 1x	1231_02LCS	710651	272275	158680
LCSD R3746877-2 WG1796911 1x	1231_03	711750	269863	153077
BLANK R3746877-3 WG1796911 1x	1231_07	743175	284912	172535
L1445691-02 WG1796911 25x	1231_08	747832	284733	158819
L1445691-03 WG1796911 25x	1231_09	735938	281457	159406

Instrument: VOCMS23 • File ID: 1230_03

12/30/21 09:29

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	1230_03	538231	244264	236387
Upper Limit		1076462	488528	472774
Lower Limit		269116	122132	118194
LCS R3746515-1 WG1796559 1x	1230_03LCSB	538231	244264	236387
LCSD R3746515-2 WG1796559 1x	1230_04B	537312	249207	215554
BLANK R3746515-3 WG1796559 1x	1230_06B	519818	229149	214489
L1445691-04 WG1796559 1x	1230_13	517306	235388	198646
L1445691-01 WG1796559 1x	1230_20	487812	221321	192674
L1445691-02 WG1796559 1x	1230_28	483192	220196	189683
L1445691-03 WG1796559 1x	1230_29	476980	208823	186168
MS R3746515-4 WG1796559 1x	1230_31	507798	239167	211889
MSD R3746515-5 WG1796559 1x	1230_32	498044	232085	211862

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 1227_03

12/27/21 17:53

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	1227_03	970409
Upper Limit		1940818
Lower Limit		485205
LCS R3746007-1 WG1795312 1x	1227_04	895806
LCSD R3746007-2 WG1795312 1x	1227_05	884944
BLANK R3746007-3 WG1795312 1x	1227_08	886012
L1445691-01 WG1795312 1x	1227_11	820316
L1445691-02 WG1795312 1x	1227_12	789337
L1445691-03 WG1795312 1x	1227_13	791738
MS R3746007-4 WG1795312 1x	1227_14	798031
MSD R3746007-5 WG1795312 1x	1227_15	805786

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E4	Concentration estimated. Analyte was detected below laboratory minimum reporting level (MRL) but above MDL.
L1	The associated blank spike recovery was above laboratory acceptance limits.
M1	Matrix spike recovery was high, the method control sample recovery was acceptable.
R5	MS/MSD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
R7	LFB/LFBD RPD exceeded the laboratory acceptance limit. Recovery met acceptance criteria.
S10	Surrogate recovery was above laboratory and method acceptance limits.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Geosyntec
11811 N. Tatum Blvd.,
Suite P186
Phoenix, AZ 85028

Billing Information:
Accounts Payable
11811 N Tatum Blvd, Ste P186,
Phoenix, Arizona 85028

CC: tluttermoser@geosyntec.com

Pres Chk

Report to:
Tory Luttermoser; Fabrizio Mascioni

Email To:
FMascioni@Geosyntec.com

Project Description: **Nammo Defense Systems, Inc.** **NDS TTU Sampling**

City/State Collected: **Mesa, AZ**

Phone: **480-748-6283**
Fax:

Client Project # **SP0101GW21/02**

Lab Project #

Collected by (print): Ryan Ayala

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day

Quote # **GEOSYNPAZ052019S**

Date Results Needed: Standard

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Perchlorate 314.0/ 125mL HDPE/ No Pres	VOC 8260B/ 40mL amber/ HCl	1,4 Dioxane V8260LL14D/40mL amb/ HCl	Remarks	Sample # (lab only)
TTU-1-20211222	Grab	GW	-	12-22-21	1236	5	X	X	X		-01
TTU-2-20211222			-		1258		X	X	X		-02
TTU-2-20211222-Dup			-		1258		X	X	X		-03
Trip Blank				12-22-21		1		X			-04

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

L # L1445691
C143

Table

Acctnum: **GEOSYNPAZ**
Template:
Prelogin:
TSR: **Chris Ward**
PB:
Shipped Via:

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking #

Sample Receipt Checklist
COC Seal Present/Intact: __NP __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
	12-22-21	1334		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
	12/22/21	1800	SWA	2.7, 2.7 15
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			K. Holder	12/23/21 830

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

PNPAZ