Geosyntec consultants

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24 June 2021

Mr. Kyle Johnson, P.E.
Voluntary Remediation Program
Arizona Department of Environmental Quality
1110 W. Washington Street
Phoenix, AZ 85007

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

Dear Mr. Johnson,

Attached please find results for the first quarter 2021 groundwater monitoring event that was conducted by Geosyntec Consultants, Inc. 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 elevation measurements (Table 1), observed concentrations of volatile organic compounds (VOCs) (Table 2), and observed concentrations of perchlorate (Table 3). Figures provided in Attachment 2 include a site location map (Figure 1), groundwater elevation 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).

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 as usable for meeting project objectives. A data validation memorandum is provided in Attachment 3. 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 Mr. Angel Soto with NDS, or Mr. Fabrizio Mascioni with Geosyntec.

Sincerely,

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

Tory Luttermoser
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
Lily Bermejo, Salt River Pima-Maricopa Indian Community

ATTACHMENT 1

TABLES

TABLE 1: GROUNDWATER ELEVATIONS - FIRST QUARTER 2021
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.
JUNE 2021

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	3/30/2021	43.12	1269.61
TTU-2	909087.852	761148.265	1314.44	3/30/2021	63.38	1251.06
TTU-3	909303.363	760888.204	1308.03	3/29/2021	90.40	1217.63
TTU-4	909673.68	761041.975	1305.12	3/29/2021	52.81	1252.31
TTU-5	908747.636	761102.227	1314.93	3/30/2021	82.18	1232.75
TTU-6	909260.820	760560.096	1300.84	3/29/2021	130.22	1170.62
TTU-7	909287.611	760527.269	1301.84	3/29/2021	124.15	1177.69
TTU-8	909699.266	760514.908	1310.23	3/29/2021	147.52	1162.71
TTU-9A	909974.49	761710.151	1318.04	3/30/2021	29.71	1288.33
TTU-10	908960.114	760297.013	1302.42	3/29/2021	142.06	1160.36
TTU-11 (1)	909029.758	761706.47	1339.20	NM	NM	NA
TTU-12	909105.99	761103.28	1312.21	3/30/2021	74.96	1237.25
TTU-13	909405.92	761232.18	1310.79	3/30/2021	42.81	1267.98
TTU-14	909224.26	761181.23	1316.80	3/30/2021	60.53	1256.27
TTU-15	909185.10	762065.91	1350.85	3/29/2021	36.07	1314.78
TTU-16	909124.98	761848.851	1338.55	3/29/2021	30.01	1308.54
TTU-17	909370.90	762179.168	1347.49	3/29/2021	42.20	1305.29
TTU-18	908215.83	761130.011	1320.25	3/30/2021	DRY	
TTU-19	909030.75	761687.70	1336.81	NM	NM	NA
TTU-20	909022.53	761681.99	1336.90	NM	NM	NA
TTU-EX-1	909350.57	761597.823	1321.69	3/29/2021	33.19	1288.50
TTU-EX-2	909268.19	761493.214	1316.40	3/30/2021	42.61	1273.79
TTU-EX-3	909134.94	761465.507	1316.85	3/30/2021	43.78	1273.07
TTU-EX-4	909051.30	761442.876	1319.96	3/30/2021	47.43	1272.53
TTU-EX-5	908971.77	761423.325	1319.50	3/30/2021	43.32	1276.18
PF-1	909161.578	760140.434	1295.99	3/29/2021	137.42	1158.57
PF-2	909166.89	760122.25	1296.35	3/29/2021	137.52	1158.83

Notes:

intl ft = international foot

ft amsl = feet above mean sea level

ft btoc = feet below top of casing

NM = Not Measured

NA = Not Applicable

(1) = During March 2021, TTU-11 and TTU-19 were being used as injection wells for a Pilot Injection Study conducted by Geosyntec, using these wells as injection points. TTU-20 is being monitored under a separate scope as part of the Injection Pilot Study.

TABLE 2: SUMMARY OF DETECTED VOC CONCENTRATIONS - FIRST QUARTER 2021
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.
JUNE 2021

Geosyntec consultants

		Analyte	1,4-Dioxane	1,1,2-Trichloroethane	1,1,2-Trichlorotrifluoroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2,3-Trimethylbenzene	1,2-Dichlorobenzene	1,2-Dichloroethane	4-Methyl-2-Pentanone (MIBK)	Benzene	Chlorobenzene	Chloroform	cis-1,2-Dichloroethene	Dichloromethane	Diisopropyl Ether	Ethylbenzene	Isopropylbenzene	Methylcyclohexane	Propene	Tetrachloroethene (PCE)	Toluene	trans-1,2-Dichloroethene	Trichloroethene (TCE)	Vinyl Chloride	Xylenes (Total)
		Method	8260 SIM	8260B																							
		Units	µg/l																								
		AWQS	NE	5	NE	NE	7	NE	NE	5	NE	5	NE	100 (1)	70	5	NE	700	NE	NE	NE	5	1,000	100	5	2	10,000
Location	**Sample Date**	**Sample Type**	**Concentrations**																								
TTU-1	2021-03-30	Primary	18.9 J	< 1.00	< 1.00	< 1.00	1.37	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	**6.40**	< 1.00	< 3.00
TTU-2	2021-03-30	Primary	196 J	2.02	< 1.00	1.20	**98.3**	< 1.00	< 1.00	< 1.00 J	< 10.0	1.26	< 1.00	1.94 J	1.60	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00 J	< 2.50	0.934 J	< 1.00	0.208 J	**656**	< 1.00	< 3.00
		Duplicate	244 J	2.00	< 10.0	1.53	**95.5**	< 1.00	< 1.00	0.200 J	< 10.0	1.59	< 1.00	2.34 J	2.02	< 5.00	< 1.00	< 1.00	< 1.00	8.21 J	< 2.50	1.01 J	< 1.00	0.258 J	**720**	< 1.00	< 3.00
TTU-3	2021-03-29	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-4	2021-03-29	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-5	2021-03-30	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-6	2021-03-29	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-7	2021-03-29	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	0.123 J	< 1.00	3.70	< 1.00	1.39	< 1.00	< 1.00	< 1.00	0.264 J
TTU-8	2021-03-29	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-9A	2021-03-30	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	**7.53**	< 1.00	< 3.00
TTU-10	2021-03-29	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-12	2021-03-30	Primary	115 J	1.35	< 1.00	0.825 J	**65.2**	< 1.00	< 1.00	< 1.00	< 10.0	0.777 J	< 1.00	1.54 J	1.14	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	0.909 J	< 1.00	0.156 J	**480**	< 1.00	< 3.00
TTU-13	2021-03-30	Primary	37.7 J	< 1.00	< 1.00	< 1.00	6.35	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	0.124 J	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	**17.1**	< 1.00	< 3.00
TTU-14	2021-03-30	Primary	280 J	2.58	< 1.00	1.70	**133**	< 1.00	< 1.00	< 1.00	< 10.0	2.19	< 1.00	2.50 J	3.07	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	1.97	< 1.00	0.467 J	**990**	< 1.00	< 3.00
TTU-15	2021-03-29	Primary	5.33 J	< 1.00	< 1.00	< 1.00	0.605 J	< 1.00	< 1.00	< 1.00	1.22 J	< 1.00	< 1.00	< 5.00	1.54	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	**12.9**	< 1.00	< 3.00
TTU-16	2021-03-29	Primary	2,880	**92.0**	< 20.0	61.5	**3,570**	3.57 J	5.21 J	**37.8**	< 200	**296**	< 20.0	85.8 J	12.9 J	**136,000**	< 20.0	19.1 J	< 20.0	< 20.0	< 50.0	**73.5**	327	7.05 J	**76,800**	< 20.0	119
		Duplicate	2,550	**88.9**	< 20.0	59.5	**3,520**	3.13 J	4.63 J	**36.8**	< 200	**292**	< 20.0	86.2 J	12.1 J	**126,000**	< 20.0	19.9 J	< 20.0	< 20.0	< 50.0	**73.9**	323	8.02 J	**71,800**	< 20.0	116
TTU-17	2021-03-29	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	0.816 J	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	0.961 J	< 1.00	< 1.00	< 1.00	**5.00**	< 1.00	< 3.00
PF-2	2021-03-29	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 3.00
TTU-EX-1	2021-03-29	Primary	340 J	1.72	0.229 J	0.889 J	**149**	< 1.00	< 1.00	0.288 J	< 10.0	0.365 J	< 1.00	1.23 J	0.127 J	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	1.04	< 1.00	0.163 J	**262**	< 1.00	< 3.00
TTU-EX-2	2021-03-30	Primary	334 J	2.30	< 1.00	1.13	**174**	< 1.00	< 1.00	< 1.00	< 10.0	1.16	< 1.00	1.89 J	2.03	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	1.66	< 1.00	0.266 J	**634**	< 1.00	< 3.00
TTU-EX-3	2021-03-30	Primary	697	**10.7**	< 1.00	9.79	**688**	< 1.00	0.455 J	1.76	< 10.0	**12.3**	0.315 J	11.6	5.21	0.879 J	0.148 J	< 1.00	< 1.00	< 1.00	< 2.50	**10.4**	< 1.00	1.87	**5,560**	0.423 J	< 3.00
TTU-EX-4	2021-03-30	Primary	16.3	0.706 J	< 1.00	1.21	**68.2**	< 1.00	< 1.00	< 1.00	< 10.0	0.813 J	< 1.00	1.34 J	1.94	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	0.644 J	< 1.00	0.413 J	**486**	< 1.00	< 3.00
TTU-EX-5	2021-03-30	Primary	< 3.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 10.0	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.50	< 1.00	< 1.00	< 1.00	**6.53**	< 1.00	< 3.00

Notes:

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

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

µg/l = micrograms per liter

AWQS = Arizona Aquifer Water Quality Standard

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

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

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.

TABLE 3: SUMMARY OF PERCHLORATE CONCENTRATIONS - FIRST QUARTER 202
FORMER THERMAL TREATMENT UNIT
NAMMO DEFENSE SYSTEMS INC.
JUNE 2021

Geosyntec consultants

		Analyte	Perchlorate	
		Method	USEPA 314.0	USEPA 6850
		Units	µg/l	
		HBGL	14	
Location	Sample Date	Sample Type	Concentration	
TTU-1	2021-03-30	Primary	**11,700**	--
TTU-2	2021-03-30	Primary	**187,000**	--
	2021-03-30	Duplicate	**188,000**	--
TTU-3	2021-03-29	Primary	**92.0**	--
TTU-4	2021-03-29	Primary	1.99 J	--
TTU-5	2021-03-30	Primary	**41.2**	--
TTU-6	2021-03-29	Primary	7.80	--
TTU-7	2021-03-29	Primary	< 4.00	--
TTU-8	2021-03-29	Primary	< 4.00	--
TTU-9A	2021-03-30	Primary	8.21	--
TTU-10	2021-03-29	Primary	< 4.00	--
TTU-12	2021-03-30	Primary	**143,000**	--
TTU-13	2021-03-30	Primary	**29,800**	--
TTU-14	2021-03-30	Primary	**160,000**	--
TTU-15	2021-03-29	Primary	0.856 J	--
TTU-16	2021-03-29	Primary	**822,000**	--
	2021-03-29	Duplicate	**803,000**	--
TTU-17	2021-03-29	Primary	2.78 J	--
TTU-EX-1	2021-03-29	Primary	**109,000**	--
TTU-EX-2	2021-03-30	Primary	**106,000**	--
TTU-EX-3	2021-03-30	Primary	**441,000**	--
TTU-EX-4	2021-03-30	Primary	**88,400**	--
TTU-EX-5	2021-03-30	Primary	< 20.0 J	--
PF-2	2021-03-29	Primary	--	< 0.5
	2021-03-29	Duplicate	--	< 0.5

Notes:

µg/l = micrograms per liter

HBGL = Health-Based Guidance Level

USEPA = United States Environmental Protection Agency

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

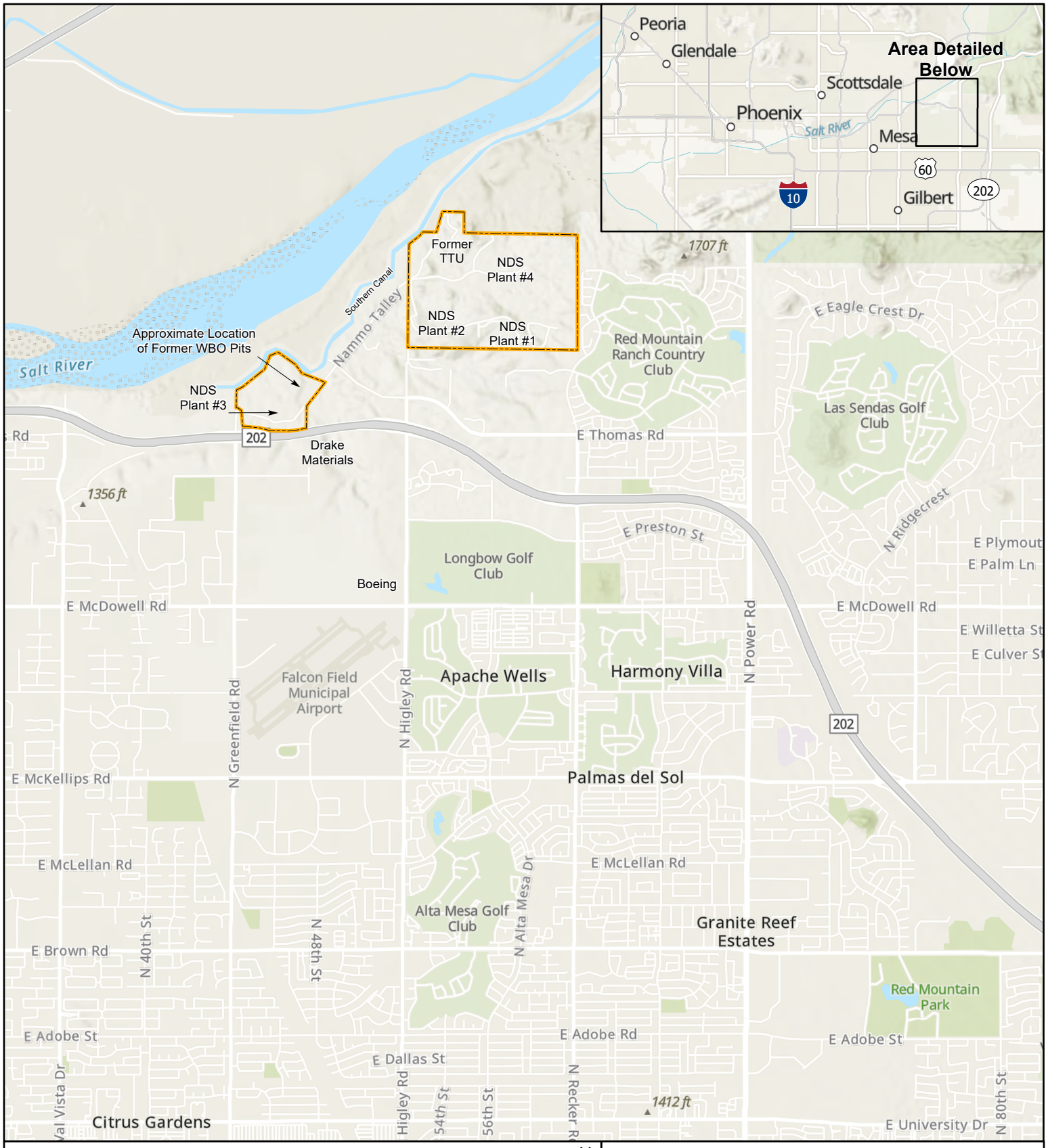
Non-detect results are indicated by "<" followed by the laboratory reporting limit.

-- = 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.
-WBO: Water Bore-Out

N

0 2,000 4,000 Feet

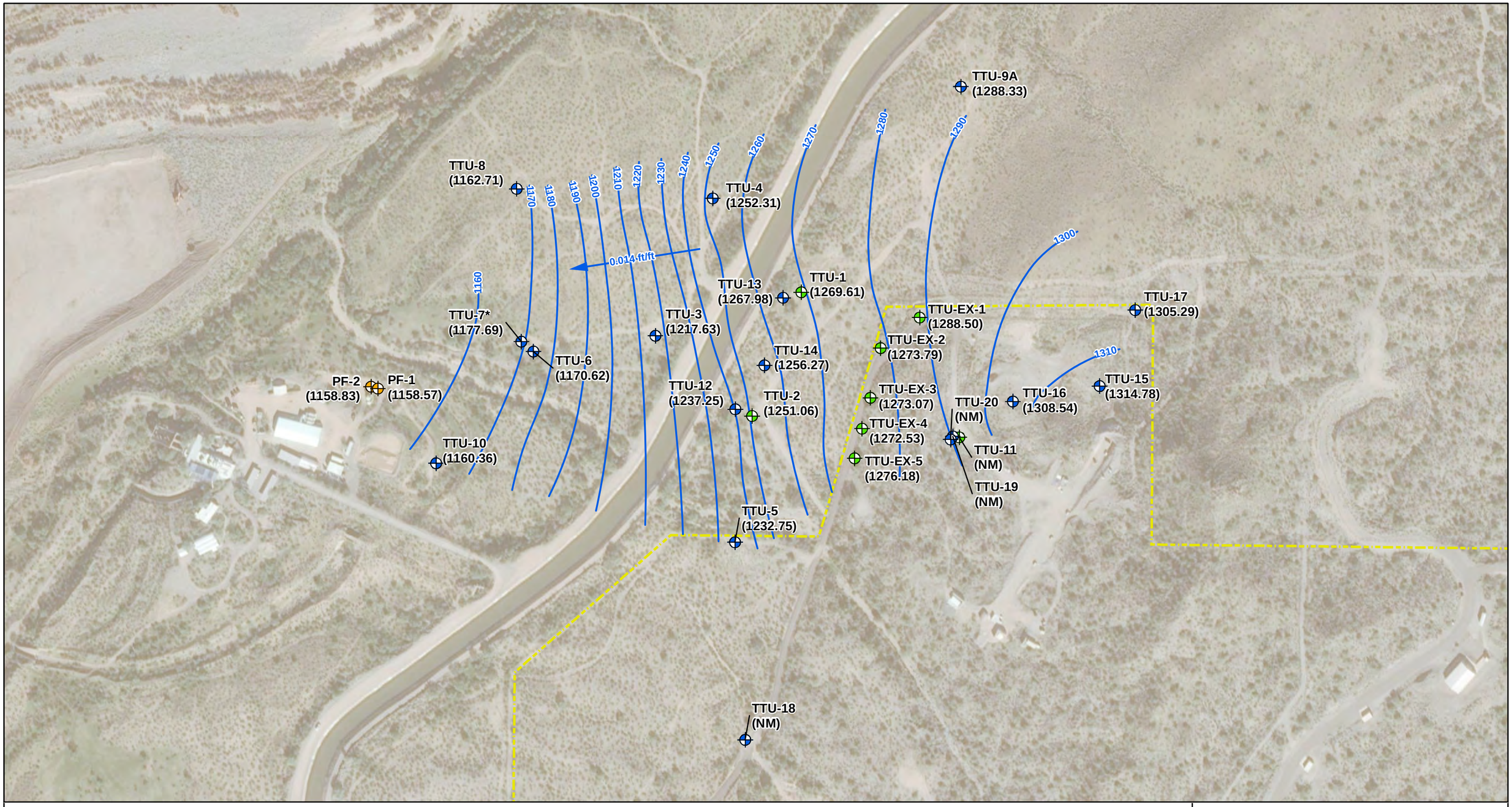
Site Location
Former Thermal Treatment Unit

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

Geosyntec consultants

Phoenix | June 2021

Figure 1



Primate Well
Extraction Well
Monitoring Well
Flow Direction and Hydraulic Gradient (ft/ft)
Groundwater Elevation Contour (ft amsl)
NDS Leased Property Boundary with SRP-MIC

TTU-1 = Monitoring Well Location
1269.61 = 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.
During 1Q 2021, TTU-11, TTU-19, and TTU-20 were used for an In-Situ Treatment Pilot Test with TTU-11 and TTU-19 as injection points.

N

0 250 Feet

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

Geosyntec consultants

Phoenix | June 2021

Figure 2

SantaBarbara-01\\\SANDIEGO-01\Data\GIS_SanDiego01\SP0101_Nammo\MXD\TTU\TTU_GWM_2021Q1\Fig02_2021Q1_Groundwater_Elevations_and_Contours.mxd 6/4/2021 (Author: MBradford) 3:29:10 PM

TTU-9A
(8.21)

TTU-8
(<4.00)

TTU-4
(1.99 J)

14

1000

TTU-13
(29,800)

TTU-1
(11,700)

TTU-EX-1
(109,000)

TTU-17
(2.78 J)

TTU-3
(92.0)

100000

10000

TTU-7
(<4.00)

TTU-6
(7.80)

TTU-14
(160,000)

TTU-EX-2
(106,000)

PF-2
(<0.50)

PF-1
(NS)

TTU-15
(0.86 J)

TTU-EX-3
(441,000)

TTU-16
(822,000)

TTU-20
(NS)

TTU-12
(143,000)

TTU-2
(188,000)

TTU-EX-4
(88,400)

TTU-11
(NS)

TTU-10
(<4.00)

TTU-EX-5
(<20.0)

TTU-19
(NS)

TTU-5
(41.2)

TTU-18
(DRY)

Primate Well
Extraction Well
Monitoring Well
NDS Leased Property Boundary with SRP-MIC

TTU-1 = Monitoring Well Location
11,700 = Perchlorate Concentration in micrograms per liter (µg/L)

NS: Not Sampled
J: estimated concentration.
Non-detect results are indicated by "<" followed by the laboratory reporting limit.
Maximum result is shown for duplicate detections.
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 were not collected during the 1Q 2021 monitoring period.
TTU-11, TTU-19 and TTU-20: Wells are sampled as part of a separate scope for the In-Situ Treatment Pilot Test.

N

0 250 Feet

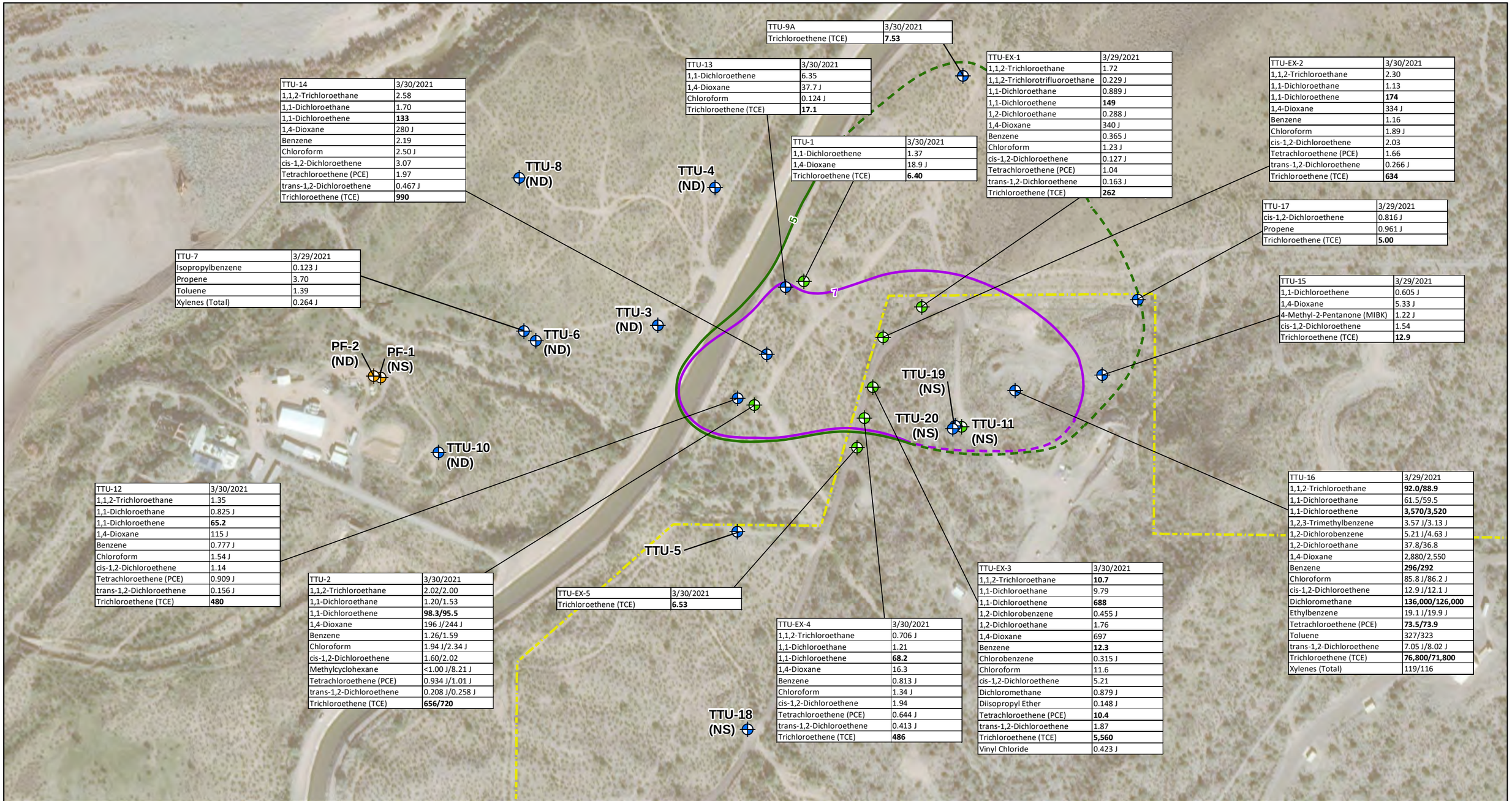
Perchlorate Detections in Groundwater
March 2021
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Geosyntec consultants

Phoenix | June 2021

Figure 3

SantaBarbara-01\\\SANDIEGO-01\Data\GIS_SanDiego01\SP0101_Nammo\MXD\TTU\TTU_GWM_2021Q1\Fig03_2021Q1_Perchlorate_Detections_GW.mxd 6/21/2021 (Author: MBradford) 5:14:51 PM



Legend

- Primate Well
- Extraction Well
- Monitoring Well
- Extent of Estimated 1,1-Dichloroethene (1,1-DCE) concentration in Groundwater March 2021 (Dashed Where Inferred)
- Extent of Estimated Trichloroethene (TCE) Concentration in Groundwater March 2021 (Dashed Where Inferred)
- NDS Leased Property Boundary with SRP-

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.
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 were not collected during the 1Q 2021 monitoring period.
TTU-11, TTU-19 and TTU-20: Wells were sampled as part of a separate scope for the In-Situ Treatment Pilot Test.

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	Trans-1,2-Dichloroethene - 100
1,1,2-TCA - 5	Dichloromethane - 5
Benzene - 5	PCE - 5
Cis-1,2-DCE - 70	TCE - 5

N

0 250 Feet

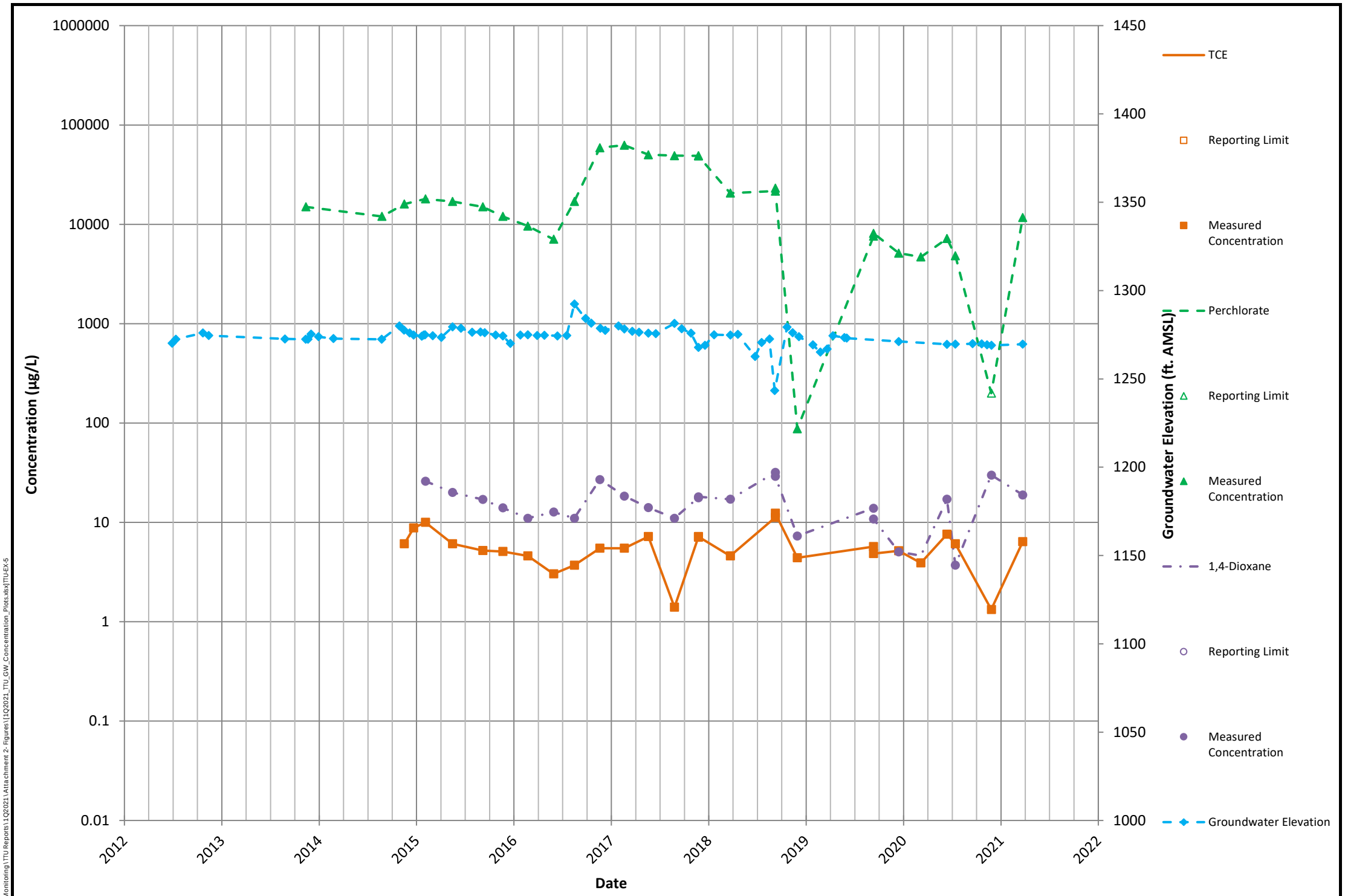
Volatile Organic Compound (VOC) Detections in Groundwater
March 2021
Nammo Defense Systems Inc.
Former Thermal Treatment Unit (TTU)
Mesa, Arizona

Geosyntec consultants

Phoenix | June 2021

Figure 4

SantaBarbara-01\P:\GIS\SP0101 - Nammo\Projects\2021Q1 TTU Quarterly GW Monitoring\Fig04_2021Q1_VOC_Detections_GW.mxd 6/21/2021 (Author: MBradford) 5:13:32 PM



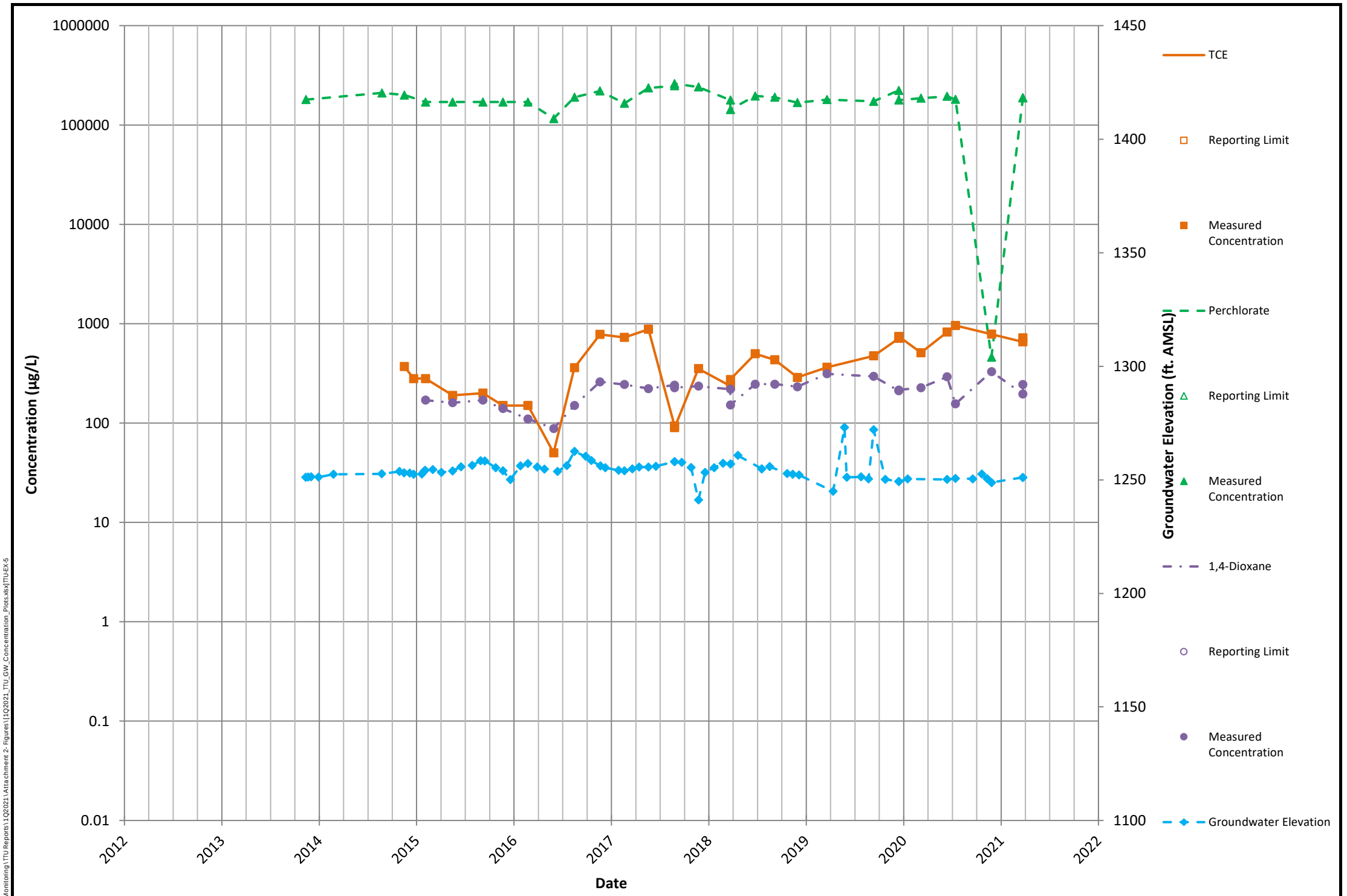
P:\SPO101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\1Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5

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-1
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix
June 2021

Figure 5-1



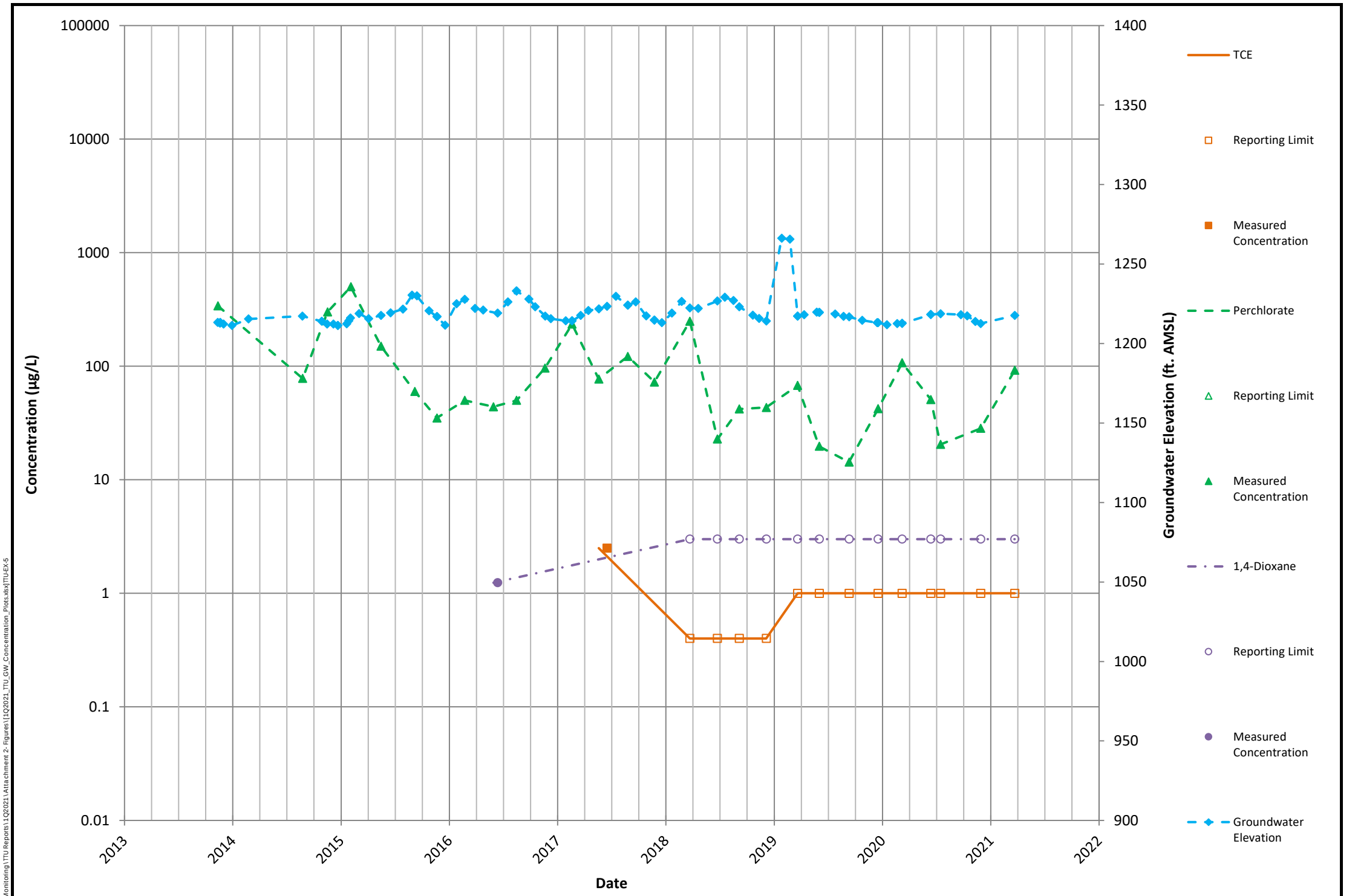
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-2

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



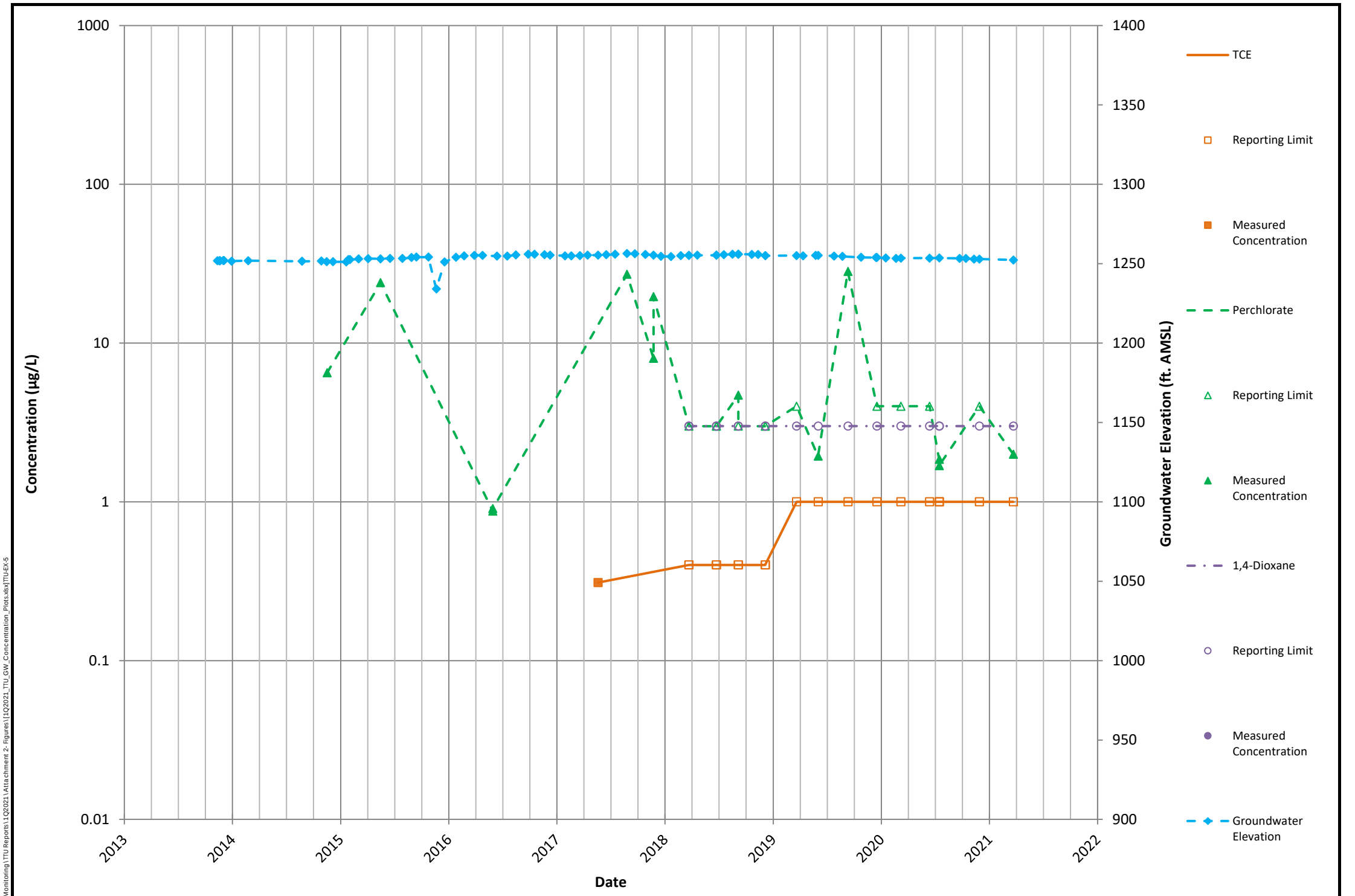
P:\3P0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5

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-3
Former Thermal Treatment Unit
Nammo Defense Systems Inc.
Mesa, Arizona

Geosyntec consultants
Phoenix | June 2021

Figure 5-3



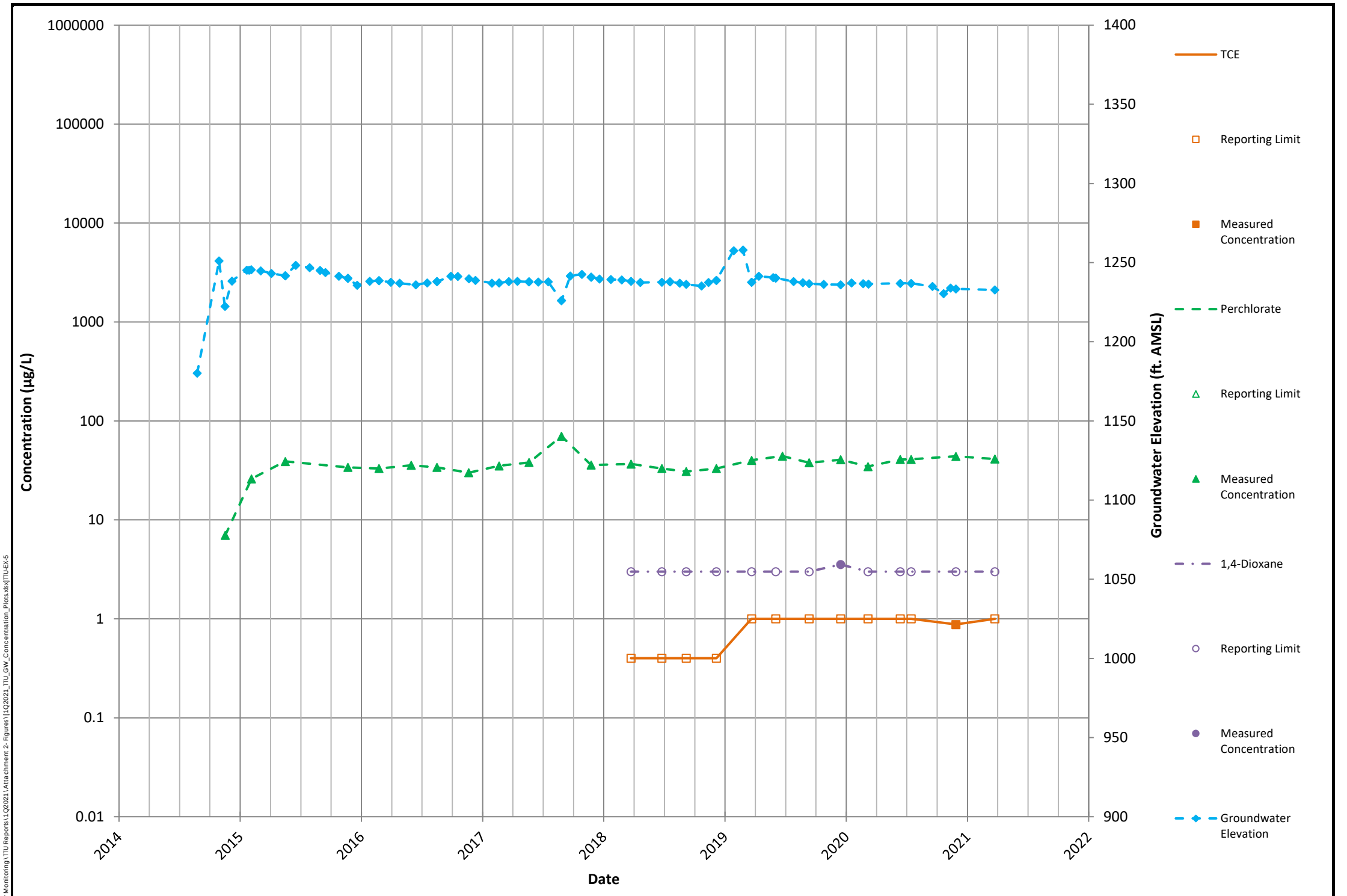
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-4

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



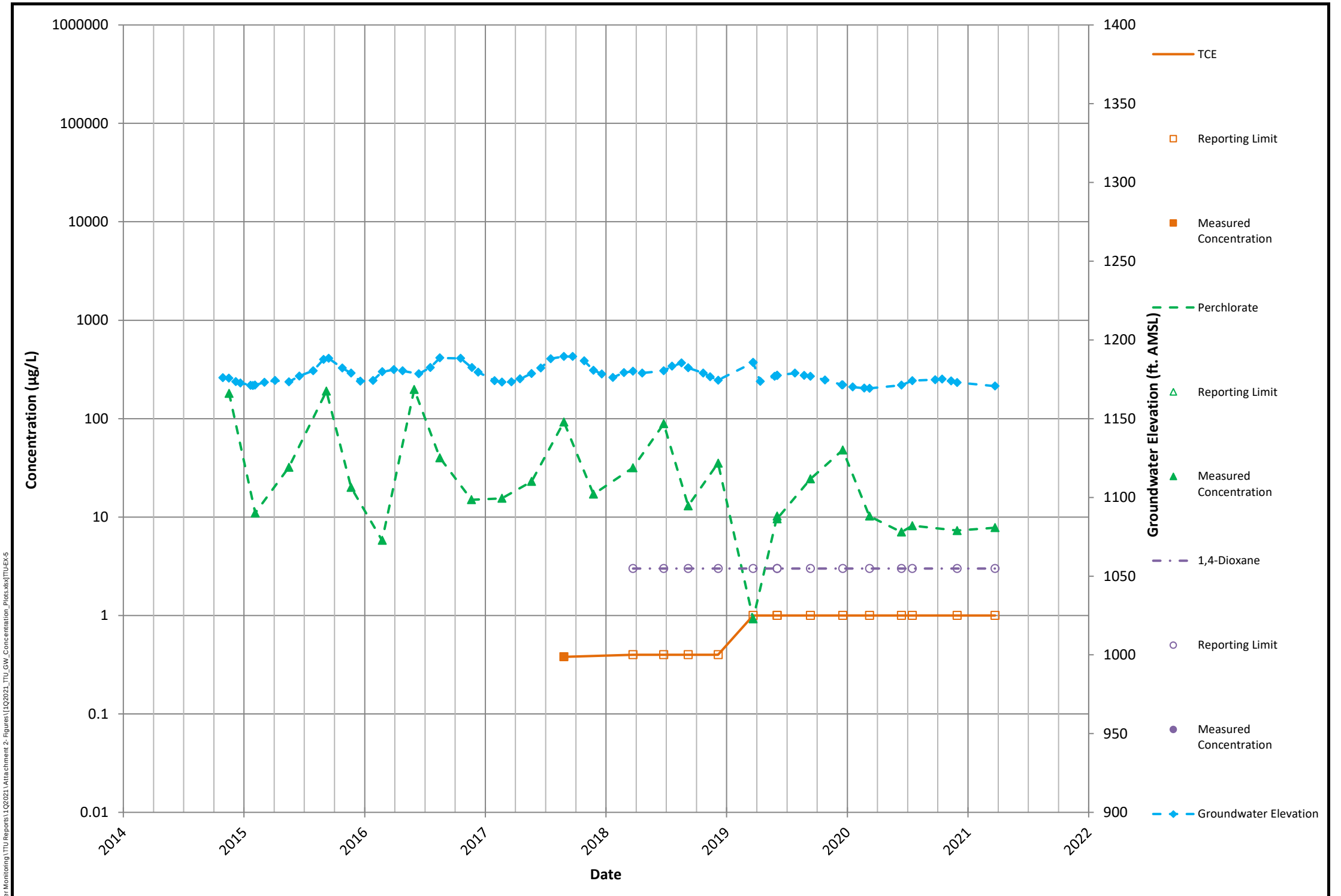
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-5

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



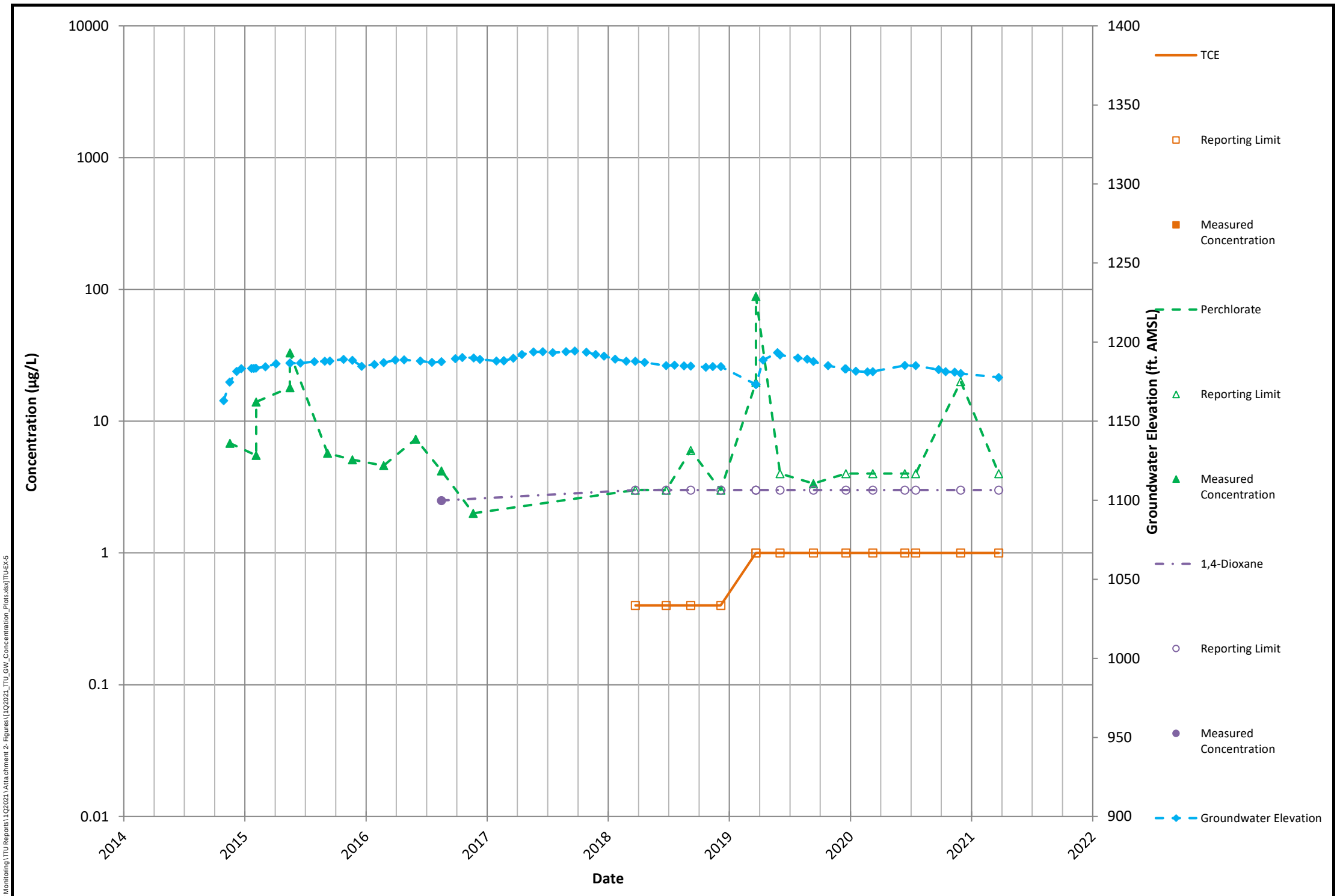
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-6

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021 Attachment 2- Figures\1Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



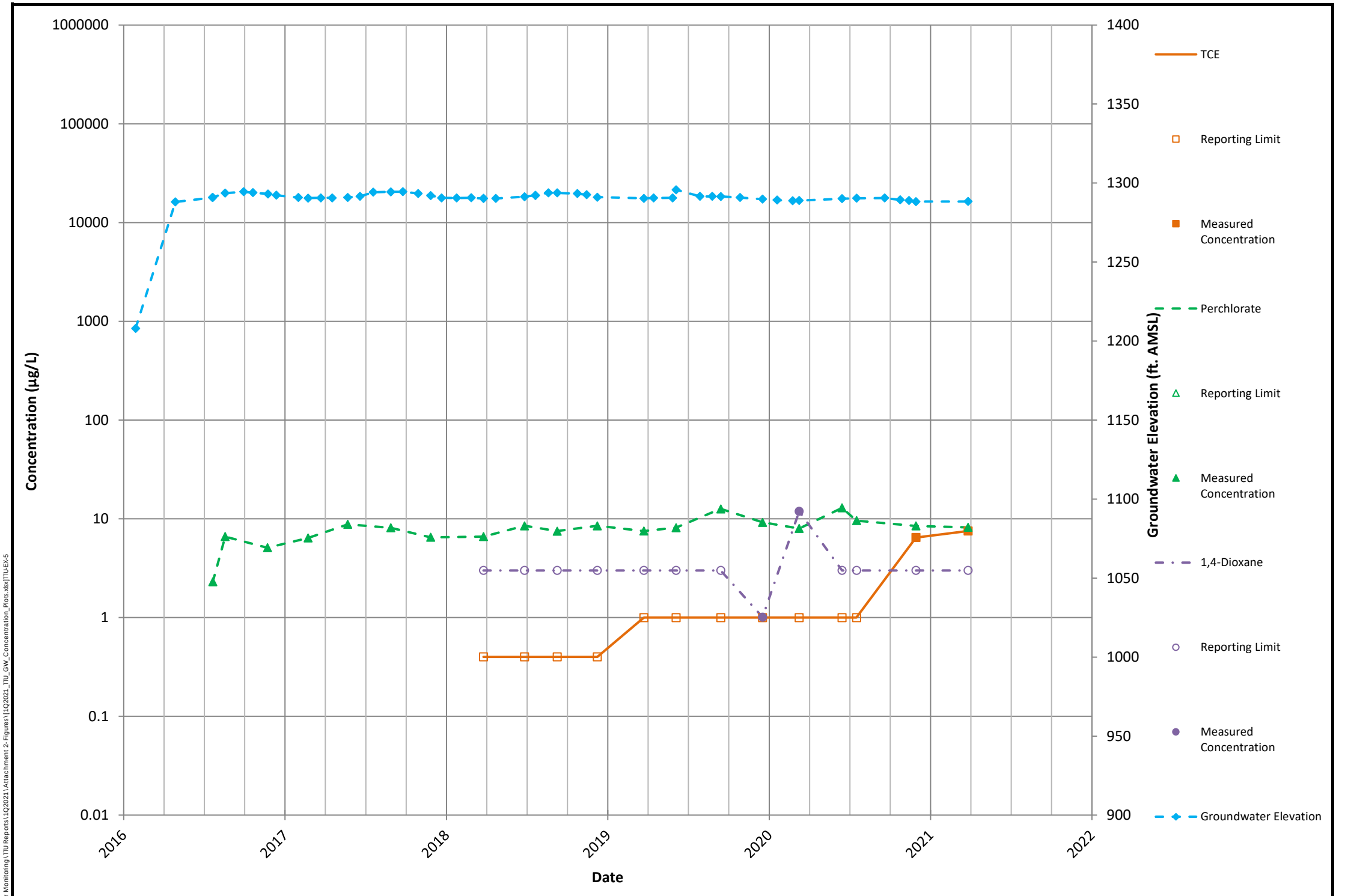
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-7

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\1Q2021_TTU_GW_Concentration_Plots.xls\TTU-EX-5



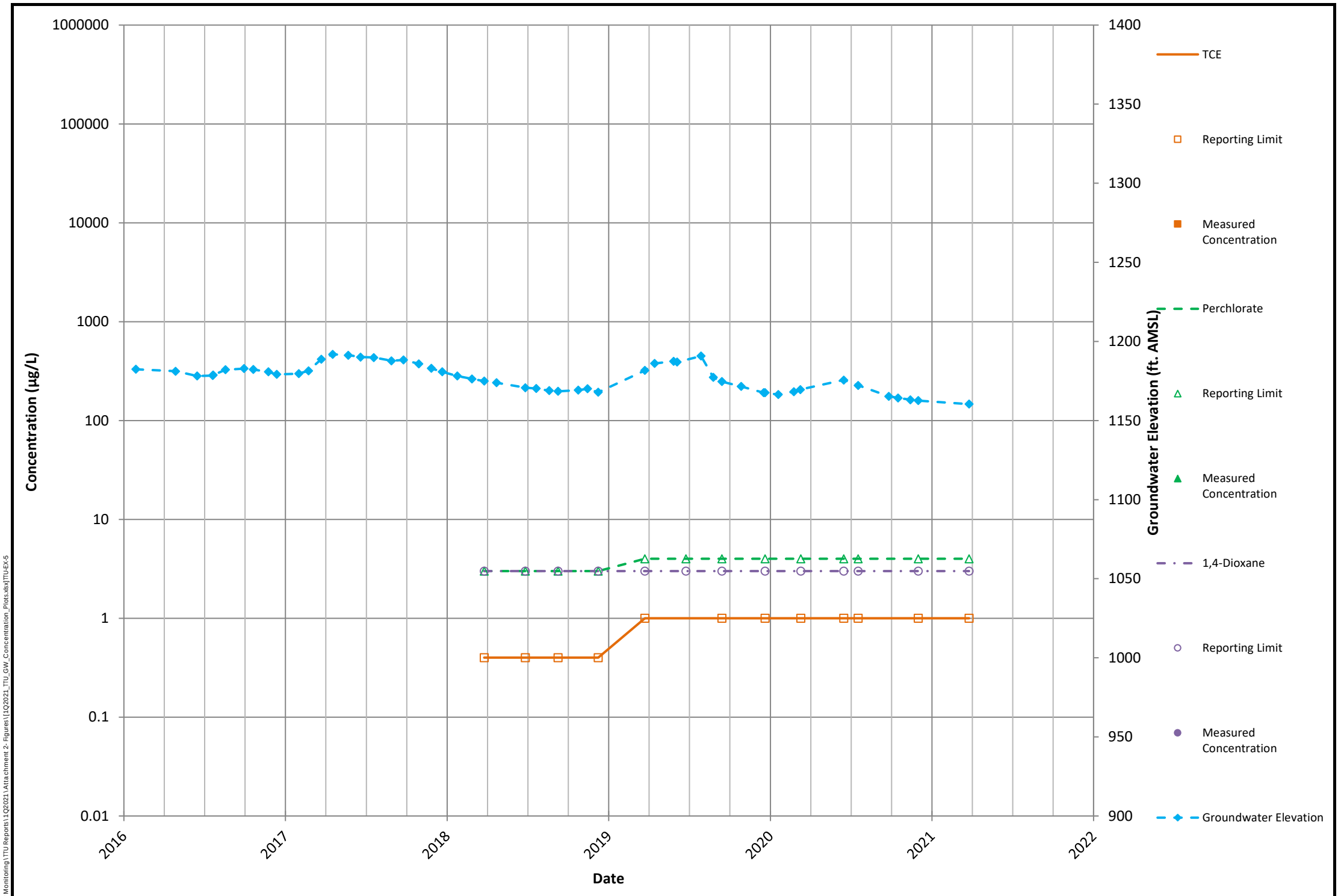
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-9

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2-Figures\[1Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



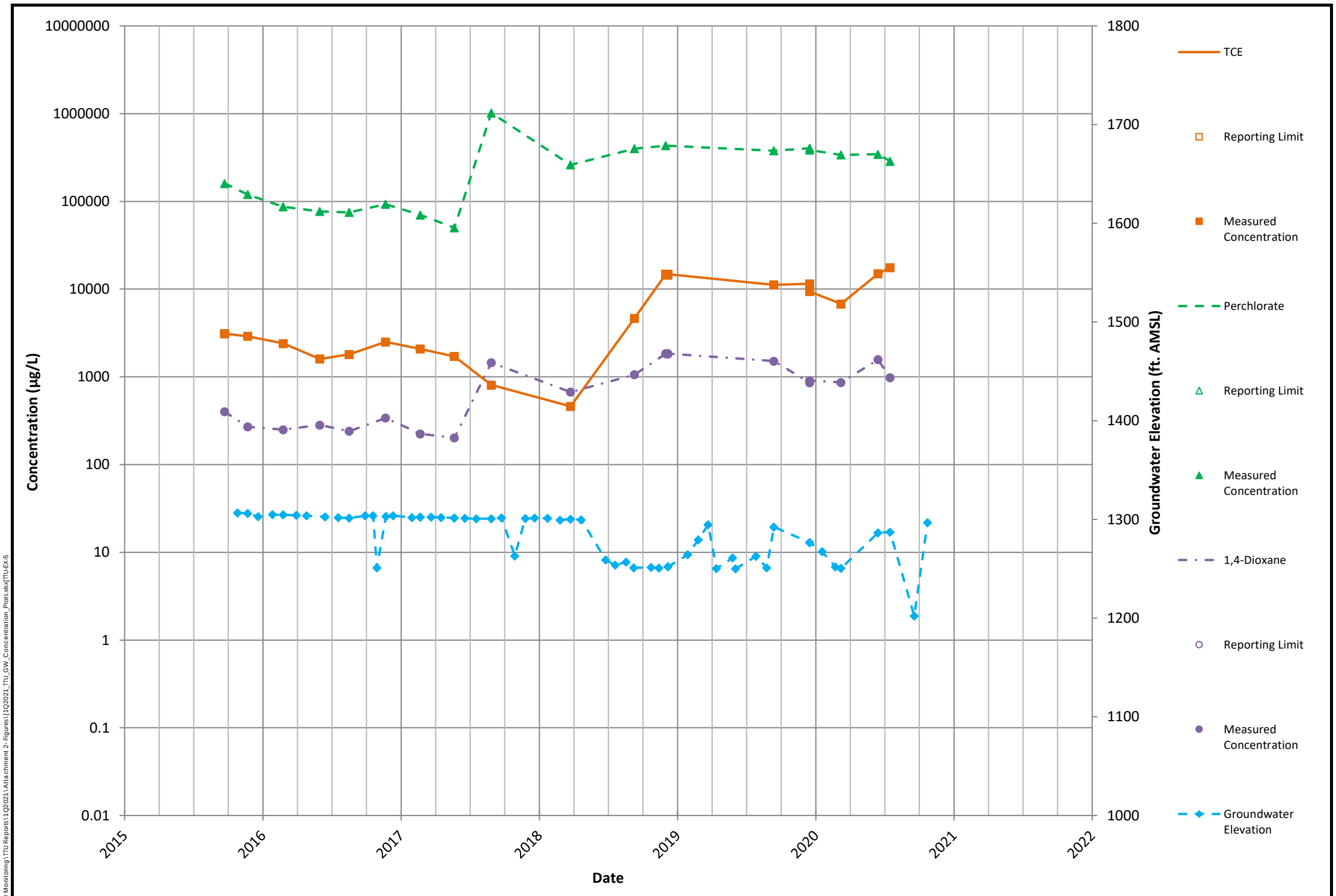
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-10

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTUEX-5



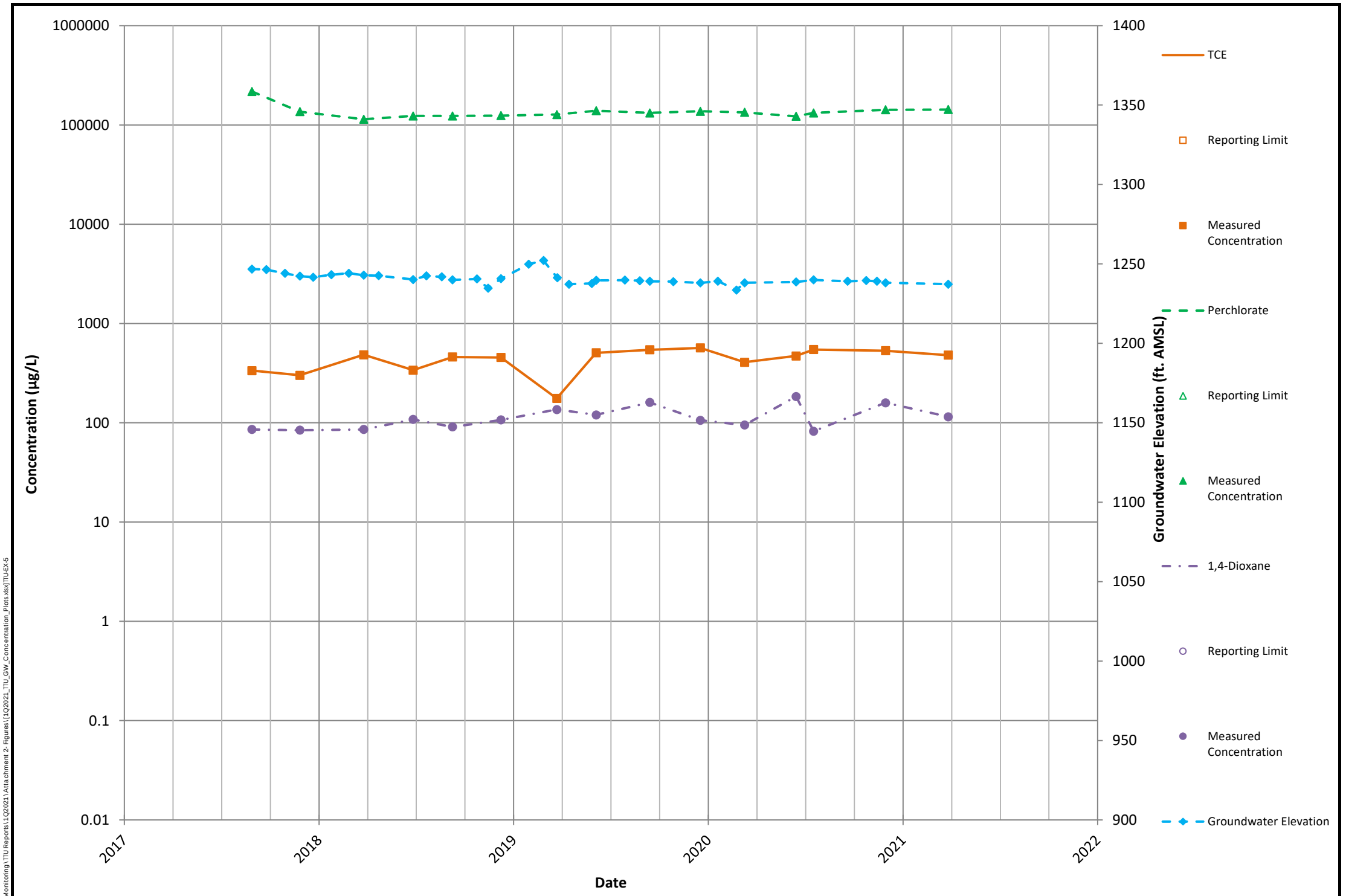
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
Converted into an injection well for a In-Situ Bio Remediation Pilot Test in October 2020.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-11

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



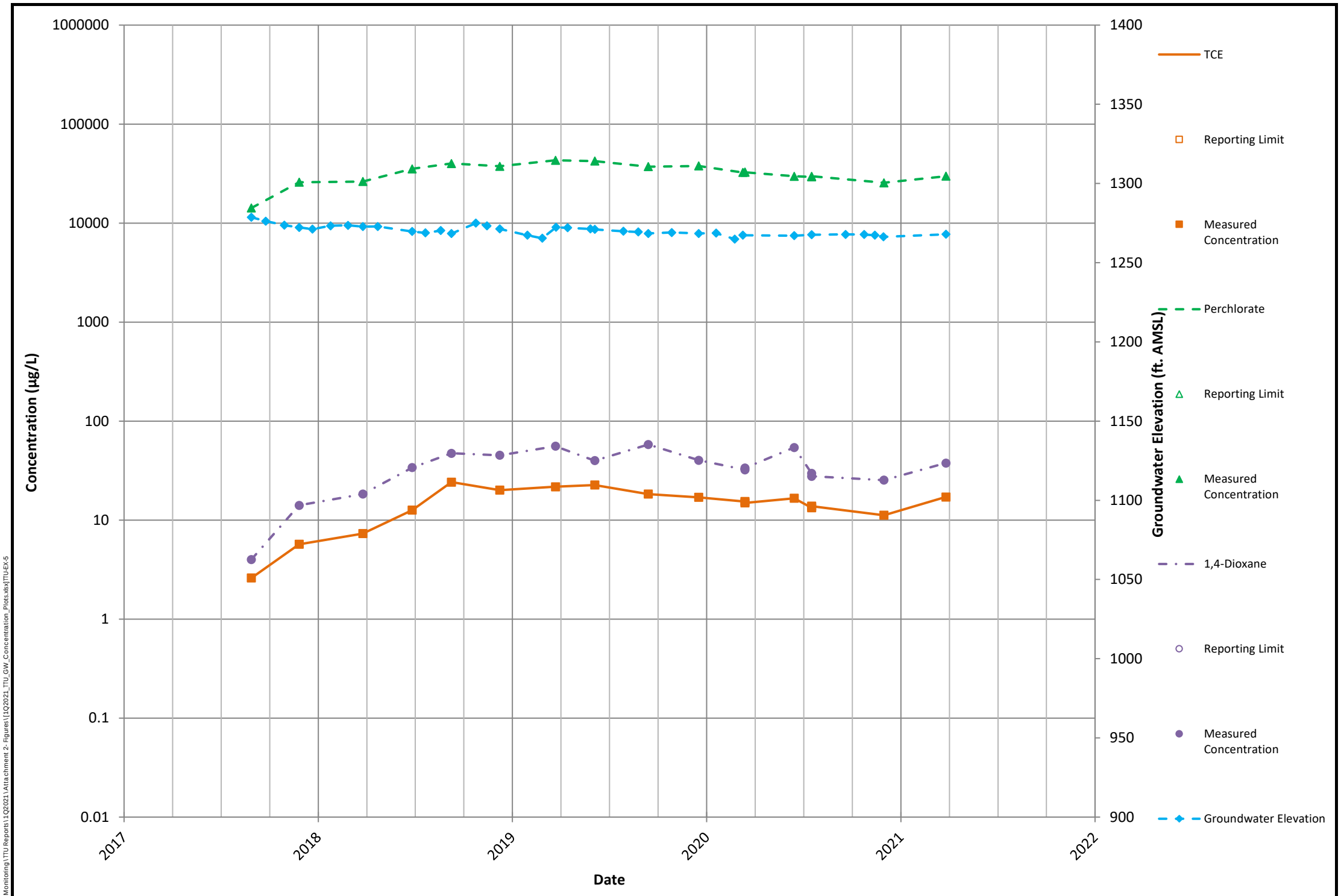
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix
June 2021

Figure 5-12

P:\SPO101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\1Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



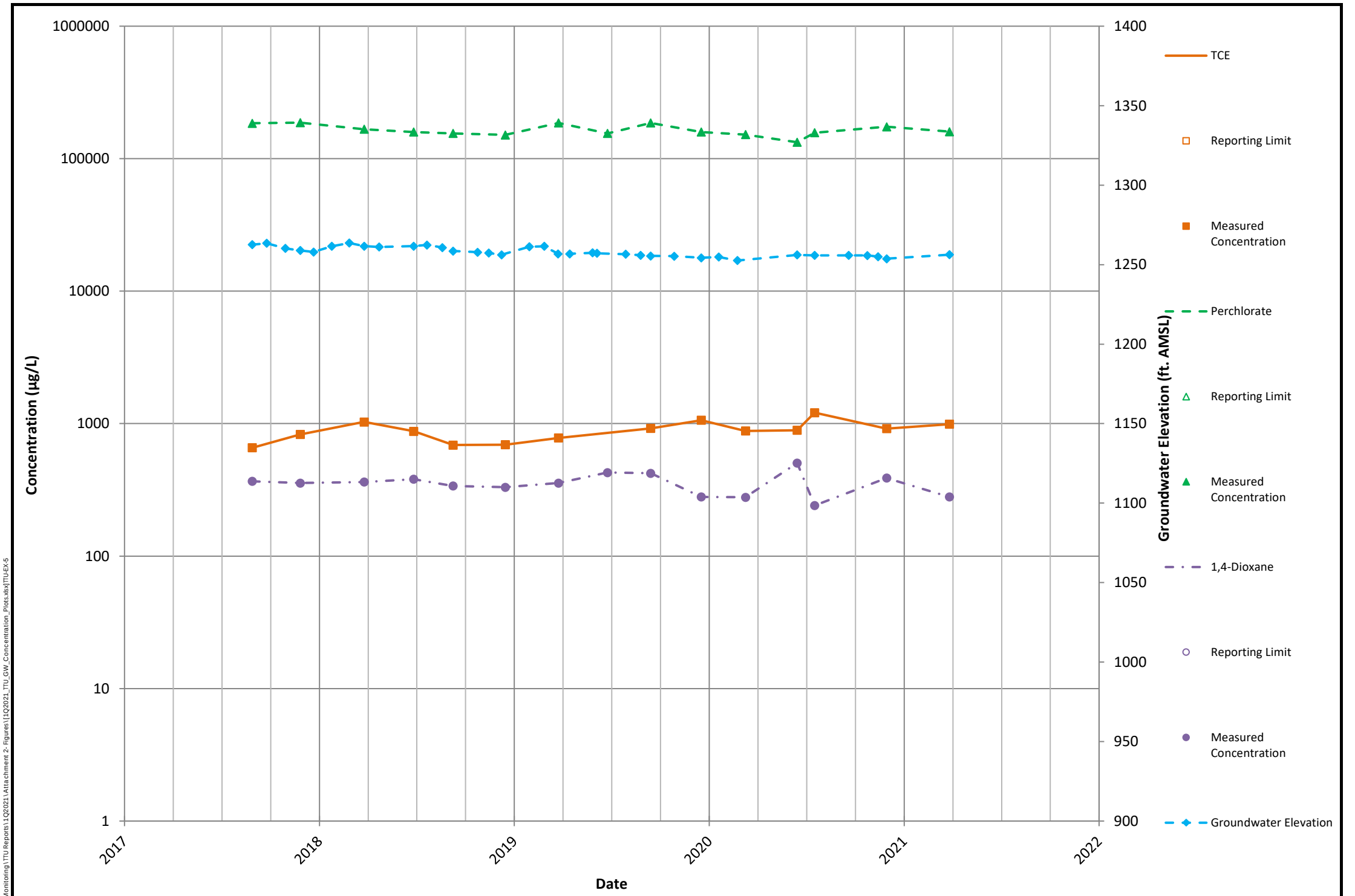
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-13

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



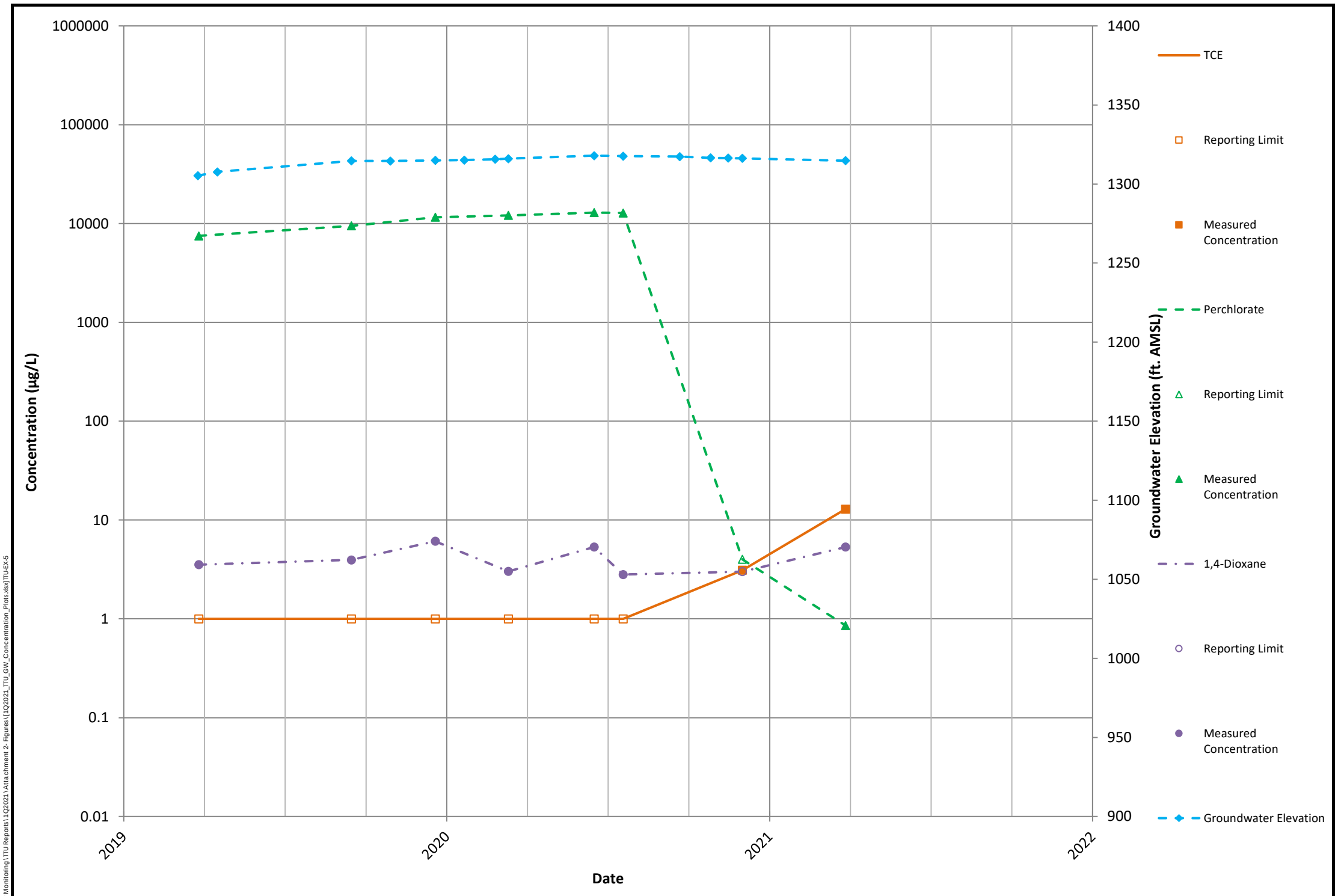
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-14

P:\SP0101\GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\1Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



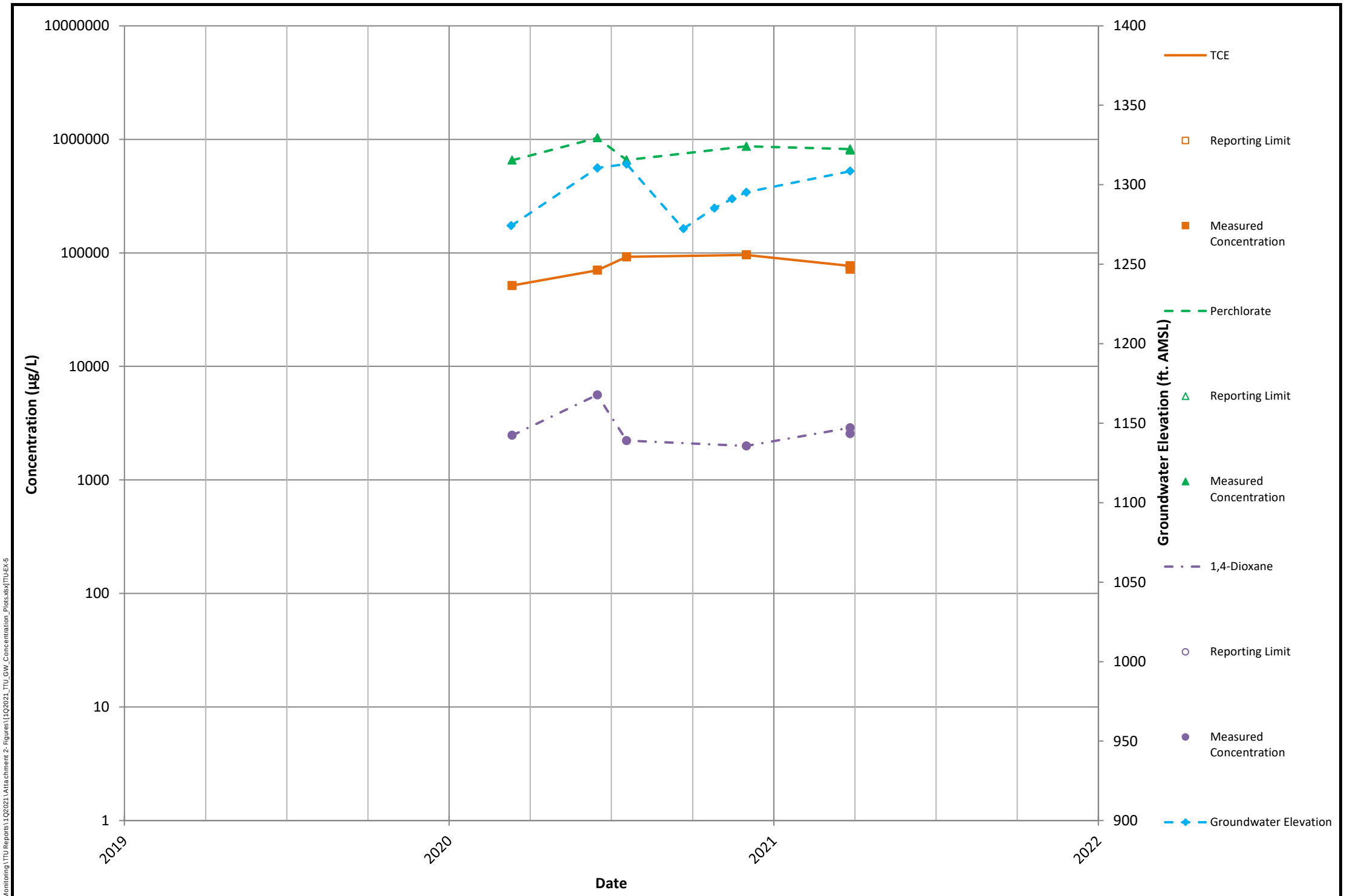
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-15

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TU-EX-5



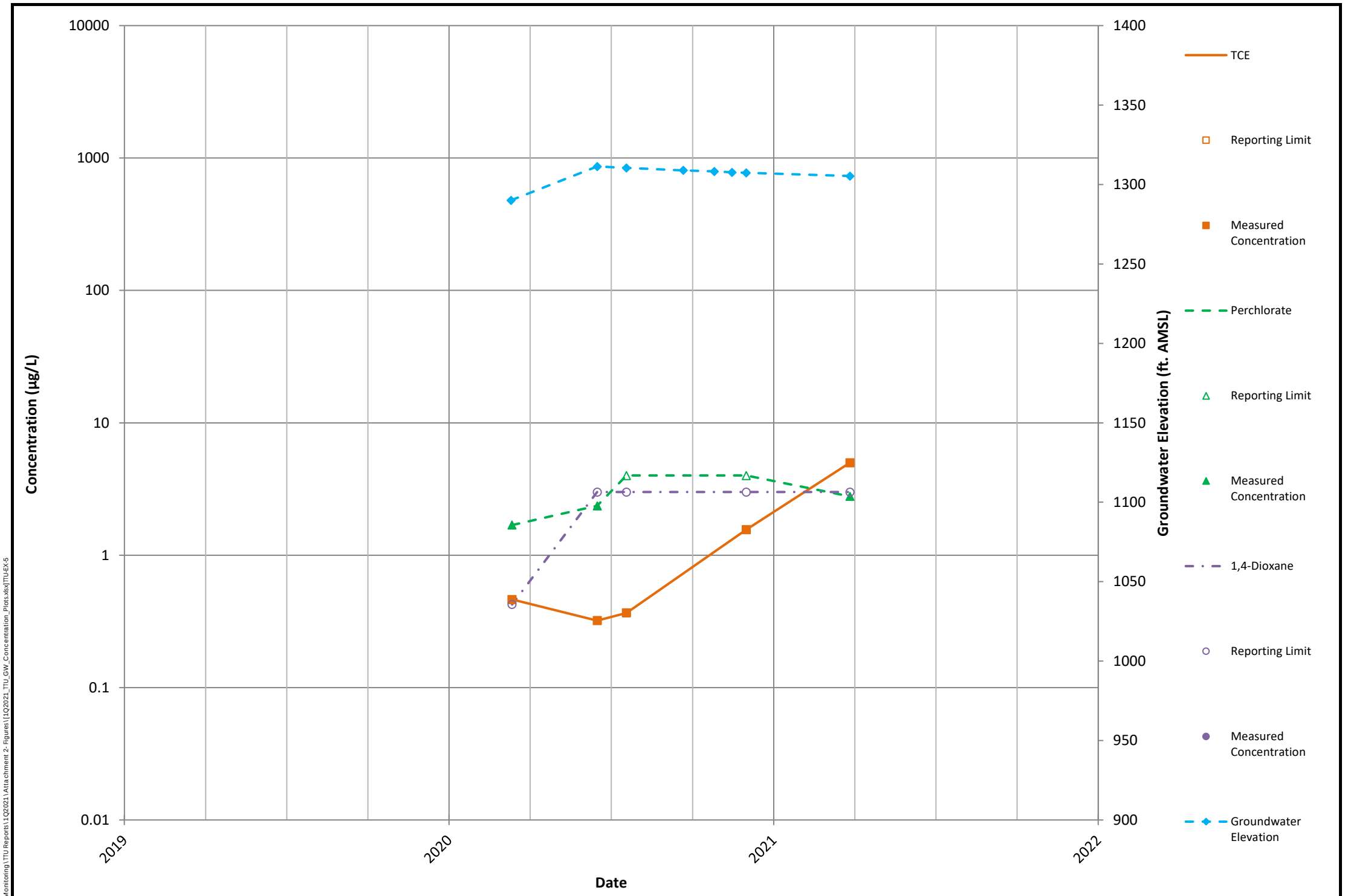
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-16

P:\SP0101\GW21 - 2021 Groundwater Monitoring\TTU Reports\1 Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



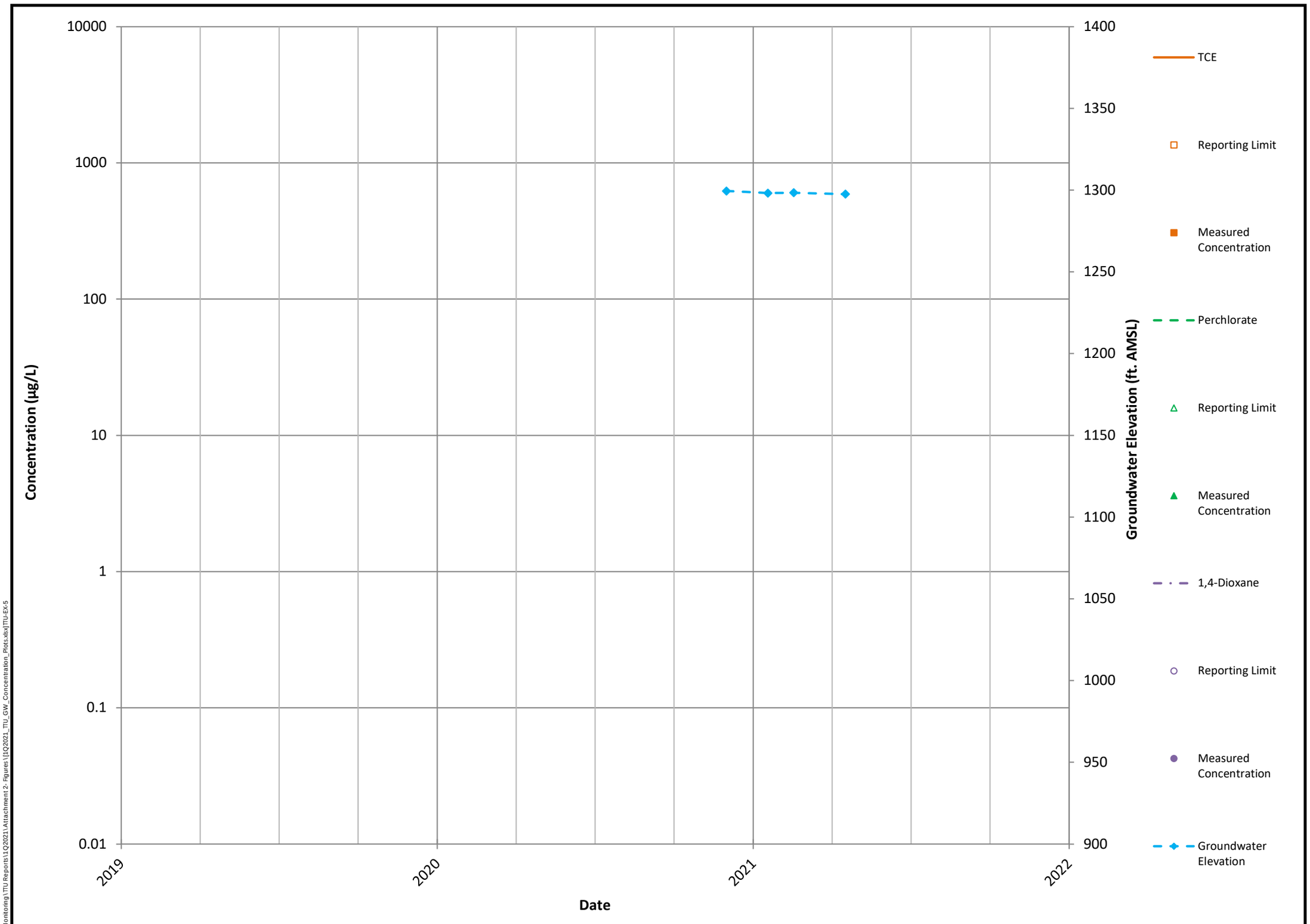
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-17

P:\SP0101GW21 - 2021 Groundwater Monitoring \TTU Reports \1Q2021 \Attachment 2- Figures\1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



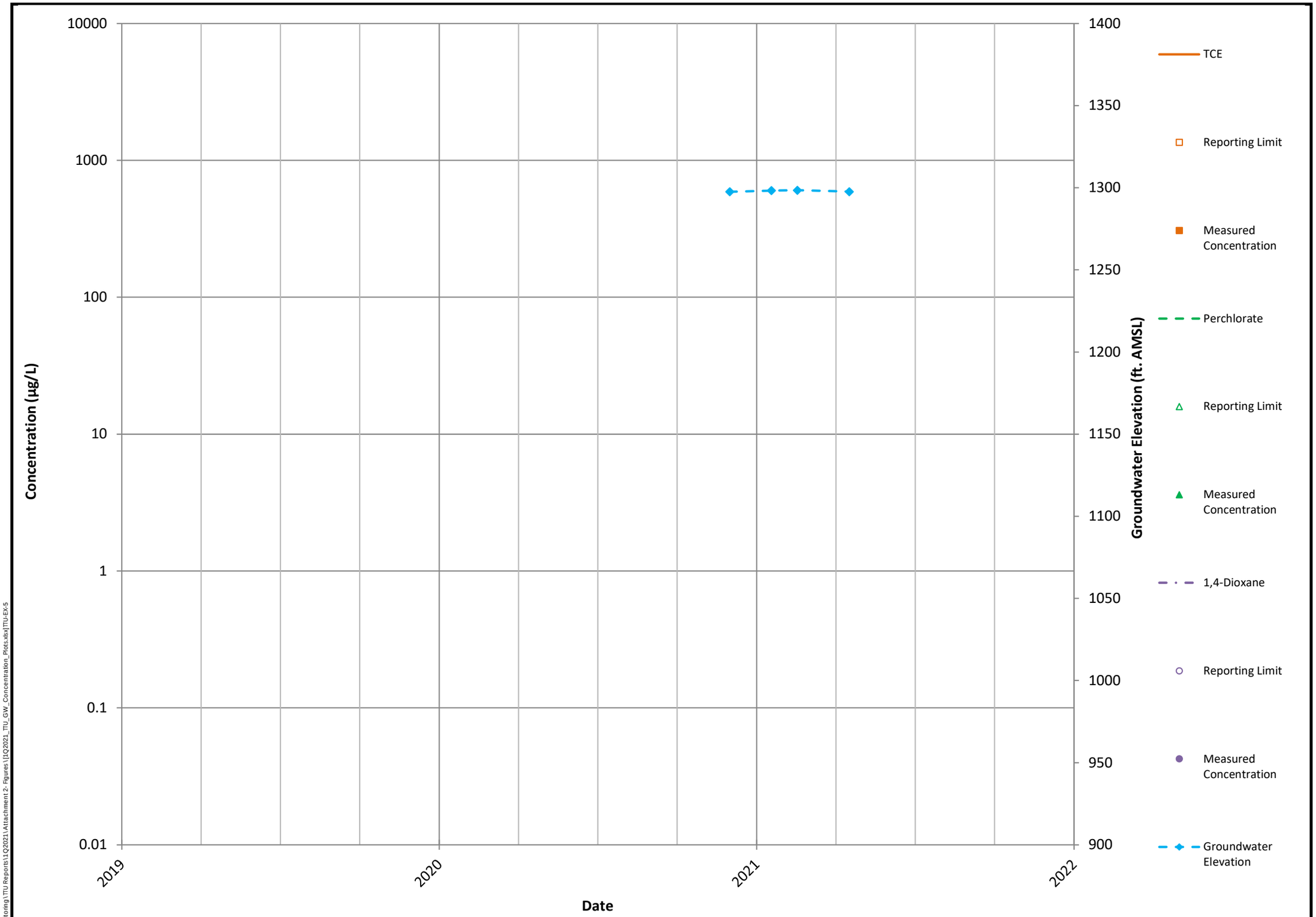
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
Installed as a monitoring well for an In-Situ Bio Remediation Pilot Test and converted into an injection well for the Pilot Test in February, 2020.
µg/L - micrograms per liter ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-18

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q20221\Attachment 2- Figures \[1Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



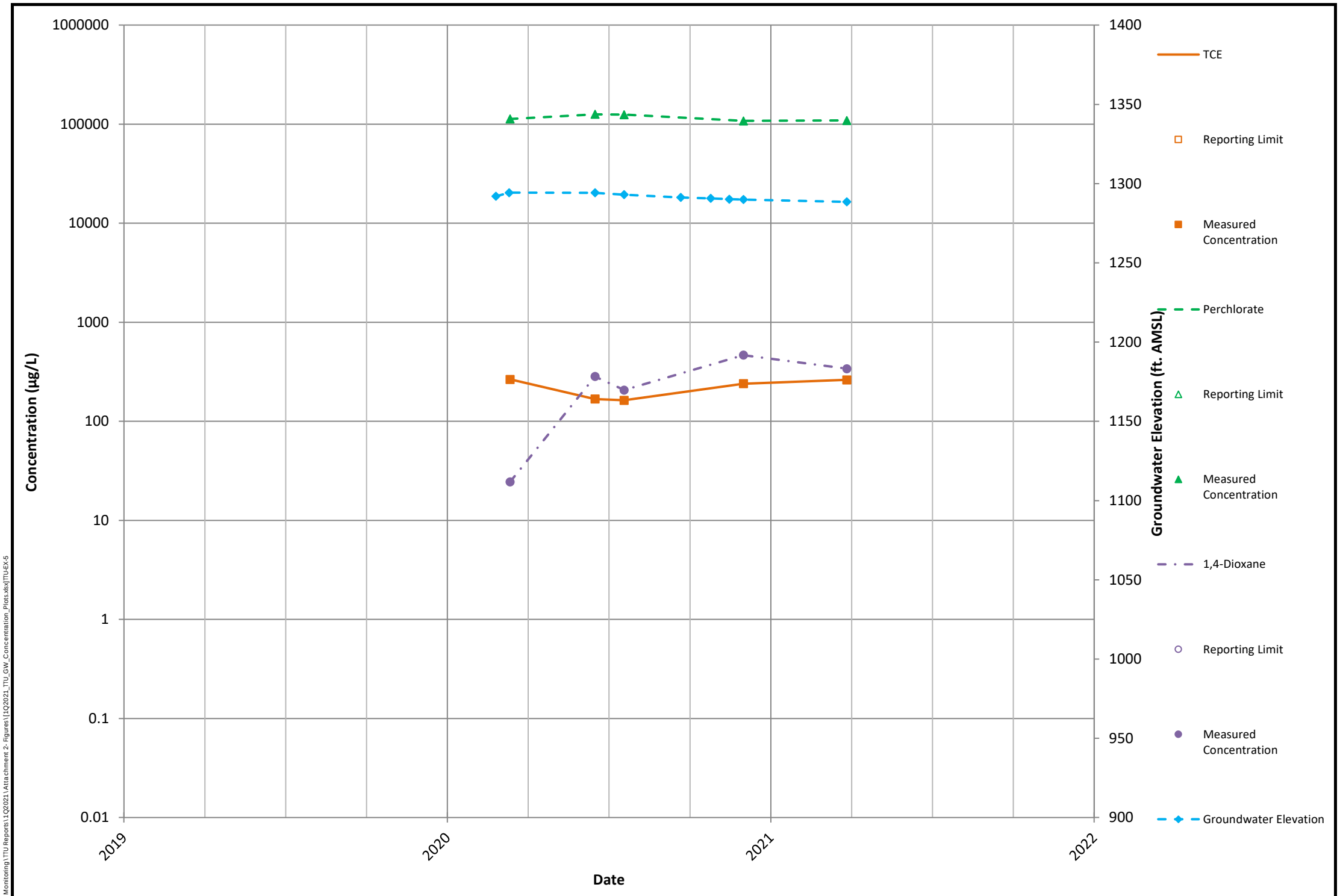
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
Installed as a monitoring well for a In-Situ Bio Remediation Pilot Test and a quarterly sampling plan has not been established.
µg/L - micrograms per liter ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-19

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



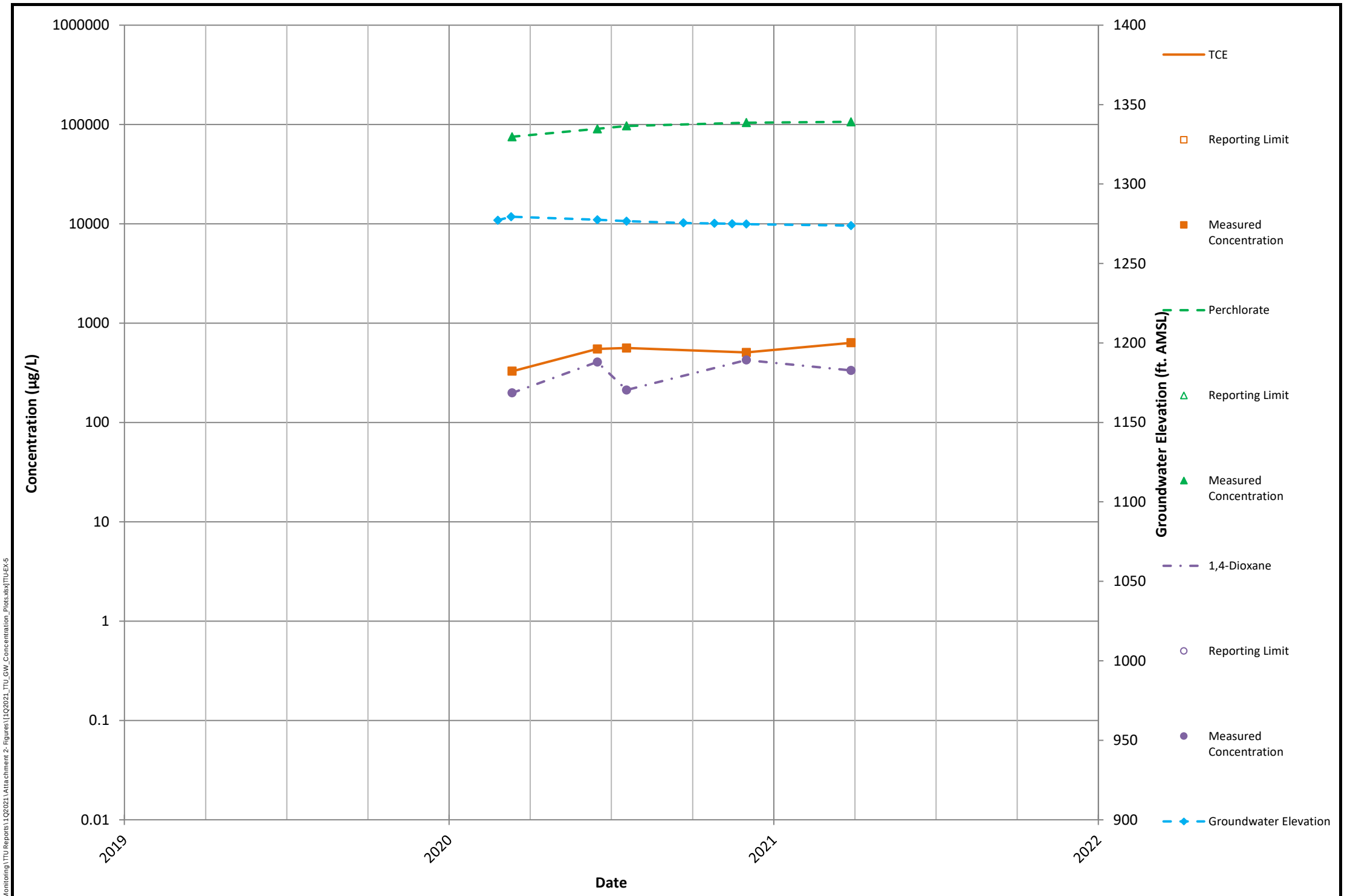
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-20

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



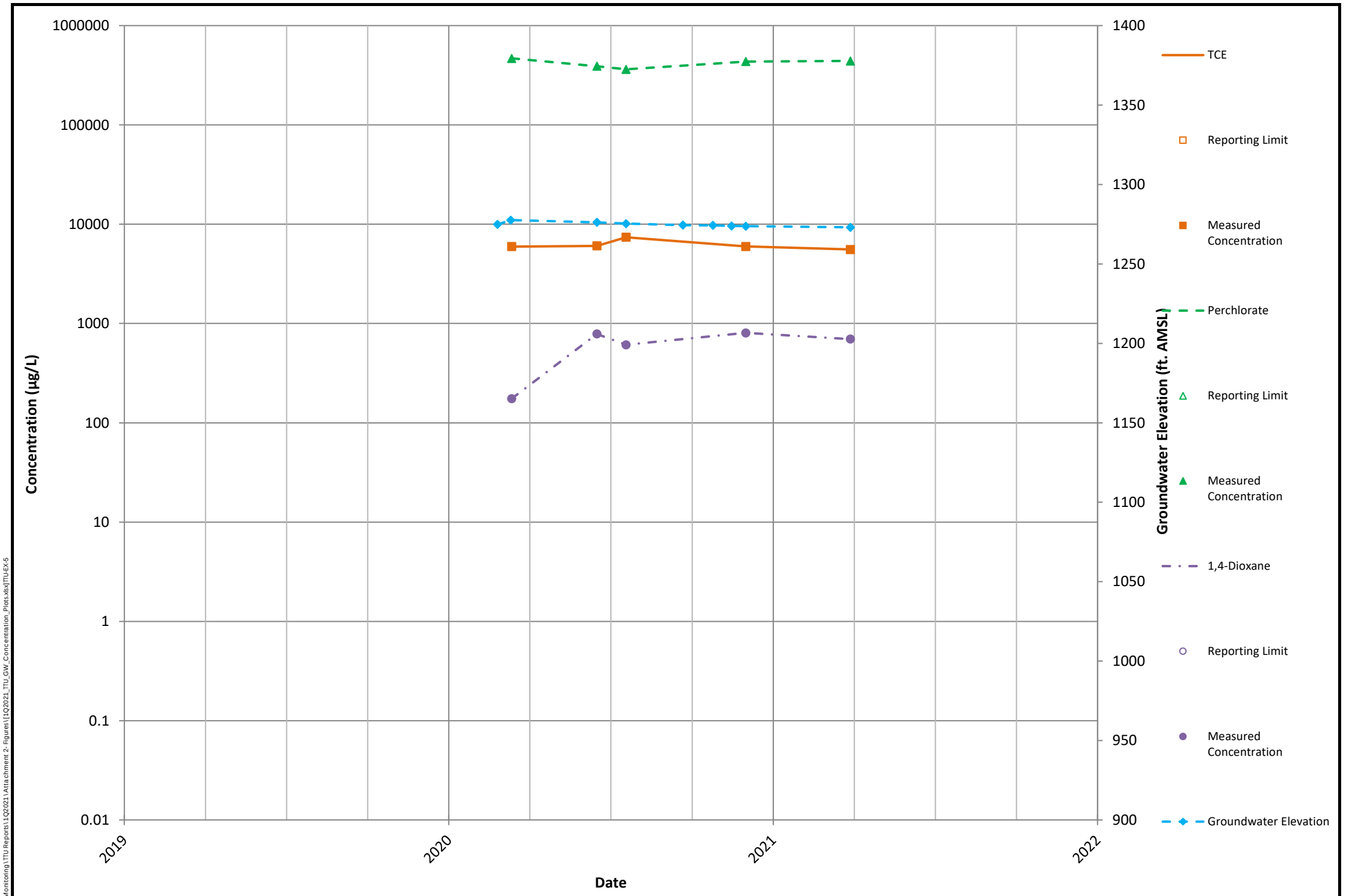
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-21

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



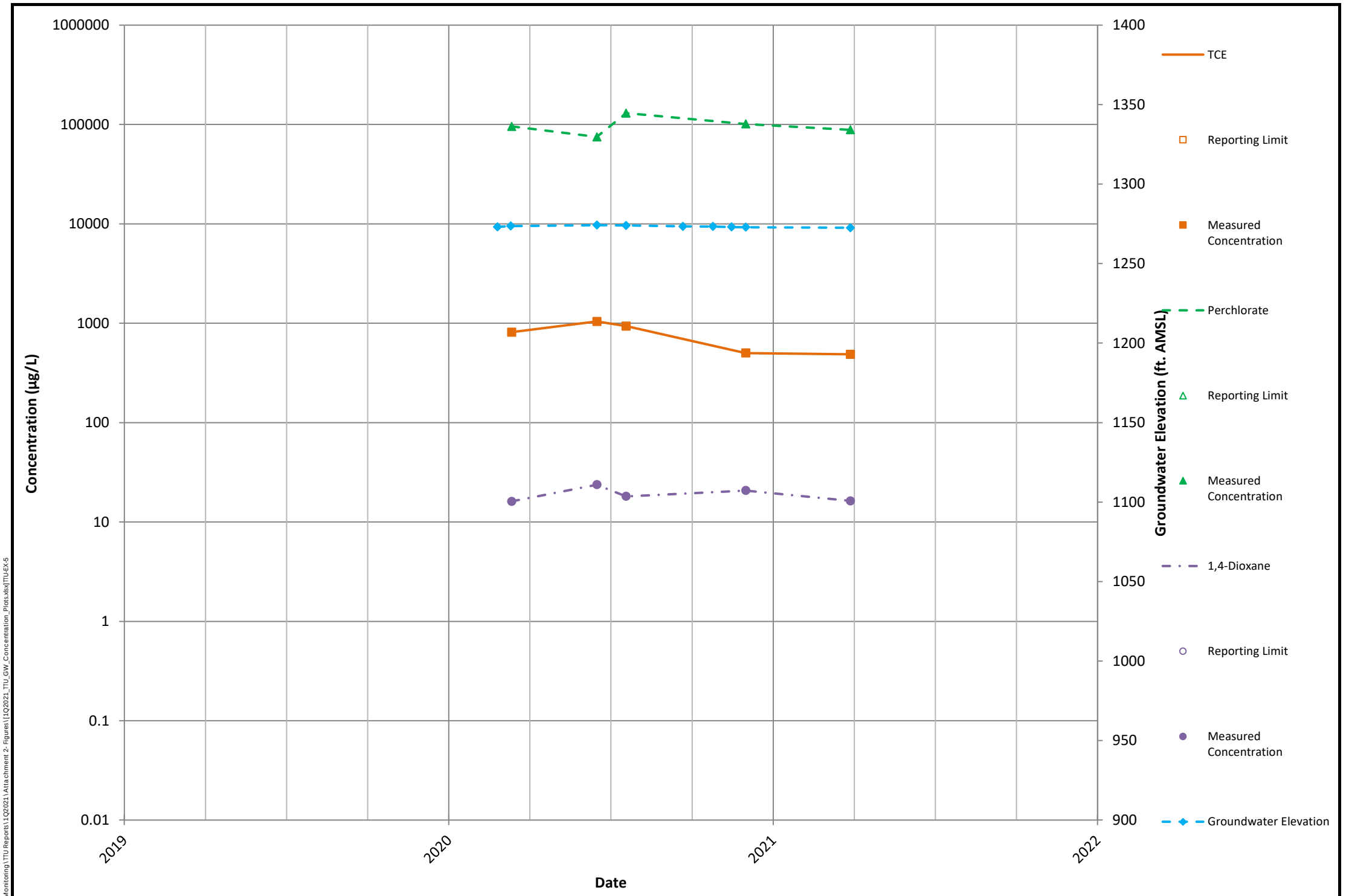
P:\SPO101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\11Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5

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
June 2021

Figure 5-22



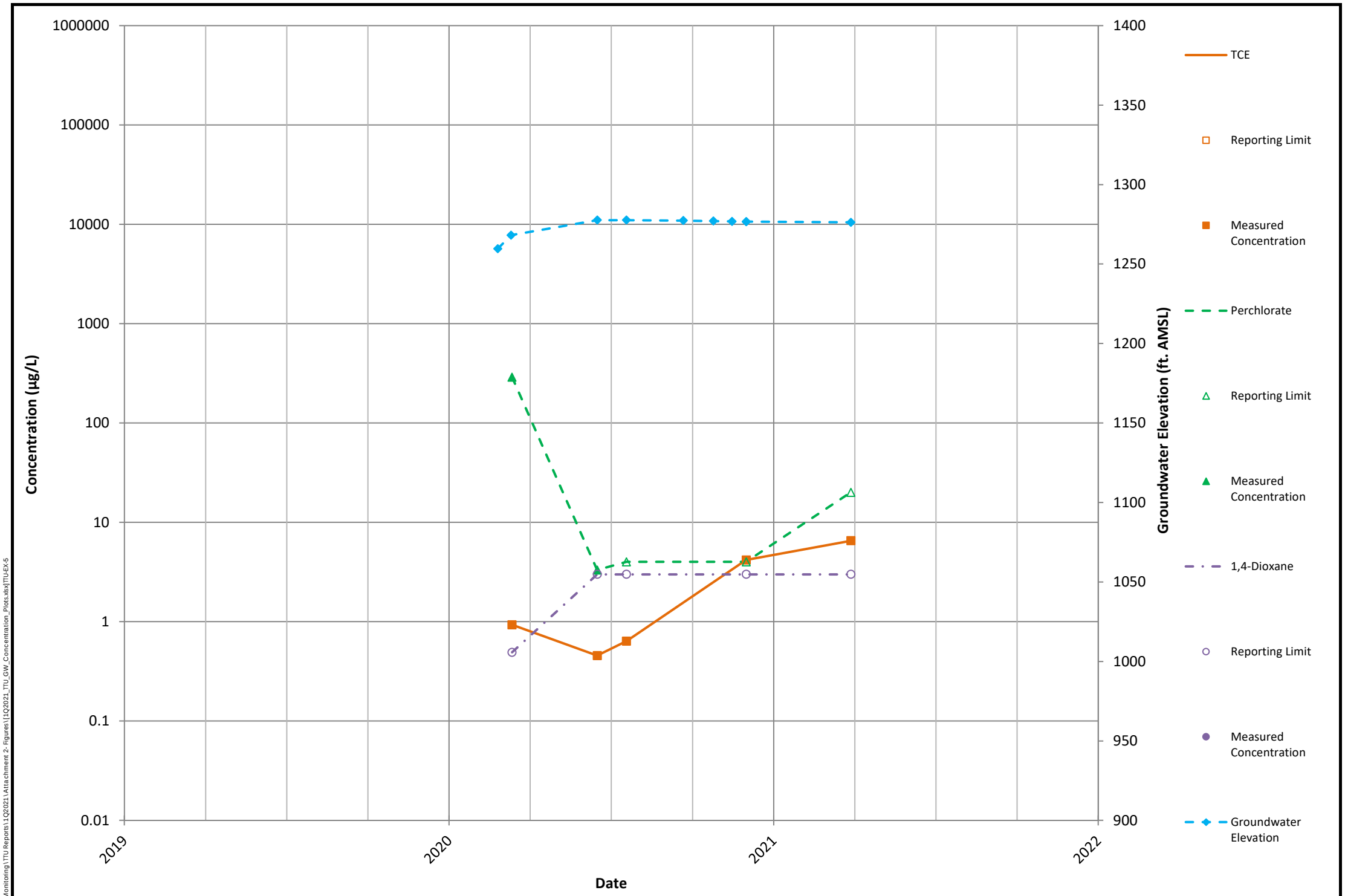
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-23

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]TTU-EX-5



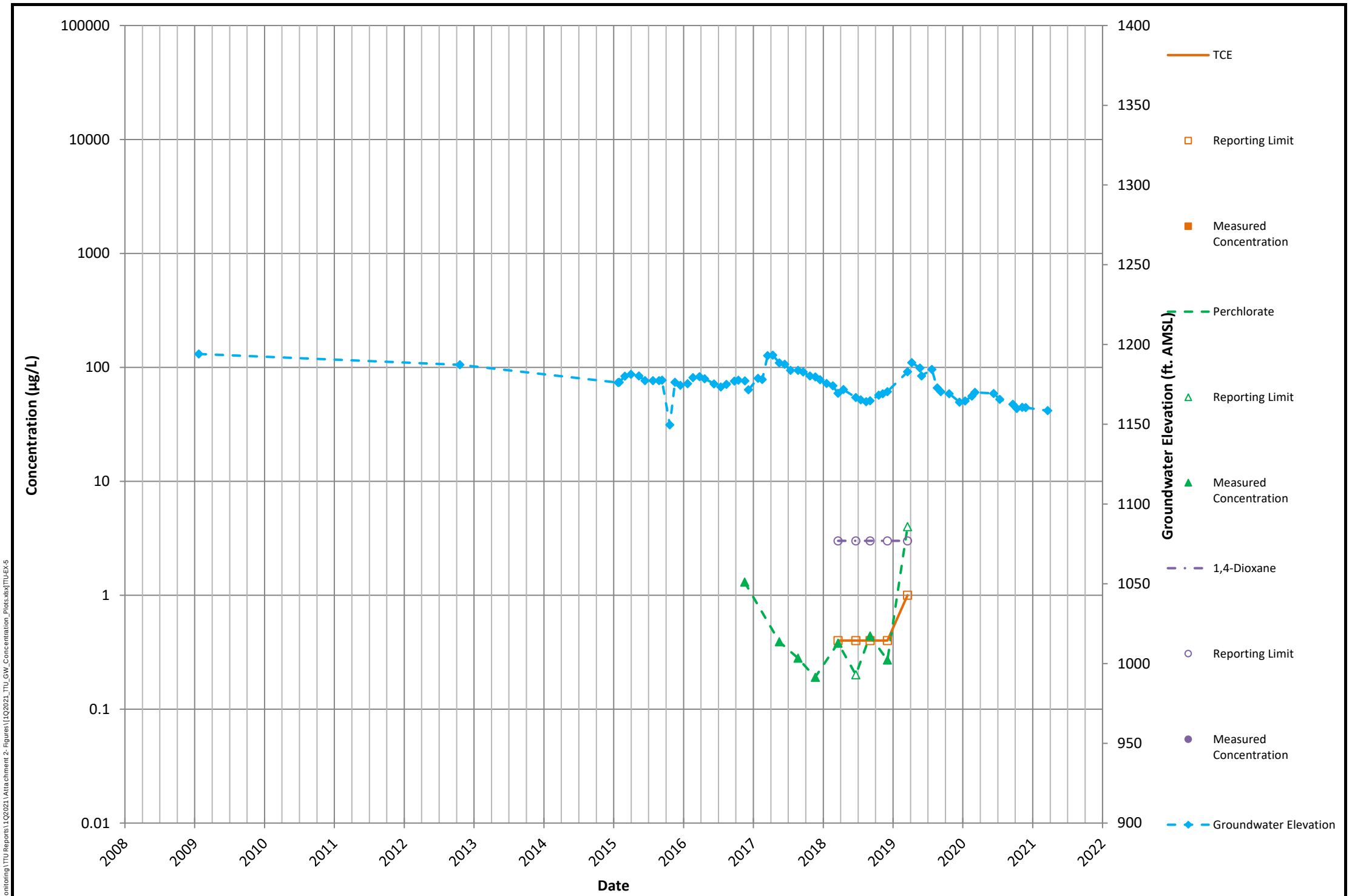
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-24

P:\GF0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xlsx]TTU-EX-5



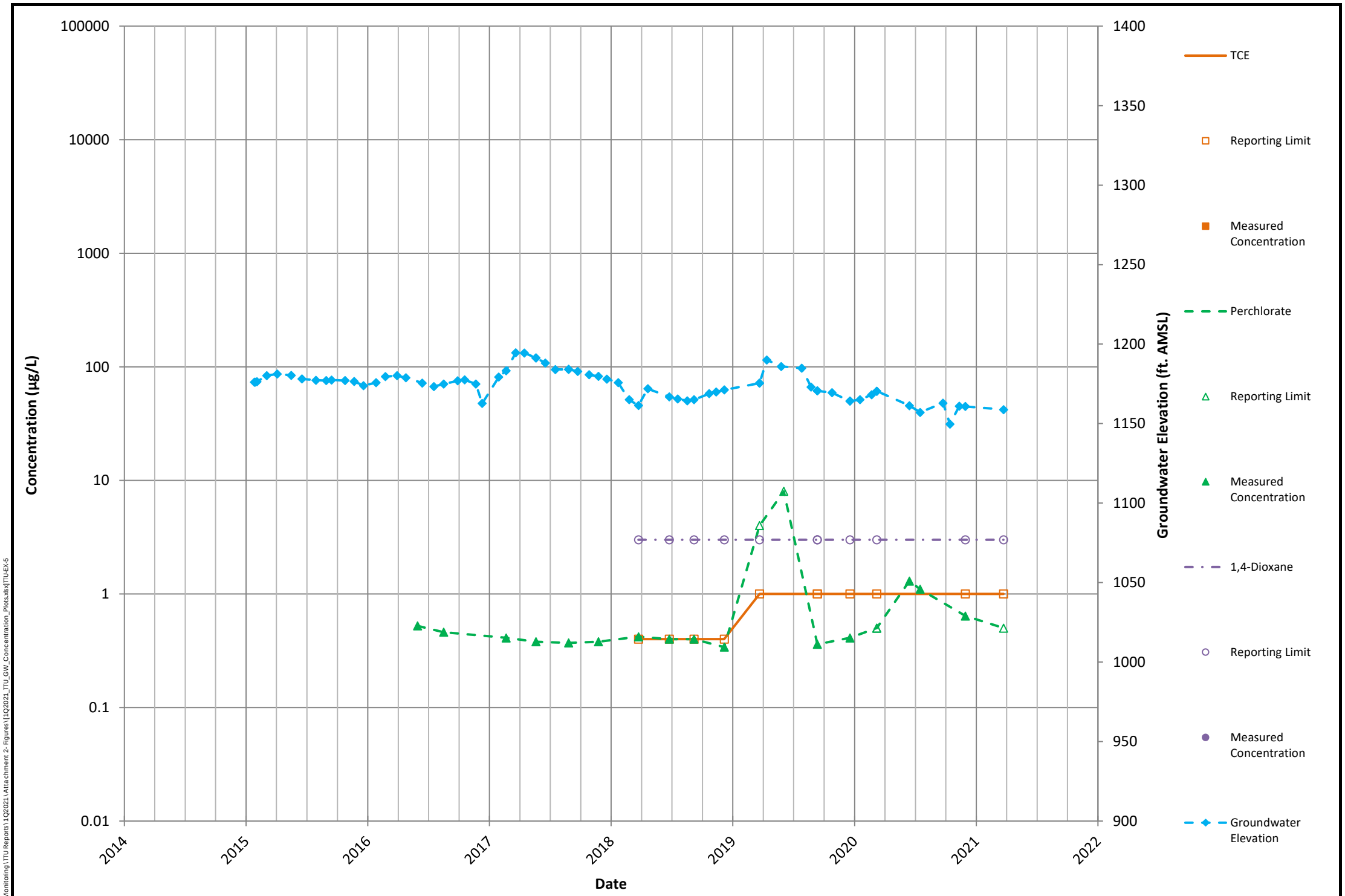
Notes:
Reporting Limit - Non-detect results are plotted as the laboratory reporting limit.
µg/L - micrograms per liter
ft. AMSL - feet above mean sea level

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

Geosyntec consultants
Phoenix | June 2021

Figure 5-25

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_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 | June 2021

Figure 5-26

P:\SP0101GW21 - 2021 Groundwater Monitoring\TTU Reports\1Q2021\Attachment 2- Figures\[1Q2021_TTU_GW_Concentration_Plots.xls]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:	22 April 2021
To:	Fabrizio Mascioni
From:	Morgan Greenwald
CC:	Susan Scudder
Subject:	**Tier 1A Data Validation - Level II Data Deliverables, Pace Analytical Sample Delivery Groups (SDGs) L1332129 and L1332422 and Eurofins TestAmerica (ETA) Work Order Number 550-160884-1**

SITE: Nammo - Thermal Treatment Unit (TTU) First Quarter 2021 Sampling

INTRODUCTION

This report summarizes the findings of the Tier 1A data validation of twenty-two groundwater samples, three field duplicate samples and two trip blanks, collected on 29 and 30 March 2021, as part of the Nammo Defense Systems, Inc. (Nammo) TTU First Quarter 2021 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)

One sample and one field duplicate were submitted to ETA Phoenix, AZ and subcontracted to ETA Sacramento, CA 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 qualification.

The data were reviewed based on the Quality Assurance Project Plan for Groundwater Investigation, August 2013 (QAPP), the USEPA National Functional Guidelines for Inorganic

Superfund Methods Data Review, January 2017 (USEPA-540-R-2017-001), the USEPA National Functional Guidelines for Organic Superfund Methods Data Review, January 2017 (USEPA-540-R-2017-002), 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 set:

Laboratory ID	Client ID
L1332129-01	TTU-3-108-20210329
L1332129-02	TTU-4-57-20210329
L1332129-03	TTU-6-143-20210329
L1332129-04	TTU-7-345-20210329
L1332129-05	TTU-8-164-20210329
L1332129-06	TTU-10-147-20210329
L1332129-07	TTU-15-75-20210329
L1332129-08	TTU-16-80-20210329
L1332129-09	TTU-16-80-20210329-DUP
L1332129-10	TTU-17-80-20210329
L1332129-11	TTU-EX-1-69-20210329
L1332129-12/ 550-160884-1	PF-2-400-20210329
L1332129-13	TRIP BLANK
L1332422-01	TTU-2-114-20210330

Laboratory ID	Client ID
L1332422-02	TTU-2-114-20210330-DUP
L1332422-03	TTU-1-50-20210330
L1332422-04	TTU-5-110-20210330
L1332422-05	TTU-9A-61-20210330
L1332422-06	TTU-12-82-20210330
L1332422-07	TTU-13-51-20210330
L1332422-08	TTU-14-69-20210330
L1332422-09	TTU-EX-2-74-20210330
L1332422-10	TTU-EX-3-76-20210330
L1332422-11	TTU-EX-4-72-20210330
L1332422-12	TTU-EX-5-80-20210330
L1332422-13	TRIP BLANK
550-160884-2	PF-2-400-20210329-Dup

The samples were received at Pace at 0.3ºC and 2.4ºC, at ETA Phoenix, AZ at 1.9ºC, and at ETA Sacramento, CA at 3.0ºC, meeting the QAPP criteria of approximately 4ºC, based on professional and technical judgment. No sample preservation issues were noted by the laboratories.

The L1332129 and L1332422 case narratives indicated that insufficient volume was received for the following samples to meet the method quality control requirements for USEPA Method 8260B-SIM: TTU-3-108-20210329, TTU-4-57-20210329, TTU-16-80-20210329, TTU-16-80-20210329-DUP, TTU-17-80-20210329, TTU-EX-1-69-20210329, PF-2-400-20210329, TTU-2-114-20210330, TTU-2-114-20210330-DUP, TTU-1-50-20210330, TTU-5-110-20210330, TTU-12-82-20210330, TTU-14-69-20210330, TTU-EX-2-74-20210330, TTU-EX-3-76-20210330, TTU-EX-4-72-20210330, and TTU-EX-5-80-20210330. Further information from the laboratory specified 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 matrix spike (MS)/MS duplicate (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.

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.

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). Seven method blanks were reported (modified Method 314.0 batches WG1643005, WG1643272, WG1643467, WG1643742, WG1645914, and WG1646082 and Method 6850 batch 475703). Perchlorate was not detected in the method blanks above the method detection limit (MDL) for Method 314.0 or above the reporting limit (RL) for Method 6850.

1.4 Matrix Spike/Matrix Spike Duplicate

One sample set specific MS/MSD pair was reported for modified Method 314.0, using sample TTU-1-50-20210330. Nine sample set specific MSs were reported for modified Method 314.0, using samples TTU-3-108-20210329, TTU-4-57-20210329, TTU-6-143-20210329, TTU-7-345-20210329, TTU-8-164-20210329, TTU-10-147-20210329, TTU-15-75-20210329, TTU-EX-5-80-20210330, and TTU-9A-61-20210330. One sample set specific MS/MSD pair was reported for Method 6850, using sample PF-2-400-20210329. The recovery and relative percent difference (RPD) results were within the laboratory specified acceptance criteria, with the following exceptions.

The perchlorate recovery in the MS using sample TTU-EX-5-80-20210330 was low and outside the laboratory specified acceptance criteria. Therefore, the non-detect perchlorate result in sample TTU-EX-5-80-20210330 was UJ qualified as estimated less than the MDL.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	Validation Result (µg/L)	Validation Qualifier*	Reason code**
TTU-EX-5-80-20210330	Perchlorate	1.50	U;M2	1.50	UJ	4

µg/L - Microgram per liter
M2 - Laboratory flag indicating the matrix spike recovery was low; the method control sample recovery was acceptable
U - The analyte was analyzed for, but was not detected at or above the MDL
* - 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

It was noted that, for the MS/MSD pair using sample TTU-1-50-20210330 and the MS using sample TTU-EX-5-80-20210330, the MS and/or MSD were spiked after dilution. In the quality control summaries included in the laboratory report, the reported MS and MSD results were adjusted for sample dilution, however the reported MS/MSD spike amounts were not adjusted for sample dilution. An email from the laboratory to the data validator dated 19 April 2021 provided the adjusted spike amounts as 5000 µg/L and 50 µg/L for the MS/MSD pair using sample TTU-1-50-20210330 and the MS using sample TTU-EX-5-80-20210330, respectively.

Batch sample MSs or 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.

MS/MSD pairs were not reported for modified Method 314.0 batch WG1643272. A laboratory control sample (LCS) and laboratory duplicate were used to assess accuracy and precision in the batch.

1.5 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 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, with the following exception.

The perchlorate recovery was high and outside the laboratory specified acceptance criteria in the LCS in modified Method 314.0 batch WG1643272. Therefore, the estimated perchlorate concentration in sample TTU-17-80-20210329 was J qualified as estimated.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	Validation Result (µg/L)	Validation Qualifier	Reason code
TTU-17-80-20210329	Perchlorate	2.78	E4;L1;R8	2.78	J	5

µg/L - Microgram per liter
E4 - Laboratory flag indicating that the concentration is estimated; the analyte was detected below the RL, but above the MDL
L1 - Laboratory flag indicating the associated LCS recovery was above laboratory acceptance limits
R8 - Laboratory flag indicating that the sample RPD exceeded the method acceptance limit

1.6 Laboratory Duplicate

Two sample set specific laboratory duplicates were reported, using samples TTU-17-80-20210329 and TTU-5-110-20210330. The RPD results were within the laboratory specified acceptance criteria, with the following exception.

The RPD was high and outside the laboratory specified acceptance criteria for the laboratory duplicate using sample TTU-17-80-20210329. However, since both the parent and laboratory sample concentrations were estimated, less than the RL and greater than the MDL, and based on professional and technical judgment, no qualifications were applied to the data.

1.7 Field Duplicate

Three field duplicates were collected with the sample sets and analyzed for perchlorate: TTU-16-80-20210329-DUP, TTU-2-114-20210330-DUP, and PF-2-400-20210329-Dup. Acceptable

precision (RPD ≤30%) was demonstrated between the field duplicates and original samples, TTU-16-80-20210329, TTU-2-114-20210330, and PF-2-400-20210329, respectively.

The QAPP specifies that field duplicates should be collected and analyzed at a frequency of 10%. Three field duplicates were collected with the twenty-two project samples. Therefore, the QAPP-specified field duplicate frequency of 10% was met for the sample sets.

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. Elevated non-detect results were reported due to the dilutions analyzed. 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.

Estimated concentrations greater than the MDLs and less than the RLs for modified Method 314.0 were flagged by the laboratory with E4. These estimated concentrations were J qualified as estimated.

1.10 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.

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.

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). Nine method blanks were reported (batches WG1644309, WG1644384, WG1646436, WG1646650, WG1645350, WG1645560, WG1645898, WG1646436, and WG1647430). VOCs were not detected in the method blanks above the MDLs, with the following exception.

Trichloroethene was detected in the method blank in batch WG1644384 at an estimated concentration greater than the MDL and less than the RL. Since trichloroethene was either not

detected or detected at concentrations greater than the RL in the associated samples, no qualifications were applied to the data.

2.4 Matrix Spike/Matrix Spike Duplicate

One sample set specific MS/MSD pair was reported using sample TTU-1-50-20210330. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

One or both of the MS/MSD recoveries were high and outside the laboratory specified acceptance criteria for the following analytes: 1,3-butadiene, n-butylbenzene, sec-butylbenzene, 2-chlorotoluene, 4-chlorotoluene, dichlorodifluoromethane, di-isopropyl ether, n-hexane, propene, and n-propylbenzene. Since the affected analytes were not detected in sample TTU-1-50-20210330, no qualifications were applied to the data.

Batch sample 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.

MS/MSD pairs were not reported in batches WG1646436, WG1646650, WG1645560, WG1645898, WG1646436, and WG1647430. LCS/LCS duplicate (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). Nine LCS/LCSD pairs were reported. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exceptions.

The LCSD recovery of methylene chloride and the RPDs of 2,2-dichloropropane and propene were high and outside the laboratory specified acceptance criteria in the LCS/LCSD pair in batch WG1645350. Since the affected analytes were not detected in the associated samples, no qualifications were applied to the data.

2.6 Surrogates

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

The recovery of surrogate toluene-d8 was high and outside the laboratory specified acceptance criteria in the dilution analysis of sample TTU-EX-4-72-20210330. Since the sample was analyzed at a dilution and based on professional and technical judgment, no qualifications were applied to the data.

The recovery of surrogate 4-bromofluorobenzene was low and outside the laboratory specified acceptance criteria in sample TRIP BLANK, reported in SDG L1332129. Since the recoveries of the other two surrogates were acceptable for this sample and based on professional and technical judgment, no qualifications were applied to the data.

2.7 Field Duplicate

Two field duplicates were collected with the sample sets and analyzed for VOCs: TTU-16-80-20210329-DUP and TTU-2-114-20210330-DUP. Acceptable precision (RPD $\leq$30%) was demonstrated between the field duplicates and original samples, TTU-16-80-20210329 and TTU-2-114-20210330, respectively, with the following exceptions.

1,2-Dichloroethane was detected at an estimated concentration greater than the MDL and less than the RL in field duplicate TTU-2-114-20210330-DUP and not detected in sample TTU-2-114-20210330, resulting in a noncalculable RPD between the results. Therefore, based on professional and technical judgment, the estimated 1,2-dichloroethane concentration in field duplicate TTU-2-114-20210330-DUP was J qualified as estimated and the non-detect result in sample TTU-2-114-20210330 was UJ qualified as estimated less than the MDL.

Methylcyclohexane was detected at a concentration greater than the RL in field duplicate TTU-2-114-20210330-DUP and not detected in sample TTU-2-114-20210330, resulting in a noncalculable RPD between the results. Therefore, based on professional and technical judgment, the methylcyclohexane concentration in field duplicate TTU-2-114-20210330-DUP was J qualified as estimated and the non-detect result in sample TTU-2-114-20210330 was UJ qualified as estimated less than the MDL.

Tetrachloroethene was detected at an estimated concentration greater than the MDL and less than the RL in sample TTU-2-114-20210330 and detected at a concentration greater than the RL in field duplicate TTU-2-114-20210330-DUP, resulting in a noncalculable RPD between the results. Therefore, based on professional and technical judgment, the tetrachloroethene concentrations in field duplicate pair TTU-2-114-20210330/TTU-2-114-20210330-DUP were J qualified as estimated.

Sample ID	Analyte	Laboratory Result (µg/L)	Laboratory Flag	RPD (%)	Validation Result (µg/L)	Validation Qualifier	Reason code
TTU-2-114-20210330	1,2-Dichloroethane	0.0819	U	NC	0.0819	UJ	7
TTU-2-114-20210330-DUP	1,2-Dichloroethane	0.200	E4		0.200	J	7
TTU-2-114-20210330	Methylcyclohexane	0.660	U	NC	0.660	UJ	7
TTU-2-114-20210330-DUP	Methylcyclohexane	8.21	NA		8.21	J	7
TTU-2-114-20210330	Tetrachloroethene	0.934	E4	NC	0.934	J	7
TTU-2-114-20210330-DUP	Tetrachloroethene	1.01	NA		1.01	J	7

ug/L - Microgram per liter
E4 - Laboratory flag indicating that the concentration is estimated; the analyte was detected below the laboratory RL, but above MDL
NA - Not applicable
NC - Non-calculable
U - Laboratory flag indicating that the analyte was analyzed for, but was not detected at the MDL

The QAPP-specified field duplicate frequency of 10% was met for the sample set.

2.8 Trip Blank

Two trip blank samples, both identified as TRIP BLANK, accompanied the VOC samples submitted in SDGs L1332129 and L1332422. Therefore, the QAPP-required frequency of one trip blank per shipment of VOC samples was met. VOCs were not detected above the MDLs in the trip blanks, with the following exception.

Carbon disulfide was detected at an estimated concentration greater than the MDL and less than the RL in the trip blank reported in SDG L1332129. Since carbon disulfide was not detected in the associated samples, no qualifications were applied to the data.

2.9 Equipment Blank

Equipment blanks were not submitted with the sample sets.

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). Four method blanks were reported (batches WG1643216, WG1644043, WG1646819, and WG1644831). 1,4-Dioxane was not detected in the method blanks above the MDL.

3.4 Matrix Spike/Matrix Spike Duplicate

One sample set specific MS/MSD pair was reported using sample TTU-1-50-20210330. The recovery and RPD results were within the laboratory specified acceptance criteria.

A batch sample MS/MSD pair was reported in batch WG1644831. 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 WG1643216 and WG1646819. 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). Four LCS/LCSD pairs were reported. The recovery and RPD results were within the laboratory specified acceptance criteria, with the following exception.

The 1,4-dioxane RPD was high and outside the laboratory specified criteria in the LCS/LCSD in batch WG1644043. Therefore, the 1,4-dioxane concentrations in the associated samples were J qualified as estimated.

Sample ID	Analyte	Laboratory Result (ug/L)	Laboratory Flag	Validation Result (ug/L)	Validation Qualifier	Reason code
TTU-15-75-20210329	1,4-Dioxane	5.33	R7	5.33	J	5
TTU-EX-1-69-20210329	1,4-Dioxane	340	R7	340	J	5
TTU-12-82-20210330	1,4-Dioxane	115	R7	115	J	5

Sample ID	Analyte	Laboratory Result (ug/L)	Laboratory Flag	Validation Result (ug/L)	Validation Qualifier	Reason code
TTU-13-51-20210330	1,4-Dioxane	37.7	R7	37.7	J	5
TTU-14-69-20210330	1,4-Dioxane	280	R7	280	J	5
TTU-2-114-20210330	1,4-Dioxane	196	R7	196	J	5
TTU-2-114-20210330-DUP	1,4-Dioxane	244	R7	244	J	5
TTU-EX-2-74-20210330	1,4-Dioxane	334	R7	334	J	5
TTU-1-50-20210330	1,4-Dioxane	18.9	NA	18.9	J	5

ug/L - Microgram per liter
NA - Not applicable
R7 – Laboratory flag indicating that the LCS/LCSD RPD exceeded the laboratory acceptance limit, but the recovery met acceptance criteria

3.6 Surrogates

Acceptable surrogate recoveries were reported for the sample analyses.

3.7 Field Duplicate

Two field duplicates were collected with the sample sets and analyzed for 1,4-dioxane: TTU-16-80-20210329-DUP and TTU-2-114-20210330-DUP. Acceptable precision (RPD $\leq$30%) was demonstrated between the field duplicates and original samples, TTU-16-80-20210329 and TTU-2-114-20210330, respectively.

The QAPP specified field duplicate frequency of 10% was met for the sample set.

3.8 Trip Blank

Two trip blank samples accompanied the VOC samples. However, 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

Equipment blanks were not submitted with the sample set.

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.

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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: 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	43.74	Date/Time: 3-30-21 1110 DTW: 43.12

	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-1-50-20210330 + MS/MSD	3-30-21 1135	25.5	1016	8.66	7.93	104.3	Clear

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: Yes / (No) Size of sleeve: N/A 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-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	65.66	Date/Time: 3-30-21 1030 DTW: 63.33

	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-2-114-20210330 + Dup	3-30-21 1057	25.0	3364	2.46	6.90	122.5	Clear

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: Yes / (No) Size of sleeve: N/A Samples Packed : (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling. Water began to sputter while filling bottles. Water level must have dropped near bottom of pump.			

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TTU Groundwater Monitoring Checklist

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	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	95.49	Date/Time: 3-29-21 1355 DTW: 90.40

	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-3-108-20210329	3-29-21 1400	26.5	1336	8.05	6.93	103.6	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: 2-1L	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-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	52.22	Date/Time: 1338 3-29-21 DTW: 52.81

	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 0329	3-29-21 1343	27.5	2032	2.35	7.43	76.4	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. CHECK HYDRASLEEVE DEPTH: 57				

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	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	81.55	Date/Time: 3-30-21 0730 DTW: 82.18

	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-5-110-20210330	3-30-21 0735	21.7	797	0.53	7.37	43.4	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	127.9	Date/Time: 1138 3-29-21 DTW: 130.22

	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-6-143-20210329	3-29-21 1143	24.7	2939	2.15	7.07	60.1	Clear

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

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	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	121.74	Date/Time: ~~1054~~ 1120 3-29 DTW: 124.15 ~~3-29-21~~ ~~147.52~~

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-7-345-20210329	3-29-21 1127	25.0	3830	1.67	6.87	-66.7	clear, black floating sed.

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	144.87	Date/Time: 1054 3-29-21 DTW: 147.52

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-8-164-20210329	3-29-21 1100	24.2	3311	1.85	6.93	-113.9	clear, black floating sed., slight odor

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

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	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	29.74	Date/Time: 3-30-21 0921 DTW: 29.71

	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-61-20210330	3-30-21 0925	23.9	1559	7.50	7.57	34.5	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-10	N/A	4/18/2016	185	115 - 180	1302.42	4" PVC	33 29'54.5995"	-111 43'07.9037"	147	139.382	Date/Time: 3-29-21 1310 DTW: 142.06

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-10-147-20210329	3-29-21 1315	26.9	1477	7.22	7.26	89.0	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: 2-1L	Samples Packed : (Yes) / No
Notes	Please make a note of the well condition and any issues that arose during sampling.				

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	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	52.69	Date/Time: DTW:

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
	Not Sampled							

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.

	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	74.08	Date/Time: 3-30-21 1014 DTW: 74.96

Field Parameters	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
	TTU-12-82-20210330	3-30-21 1019	24.0	3030	6.79	6.90	94.9	Clear, rust scale on bag.

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. CHECK HYDRASLEEVE DEPTH: —

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	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	44.45	Date/Time: 03-30-21 0941 DTW: 42.81

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-13-51-20210330	3-30-21 0946	23.4	1347	3.92	7.12	64.3	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. CHECK HYDRASLEEVE DEPTH: 51				

	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	63.06	Date/Time: 3-30-21 0958 DTW: 60.53

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-14-69-20210330	3-30-21 1003	23.5	2822	4.59	6.90	89.3	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. CHECK HYDRASLEEVE DEPTH: —				

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	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	34.57	Date/Time: 3-29-21 1431 DTW: 32.07
Field Parameters	Sample ID:		Date and Time Sampled:		Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:		
	TTU-15-75-20210329		3-29-21 1435		27.7	2172	1.36	7.10	-103.2	Clear, some flaking black scale, slight 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-16**	55-231730	1/23/2020	96.6*	Open	1338.554	8"	33°29'56.18415"	-111°42'49.59235"	80	43.27	Date/Time: 1452 3-29-21 DTW: 30.01
Field Parameters	Sample ID:		Date and Time Sampled:		Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:		
	TTU-16-80-2021 0329 + Dup		3-29-21 1456 +5M		30.01	7953	1.58	6.37	60.9	slight green color, light brown bottom, mod. sed. strong odor		
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.											

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	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	40.15	Date/Time: 3-29-21 1521 DTW: 42.20

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	TTU-17-80-20210329	3-29-21 1525	28.5	958	1.42	7.12	-166.6	Cloudy, black floating sed., odor

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	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-18	55-231737	1/21/2020	104.5*	Open	1320.248	8"	33°29'47.20278"	-111°42'58.10223"		Dry	Date/Time: 3-30-21 0900 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-	NA						

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.				

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	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	31.71	Date/Time: 3-29-21 1542 DTW: 33.19

	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-1-69-20210329	3-29-21 1545	26.7	2684	4.25	6.95	40.9	Clear top, cloudy bottom, ~1" scale & 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.				

	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	41.62	Date/Time: 3-30-21 0751 DTW: 42.61

	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-2-74-20210330	3-30-21 0756	22.0	2245	2.09	6.94	28.4	Clear top half, 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: 2-1L	Samples Packed : Yes / No
Notes	Please make a note of the well condition and any issues that arose during sampling.				

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	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	43.09	Date/Time: 3-30-21 0808 DTW: 43.78

	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-3-76-2021 0330	3-30-21 0813	21.9	4733	2.44	6.61	56.1	Clear, ~1/4" sed at bottom, slight odor

Checklist	Depth to Water: Yes / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate / VOCs / 1,4-Dioxane	Hydraleeve Reset: (Yes) / No Size of sleeve: 2-1L	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-4	55-231732	1/25/2020	112*	Open	1319.958	8"	33°29'55.46297"	-111°42'54.38840"	77	47.06	Date/Time: 3-30-21 0824 DTW: 47.43

	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-4-77-2021 0330	3-30-21 0830	23.0	1998	2.27	7.15	54.0	Cloudy, slight odor

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

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	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	42.83	Date/Time: 3-30-21 0842 DTW: 43.32

	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 0930	3-30-21 0850	23.4	1105	2.32	7.75	-73.1	Cloudy, bottom 1/4 dark grey/brown 1" of sed. @ 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.				

	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	135.5	Date/Time: 1201 3-29-21 DTW: 137.42

	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	NM						

Checklist	Depth to Water: Yes / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate (6850)	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. Pump not active				

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	135.56	Date/Time: 1159 3-29-21 DTW: 137.52

	Sample ID:	Date and Time Sampled:	Temp (°C)	Spec Cond (µS/cm)	DO (mg/l)	pH (S.U.)	ORP (mV)	Appearance:
Field Parameters	PF-2-400-20210329	3-29-21 1223	25.4	1230	6.35	7.27	43.8	Clear

Checklist	Depth to Water: (Yes) / No	~~Transducer Downloaded: Yes / No~~	Sampled: Perchlorate (6850) ~~TA~~ 4A-Diox, VOCs-Pace	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.

1202 pump start.

Time	Temp	SP Cond	DO	pH	Orp	Appearance
1209	26.0	1263	5.93	7.12	79.3	clear
1211	25.4	1235	6.37	7.25	57.0	
1213	25.7	1233	5.56	7.21	53.3	
1216	25.2	1230	6.29	7.26	49.4	
1219	24.9	1229	6.45	7.20	45.6	
1221	25.1	1229	6.43	7.27	43.5	
1223	25.4	1230	6.35	7.27	43.8	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: 550-160884-1
Client Project/Site: SP0101GW21/02

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

Attn: Fabrizio Mascioni

Authorized for release by:
4/5/2021 2:29:54 PM

Mary Charlson, Project Manager I
(602)437-3340
Mary.Charlson@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: Geosyntec Consultants, Inc.
Project/Site: SP0101GW21/02

Job ID: 550-160884-1

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: SP0101GW21/02

Job ID: 550-160884-1

Job ID: 550-160884-1

Laboratory: Eurofins TestAmerica, Phoenix

Narrative

Job Narrative
550-160884-1

Comments
No additional comments.

Receipt
The samples were received on 3/29/2021 4:53 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 1.9º 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: SP0101GW21/02

Job ID: 550-160884-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
550-160884-1	PF-2-400-20210329	Water	03/29/21 12:23	03/29/21 16:53	
550-160884-2	PF-2-400-20210329-Dup	Water	03/29/21 12:23	03/29/21 16:53	

Detection Summary

Client: Geosyntec Consultants, Inc.
Project/Site: SP0101GW21/02

Job ID: 550-160884-1

Client Sample ID: PF-2-400-20210329 — Lab Sample ID: 550-160884-1

No Detections.

Client Sample ID: PF-2-400-20210329-Dup — Lab Sample ID: 550-160884-2

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: SP0101GW21/02

Job ID: 550-160884-1

Client Sample ID: PF-2-400-20210329

Lab Sample ID: 550-160884-1

Date Collected: 03/29/21 12:23

Matrix: Water

Date Received: 03/29/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.50		ug/L		04/01/21 06:18	04/02/21 12:52	1

Client Sample ID: PF-2-400-20210329-Dup

Lab Sample ID: 550-160884-2

Date Collected: 03/29/21 12:23

Matrix: Water

Date Received: 03/29/21 16:53

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.50		ug/L		04/01/21 06:18	04/02/21 13:34	1

QC Sample Results

Client: Geosyntec Consultants, Inc.
Project/Site: SP0101GW21/02

Job ID: 550-160884-1

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

Lab Sample ID: MB 320-475703/1-A
Matrix: Water
Analysis Batch: 476140

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 475703

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Perchlorate	ND		0.50		ug/L		04/01/21 06:18	04/02/21 11:26	1

Lab Sample ID: LCS 320-475703/2-A
Matrix: Water
Analysis Batch: 476140

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 475703

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate			5.00	4.96		ug/L		99	80 - 120		

Lab Sample ID: 550-160884-1 MS
Matrix: Water
Analysis Batch: 476140

Client Sample ID: PF-2-400-20210329
Prep Type: Total/NA
Prep Batch: 475703

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Perchlorate	ND		5.00	5.25		ug/L		97	80 - 120		

Lab Sample ID: 550-160884-1 MSD
Matrix: Water
Analysis Batch: 476140

Client Sample ID: PF-2-400-20210329
Prep Type: Total/NA
Prep Batch: 475703

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Perchlorate	ND		5.00	5.28		ug/L		98	80 - 120	1	15

QC Association Summary

Client: Geosyntec Consultants, Inc.
Project/Site: SP0101GW21/02

Job ID: 550-160884-1

LCMS

Prep Batch: 475703

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-160884-1	PF-2-400-20210329	Total/NA	Water	Filtration	
550-160884-2	PF-2-400-20210329-Dup	Total/NA	Water	Filtration	
MB 320-475703/1-A	Method Blank	Total/NA	Water	Filtration	
LCS 320-475703/2-A	Lab Control Sample	Total/NA	Water	Filtration	
550-160884-1 MS	PF-2-400-20210329	Total/NA	Water	Filtration	
550-160884-1 MSD	PF-2-400-20210329	Total/NA	Water	Filtration	

Analysis Batch: 476140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-160884-1	PF-2-400-20210329	Total/NA	Water	6850	475703
550-160884-2	PF-2-400-20210329-Dup	Total/NA	Water	6850	475703
MB 320-475703/1-A	Method Blank	Total/NA	Water	6850	475703
LCS 320-475703/2-A	Lab Control Sample	Total/NA	Water	6850	475703
550-160884-1 MS	PF-2-400-20210329	Total/NA	Water	6850	475703
550-160884-1 MSD	PF-2-400-20210329	Total/NA	Water	6850	475703

Lab Chronicle

Client: Geosyntec Consultants, Inc.
Project/Site: SP0101GW21/02

Job ID: 550-160884-1

Client Sample ID: PF-2-400-20210329

Lab Sample ID: 550-160884-1

Date Collected: 03/29/21 12:23

Matrix: Water

Date Received: 03/29/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Filtration			475703	04/01/21 06:18	HJA	TAL SAC
Total/NA	Analysis	6850		1	476140	04/02/21 12:52	JY1	TAL SAC

Client Sample ID: PF-2-400-20210329-Dup

Lab Sample ID: 550-160884-2

Date Collected: 03/29/21 12:23

Matrix: Water

Date Received: 03/29/21 16:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Filtration			475703	04/01/21 06:18	HJA	TAL SAC
Total/NA	Analysis	6850		1	476140	04/02/21 13:34	JY1	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: SP0101GW21/02

Job ID: 550-160884-1

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	08-11-21
Arkansas DEQ	State	88-0691	06-17-21
California	State	2897	01-31-22
Colorado	State	CA0004	08-31-21
Connecticut	State	PH-0691	06-30-21
Florida	NELAP	E87570	06-30-21
Georgia	State	4040	01-29-22
Hawaii	State	<cert No.>	01-29-22
Illinois	NELAP	200060	03-18-22
Kansas	NELAP	E-10375	10-31-21
Louisiana	NELAP	01944	06-30-21
Maine	State	CA00004	04-14-22
Michigan	State	9947	01-29-22
Nevada	State	CA000442021-2	07-31-21
New Hampshire	NELAP	2997	04-18-21
New Jersey	NELAP	CA005	06-30-21
New York	NELAP	11666	04-01-22
Ohio	State	41252	01-29-22
Oregon	NELAP	4040	01-30-23
Texas	NELAP	T104704399-19-13	06-01-21
US Fish & Wildlife	US Federal Programs	58448	07-31-21
USDA	US Federal Programs	P330-18-00239	07-31-21
Utah	NELAP	CA000442021-12	02-28-21 *
Vermont	State	VT-4040	04-16-21
Virginia	NELAP	460278	03-14-22
Washington	State	C581	05-05-21
West Virginia (DW)	State	9930C	12-31-21
Wisconsin	State	998204680	08-31-21
Wyoming	State Program	8TMS-L	01-28-19 *

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

Eurofins TestAmerica, Phoenix

Method Summary

Client: Geosyntec Consultants, Inc.
Project/Site: SP0101GW21/02

Job ID: 550-160884-1

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TAL-0013-550 (0116)

CHAIN OF CUSTODY FORM

160884

[ ] Phoenix - 4625 E. Cotton Center Blvd., Suite 189, Phoenix, AZ 85040 (602) 437-3340

Page 1 of 1

Client Name/Address:	Project/PO Number:
Geosyntec Consultants 11811 N Tatum Blvd P-186 Phoenix, AZ 85028	SPDIDIGW21/02
Project Manager: Fabrizio Mascioni	**Phone Number:** 602-513-5812
Sampler: Ryan Ayala	**Email Address:** Fmascioni@geosyntec.com

Sample Description	Sample Matrix	Container Type	# of Cont.	Sampling Date	Sampling Time	Preservatives	Analysis Required: 6850 Perchlorate	Special Instructions
PF-2-400-20210329	GW	Poly	3	3-29-21	1223	None	X	-1
PF-2-400-20210329-Dup	GW	Poly	3	3-29-21	1223	None	X	-2

550-160884 Chain of Custody

Relinquished By:	Date/Time:	Received By:	Date/Time:
	1653 3-29-21		
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received In Lab By:	Date/Time: 3/29/21 16:53

Turnaround Time: (Check)
same day ____ 72 hours ____
24 hours ____ 5 days ____
48 hours ____ normal X

Sample Integrity: (Check)
intact X on ice X

Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and any additional analyses performed on this project. Payment for services is due within 30 days from the date of invoice. Sample(s) will be disposed of after 30 days.

1.9

4/5/2021

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: Charlson, Mary	Carrier Tracking No(s):	COC No: 550-30436.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Mary.Charlson@Eurofinset.com	State of Origin: Arizona	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): State Program - Arizona		Job #: 550-160884-1
Address: 880 Riverside Parkway, ,	Due Date Requested: 4/6/2021			
City: West Sacramento	TAT Requested (days):			
State, Zip: CA, 95605				
Phone: 916-373-5600(Tel) 916-372-1059(Fax)	PO #:			
Email:	WO #:			
Project Name: SP0101GW21/02	Project #: 55006113			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, 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-2-400-20210329 (550-160884-1)	3/29/21	12:23 Arizona		Water			X	3	
PF-2-400-20210329-Dup (550-160884-2)	3/29/21	12:23 Arizona		Water			X	3	

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	3-30-21 1345			FedEx		
2					3-31-21 1015	ETASAC
3						

Custody Seals Intact:	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:
☐ Yes △ No	1350245	3.0

Ver: 11/01/2020

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4/5/2021

eurofins | Environment Testing TestAmerica

Sacramento Sample Receiving Notes

550-160884 Field Sheet

Job: _____

Tracking # : 1835 2439 9850

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-02 Corr. Factor: (+ / -) N/A °C

Ice ✓ Wet ✓ Gel _____ Other _____

Cooler Custody Seal: 1350 245

Cooler ID: _____

Temp Observed: 3.0 °C Corrected: 3.0 °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: NC Date: 3-31-21

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: NC Date: 3-31-21

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: NC Date: 3-31-21

Login Sample Receipt Checklist

Client: Geosyntec Consultants, Inc.

Job Number: 550-160884-1

Login Number: 160884
List Number: 1
Creator: Maycock, Lisa

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.	True	
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: 550-160884-1

Login Number: 160884
List Number: 2
Creator: Cahill, Nicholas P

List Source: Eurofins TestAmerica, Sacramento
List Creation: 03/31/21 01:49 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	160884
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	3.0c
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

April 08, 2021

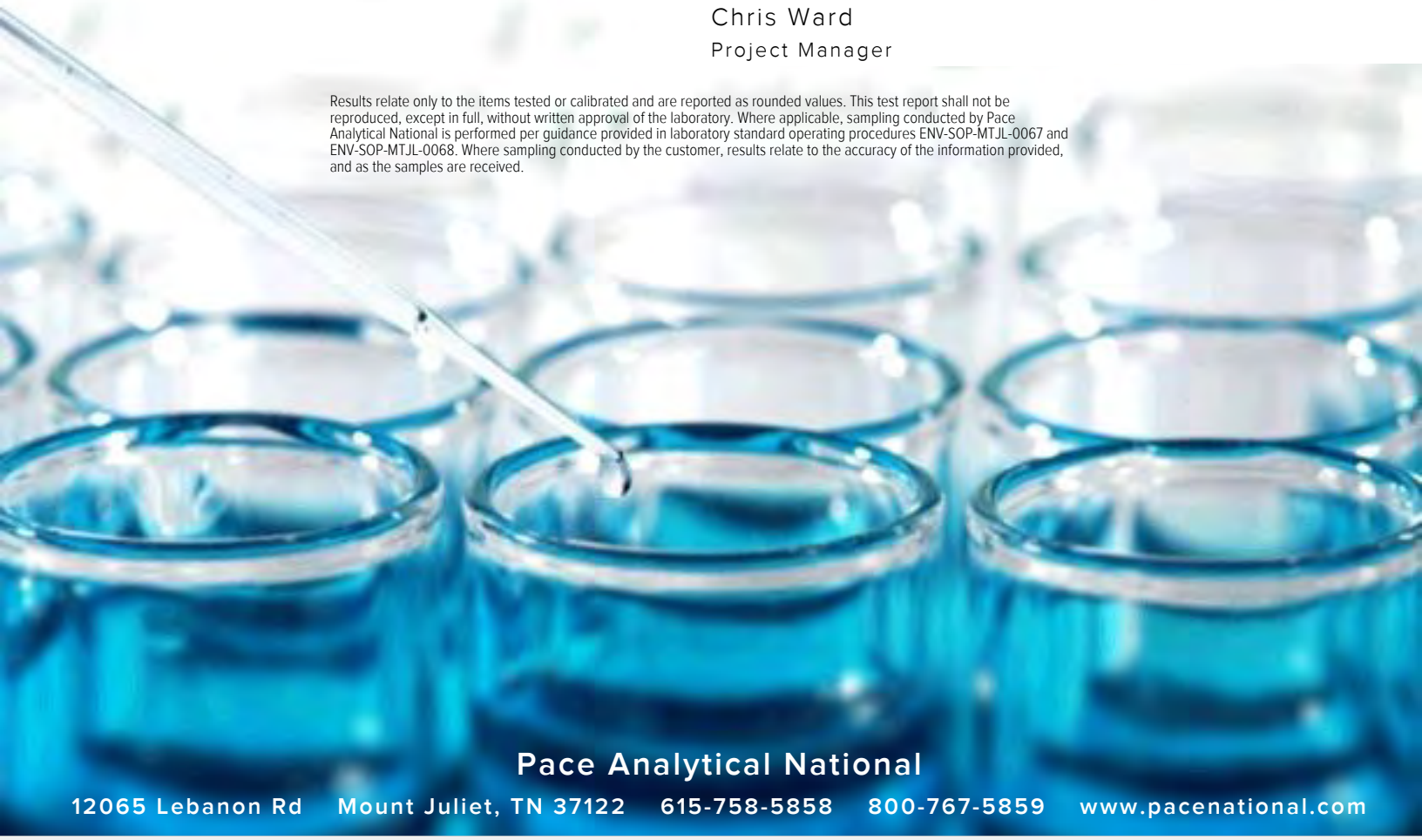
GeoSyntec, Inc. - AZ

Sample Delivery Group:	L1332129
Samples Received:	03/30/2021
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



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TTU-3-108-20210329 L1332129-01 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 14:00 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643467	1	03/31/21 01:44	03/31/21 01:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	1	04/01/21 22:10	04/01/21 22:10	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1643216	1	03/31/21 23:26	03/31/21 23:26	BMB	Mt. Juliet, TN

TTU-4-57-20210329 L1332129-02 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 13:43 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643467	1	03/31/21 03:04	03/31/21 03:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	1	04/01/21 22:30	04/01/21 22:30	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1643216	1	03/31/21 23:46	03/31/21 23:46	BMB	Mt. Juliet, TN

TTU-6-143-20210329 L1332129-03 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 11:43 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643467	1	03/31/21 03:30	03/31/21 03:30	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	1	04/01/21 22:51	04/01/21 22:51	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 18:21	04/01/21 18:21	BMB	Mt. Juliet, TN

TTU-7-345-20210329 L1332129-04 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 11:27 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643467	1	03/31/21 03:56	03/31/21 03:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	1	04/01/21 23:11	04/01/21 23:11	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 18:40	04/01/21 18:40	BMB	Mt. Juliet, TN

TTU-8-164-20210329 L1332129-05 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 11:00 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643467	1	03/31/21 04:23	03/31/21 04:23	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	1	04/01/21 23:32	04/01/21 23:32	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 19:00	04/01/21 19:00	BMB	Mt. Juliet, TN

TTU-10-147-20210329 L1332129-06 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 13:15 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643467	1	03/31/21 04:49	03/31/21 04:49	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	1	04/01/21 23:52	04/01/21 23:52	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 19:20	04/01/21 19:20	BMB	Mt. Juliet, TN

TTU-15-75-20210329 L1332129-07 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 14:35 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643742	1	03/31/21 21:51	03/31/21 21:51	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	1	04/02/21 00:13	04/02/21 00:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 19:40	04/01/21 19:40	BMB	Mt. Juliet, TN

TTU-16-80-20210329 L1332129-08 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 14:56 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643005	10000	03/31/21 22:17	03/31/21 22:17	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	20	04/02/21 00:33	04/02/21 00:33	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1646650	5000	04/06/21 22:02	04/06/21 22:02	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1646819	200	04/07/21 15:52	04/07/21 15:52	BMB	Mt. Juliet, TN

TTU-16-80-20210329-DUP L1332129-09 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 14:56 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	20000	04/05/21 18:07	04/05/21 18:07	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644309	20	04/02/21 00:54	04/02/21 00:54	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1646650	5000	04/06/21 22:22	04/06/21 22:22	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1646819	200	04/07/21 16:12	04/07/21 16:12	BMB	Mt. Juliet, TN

TTU-17-80-20210329 L1332129-10 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 15:25 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1643272	1	04/03/21 12:25	04/03/21 12:25	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644384	1	04/02/21 05:41	04/02/21 05:41	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1646819	1	04/07/21 15:33	04/07/21 15:33	BMB	Mt. Juliet, TN

TTU-EX-1-69-20210329 L1332129-11 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 15:45 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5000	04/05/21 21:12	04/05/21 21:12	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644384	1	04/02/21 06:01	04/02/21 06:01	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1646436	5	04/06/21 14:04	04/06/21 14:04	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 20:59	04/01/21 20:59	BMB	Mt. Juliet, TN

PF-2-400-20210329 L1332129-12 GW

Collected by: Ryan Ayala | Collected date/time: 03/29/21 12:23 | Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644384	1	04/02/21 06:21	04/02/21 06:21	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1646436	1	04/06/21 13:44	04/06/21 13:44	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 21:19	04/01/21 21:19	BMB	Mt. Juliet, TN

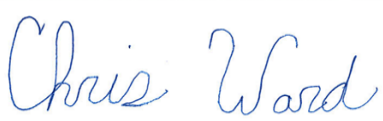
TRIP BLANK L1332129-13 GW

Collected by: Ryan Ayala
Collected date/time: 03/29/21 00:00
Received date/time: 03/30/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644384	1	04/02/21 04:39	04/02/21 04:39	ADM	Mt. Juliet, TN

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
L1332129-01	TTU-3-108-20210329	8260B-SIM
L1332129-02	TTU-4-57-20210329	8260B-SIM
L1332129-08	TTU-16-80-20210329	8260B, 8260B-SIM
L1332129-09	TTU-16-80-20210329-DUP	8260B, 8260B-SIM
L1332129-10	TTU-17-80-20210329	8260B-SIM
L1332129-11	TTU-EX-1-69-20210329	8260B
L1332129-12	PF-2-400-20210329	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	92.0		0.300	4.00	1	03/31/2021 01:44	WG1643467

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	04/01/2021 22:10	WG1644309
Acrolein	U		2.54	50.0	1	04/01/2021 22:10	WG1644309
Acrylonitrile	U		0.671	10.0	1	04/01/2021 22:10	WG1644309
Benzene	U		0.0941	1.00	1	04/01/2021 22:10	WG1644309
Bromobenzene	U		0.118	1.00	1	04/01/2021 22:10	WG1644309
Bromodichloromethane	U		0.136	1.00	1	04/01/2021 22:10	WG1644309
Bromoform	U		0.129	1.00	1	04/01/2021 22:10	WG1644309
Bromomethane	U		0.605	5.00	1	04/01/2021 22:10	WG1644309
1,3-Butadiene	U		0.299	2.00	1	04/01/2021 22:10	WG1644309
n-Butylbenzene	U		0.157	1.00	1	04/01/2021 22:10	WG1644309
sec-Butylbenzene	U		0.125	1.00	1	04/01/2021 22:10	WG1644309
tert-Butylbenzene	U		0.127	1.00	1	04/01/2021 22:10	WG1644309
Carbon tetrachloride	U		0.128	1.00	1	04/01/2021 22:10	WG1644309
Carbon disulfide	U		0.0962	1.00	1	04/01/2021 22:10	WG1644309
Chlorobenzene	U		0.116	1.00	1	04/01/2021 22:10	WG1644309
Chlorodibromomethane	U		0.140	1.00	1	04/01/2021 22:10	WG1644309
Chloroethane	U		0.192	5.00	1	04/01/2021 22:10	WG1644309
Chloroform	U		0.111	5.00	1	04/01/2021 22:10	WG1644309
Chloromethane	U		0.960	2.50	1	04/01/2021 22:10	WG1644309
Cyclohexane	U		0.188	1.00	1	04/01/2021 22:10	WG1644309
2-Chlorotoluene	U		0.106	1.00	1	04/01/2021 22:10	WG1644309
4-Chlorotoluene	U		0.114	1.00	1	04/01/2021 22:10	WG1644309
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/01/2021 22:10	WG1644309
1,2-Dibromoethane	U		0.126	1.00	1	04/01/2021 22:10	WG1644309
Dibromomethane	U		0.122	1.00	1	04/01/2021 22:10	WG1644309
1,2-Dichlorobenzene	U		0.107	1.00	1	04/01/2021 22:10	WG1644309
1,3-Dichlorobenzene	U		0.110	1.00	1	04/01/2021 22:10	WG1644309
1,4-Dichlorobenzene	U		0.120	1.00	1	04/01/2021 22:10	WG1644309
Dichlorodifluoromethane	U		0.374	5.00	1	04/01/2021 22:10	WG1644309
1,1-Dichloroethane	U		0.100	1.00	1	04/01/2021 22:10	WG1644309
1,2-Dichloroethane	U		0.0819	1.00	1	04/01/2021 22:10	WG1644309
1,1-Dichloroethene	U		0.188	1.00	1	04/01/2021 22:10	WG1644309
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/01/2021 22:10	WG1644309
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/01/2021 22:10	WG1644309
1,2-Dichloropropane	U		0.149	1.00	1	04/01/2021 22:10	WG1644309
1,1-Dichloropropene	U		0.142	1.00	1	04/01/2021 22:10	WG1644309
1,3-Dichloropropane	U		0.110	1.00	1	04/01/2021 22:10	WG1644309
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/01/2021 22:10	WG1644309
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/01/2021 22:10	WG1644309
2,2-Dichloropropane	U		0.161	1.00	1	04/01/2021 22:10	WG1644309
Dicyclopentadiene	U		0.253	1.00	1	04/01/2021 22:10	WG1644309
Di-isopropyl ether	U		0.105	1.00	1	04/01/2021 22:10	WG1644309
Ethylbenzene	U		0.137	1.00	1	04/01/2021 22:10	WG1644309
4-Ethyltoluene	U		0.208	1.00	1	04/01/2021 22:10	WG1644309
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/01/2021 22:10	WG1644309
n-Hexane	U		0.749	10.0	1	04/01/2021 22:10	WG1644309
Isopropylbenzene	U		0.105	1.00	1	04/01/2021 22:10	WG1644309
p-Isopropyltoluene	U		0.120	1.00	1	04/01/2021 22:10	WG1644309
2-Butanone (MEK)	U		1.19	10.0	1	04/01/2021 22:10	WG1644309
Methyl Cyclohexane	U		0.660	1.00	1	04/01/2021 22:10	WG1644309

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	04/01/2021 22:10	WG1644309
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/01/2021 22:10	WG1644309
Methyl tert-butyl ether	U		0.101	1.00	1	04/01/2021 22:10	WG1644309
Naphthalene	U		1.00	5.00	1	04/01/2021 22:10	WG1644309
Propene	U		0.936	2.50	1	04/01/2021 22:10	WG1644309
n-Propylbenzene	U		0.0993	1.00	1	04/01/2021 22:10	WG1644309
Styrene	U		0.118	1.00	1	04/01/2021 22:10	WG1644309
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/01/2021 22:10	WG1644309
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/01/2021 22:10	WG1644309
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/01/2021 22:10	WG1644309
Tetrachloroethene	U		0.300	1.00	1	04/01/2021 22:10	WG1644309
Toluene	U		0.278	1.00	1	04/01/2021 22:10	WG1644309
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/01/2021 22:10	WG1644309
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/01/2021 22:10	WG1644309
1,1,1-Trichloroethane	U		0.149	1.00	1	04/01/2021 22:10	WG1644309
1,1,2-Trichloroethane	U		0.158	1.00	1	04/01/2021 22:10	WG1644309
Trichloroethene	U		0.190	1.00	1	04/01/2021 22:10	WG1644309
Trichlorofluoromethane	U		0.160	5.00	1	04/01/2021 22:10	WG1644309
1,2,3-Trichloropropane	U		0.237	2.50	1	04/01/2021 22:10	WG1644309
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/01/2021 22:10	WG1644309
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 22:10	WG1644309
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 22:10	WG1644309
Vinyl chloride	U		0.234	1.00	1	04/01/2021 22:10	WG1644309
Xylenes, Total	U		0.174	3.00	1	04/01/2021 22:10	WG1644309
(S) Toluene-d8	*101*			*80.0-120*		*04/01/2021 22:10*	WG1644309
(S) 4-Bromofluorobenzene	*93.8*			*77.0-126*		*04/01/2021 22:10*	WG1644309
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/01/2021 22:10*	WG1644309

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	03/31/2021 23:26	WG1643216
(S) Toluene-d8	*97.3*			*77.0-127*		*03/31/2021 23:26*	WG1643216

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	1.99	E4	0.300	4.00	1	03/31/2021 03:04	WG1643467

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	04/01/2021 22:30	WG1644309
Acrolein	U		2.54	50.0	1	04/01/2021 22:30	WG1644309
Acrylonitrile	U		0.671	10.0	1	04/01/2021 22:30	WG1644309
Benzene	U		0.0941	1.00	1	04/01/2021 22:30	WG1644309
Bromobenzene	U		0.118	1.00	1	04/01/2021 22:30	WG1644309
Bromodichloromethane	U		0.136	1.00	1	04/01/2021 22:30	WG1644309
Bromoform	U		0.129	1.00	1	04/01/2021 22:30	WG1644309
Bromomethane	U		0.605	5.00	1	04/01/2021 22:30	WG1644309
1,3-Butadiene	U		0.299	2.00	1	04/01/2021 22:30	WG1644309
n-Butylbenzene	U		0.157	1.00	1	04/01/2021 22:30	WG1644309
sec-Butylbenzene	U		0.125	1.00	1	04/01/2021 22:30	WG1644309
tert-Butylbenzene	U		0.127	1.00	1	04/01/2021 22:30	WG1644309
Carbon tetrachloride	U		0.128	1.00	1	04/01/2021 22:30	WG1644309
Carbon disulfide	U		0.0962	1.00	1	04/01/2021 22:30	WG1644309
Chlorobenzene	U		0.116	1.00	1	04/01/2021 22:30	WG1644309
Chlorodibromomethane	U		0.140	1.00	1	04/01/2021 22:30	WG1644309
Chloroethane	U		0.192	5.00	1	04/01/2021 22:30	WG1644309
Chloroform	U		0.111	5.00	1	04/01/2021 22:30	WG1644309
Chloromethane	U		0.960	2.50	1	04/01/2021 22:30	WG1644309
Cyclohexane	U		0.188	1.00	1	04/01/2021 22:30	WG1644309
2-Chlorotoluene	U		0.106	1.00	1	04/01/2021 22:30	WG1644309
4-Chlorotoluene	U		0.114	1.00	1	04/01/2021 22:30	WG1644309
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/01/2021 22:30	WG1644309
1,2-Dibromoethane	U		0.126	1.00	1	04/01/2021 22:30	WG1644309
Dibromomethane	U		0.122	1.00	1	04/01/2021 22:30	WG1644309
1,2-Dichlorobenzene	U		0.107	1.00	1	04/01/2021 22:30	WG1644309
1,3-Dichlorobenzene	U		0.110	1.00	1	04/01/2021 22:30	WG1644309
1,4-Dichlorobenzene	U		0.120	1.00	1	04/01/2021 22:30	WG1644309
Dichlorodifluoromethane	U		0.374	5.00	1	04/01/2021 22:30	WG1644309
1,1-Dichloroethane	U		0.100	1.00	1	04/01/2021 22:30	WG1644309
1,2-Dichloroethane	U		0.0819	1.00	1	04/01/2021 22:30	WG1644309
1,1-Dichloroethene	U		0.188	1.00	1	04/01/2021 22:30	WG1644309
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/01/2021 22:30	WG1644309
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/01/2021 22:30	WG1644309
1,2-Dichloropropane	U		0.149	1.00	1	04/01/2021 22:30	WG1644309
1,1-Dichloropropene	U		0.142	1.00	1	04/01/2021 22:30	WG1644309
1,3-Dichloropropane	U		0.110	1.00	1	04/01/2021 22:30	WG1644309
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/01/2021 22:30	WG1644309
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/01/2021 22:30	WG1644309
2,2-Dichloropropane	U		0.161	1.00	1	04/01/2021 22:30	WG1644309
Dicyclopentadiene	U		0.253	1.00	1	04/01/2021 22:30	WG1644309
Di-isopropyl ether	U		0.105	1.00	1	04/01/2021 22:30	WG1644309
Ethylbenzene	U		0.137	1.00	1	04/01/2021 22:30	WG1644309
4-Ethyltoluene	U		0.208	1.00	1	04/01/2021 22:30	WG1644309
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/01/2021 22:30	WG1644309
n-Hexane	U		0.749	10.0	1	04/01/2021 22:30	WG1644309
Isopropylbenzene	U		0.105	1.00	1	04/01/2021 22:30	WG1644309
p-Isopropyltoluene	U		0.120	1.00	1	04/01/2021 22:30	WG1644309
2-Butanone (MEK)	U		1.19	10.0	1	04/01/2021 22:30	WG1644309
Methyl Cyclohexane	U		0.660	1.00	1	04/01/2021 22:30	WG1644309

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	04/01/2021 22:30	WG1644309
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/01/2021 22:30	WG1644309
Methyl tert-butyl ether	U		0.101	1.00	1	04/01/2021 22:30	WG1644309
Naphthalene	U		1.00	5.00	1	04/01/2021 22:30	WG1644309
Propene	U		0.936	2.50	1	04/01/2021 22:30	WG1644309
n-Propylbenzene	U		0.0993	1.00	1	04/01/2021 22:30	WG1644309
Styrene	U		0.118	1.00	1	04/01/2021 22:30	WG1644309
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/01/2021 22:30	WG1644309
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/01/2021 22:30	WG1644309
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/01/2021 22:30	WG1644309
Tetrachloroethene	U		0.300	1.00	1	04/01/2021 22:30	WG1644309
Toluene	U		0.278	1.00	1	04/01/2021 22:30	WG1644309
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/01/2021 22:30	WG1644309
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/01/2021 22:30	WG1644309
1,1,1-Trichloroethane	U		0.149	1.00	1	04/01/2021 22:30	WG1644309
1,1,2-Trichloroethane	U		0.158	1.00	1	04/01/2021 22:30	WG1644309
Trichloroethene	U		0.190	1.00	1	04/01/2021 22:30	WG1644309
Trichlorofluoromethane	U		0.160	5.00	1	04/01/2021 22:30	WG1644309
1,2,3-Trichloropropane	U		0.237	2.50	1	04/01/2021 22:30	WG1644309
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/01/2021 22:30	WG1644309
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 22:30	WG1644309
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 22:30	WG1644309
Vinyl chloride	U		0.234	1.00	1	04/01/2021 22:30	WG1644309
Xylenes, Total	U		0.174	3.00	1	04/01/2021 22:30	WG1644309
(S) Toluene-d8	*101*			*80.0-120*		*04/01/2021 22:30*	WG1644309
(S) 4-Bromofluorobenzene	*98.8*			*77.0-126*		*04/01/2021 22:30*	WG1644309
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/01/2021 22:30*	WG1644309

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	03/31/2021 23:46	WG1643216
(S) Toluene-d8	*97.8*			*77.0-127*		*03/31/2021 23:46*	WG1643216

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	7.80		0.300	4.00	1	03/31/2021 03:30	WG1643467

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	04/01/2021 22:51	WG1644309
Acrolein	U		2.54	50.0	1	04/01/2021 22:51	WG1644309
Acrylonitrile	U		0.671	10.0	1	04/01/2021 22:51	WG1644309
Benzene	U		0.0941	1.00	1	04/01/2021 22:51	WG1644309
Bromobenzene	U		0.118	1.00	1	04/01/2021 22:51	WG1644309
Bromodichloromethane	U		0.136	1.00	1	04/01/2021 22:51	WG1644309
Bromoform	U		0.129	1.00	1	04/01/2021 22:51	WG1644309
Bromomethane	U		0.605	5.00	1	04/01/2021 22:51	WG1644309
1,3-Butadiene	U		0.299	2.00	1	04/01/2021 22:51	WG1644309
n-Butylbenzene	U		0.157	1.00	1	04/01/2021 22:51	WG1644309
sec-Butylbenzene	U		0.125	1.00	1	04/01/2021 22:51	WG1644309
tert-Butylbenzene	U		0.127	1.00	1	04/01/2021 22:51	WG1644309
Carbon tetrachloride	U		0.128	1.00	1	04/01/2021 22:51	WG1644309
Carbon disulfide	U		0.0962	1.00	1	04/01/2021 22:51	WG1644309
Chlorobenzene	U		0.116	1.00	1	04/01/2021 22:51	WG1644309
Chlorodibromomethane	U		0.140	1.00	1	04/01/2021 22:51	WG1644309
Chloroethane	U		0.192	5.00	1	04/01/2021 22:51	WG1644309
Chloroform	U		0.111	5.00	1	04/01/2021 22:51	WG1644309
Chloromethane	U		0.960	2.50	1	04/01/2021 22:51	WG1644309
Cyclohexane	U		0.188	1.00	1	04/01/2021 22:51	WG1644309
2-Chlorotoluene	U		0.106	1.00	1	04/01/2021 22:51	WG1644309
4-Chlorotoluene	U		0.114	1.00	1	04/01/2021 22:51	WG1644309
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/01/2021 22:51	WG1644309
1,2-Dibromoethane	U		0.126	1.00	1	04/01/2021 22:51	WG1644309
Dibromomethane	U		0.122	1.00	1	04/01/2021 22:51	WG1644309
1,2-Dichlorobenzene	U		0.107	1.00	1	04/01/2021 22:51	WG1644309
1,3-Dichlorobenzene	U		0.110	1.00	1	04/01/2021 22:51	WG1644309
1,4-Dichlorobenzene	U		0.120	1.00	1	04/01/2021 22:51	WG1644309
Dichlorodifluoromethane	U		0.374	5.00	1	04/01/2021 22:51	WG1644309
1,1-Dichloroethane	U		0.100	1.00	1	04/01/2021 22:51	WG1644309
1,2-Dichloroethane	U		0.0819	1.00	1	04/01/2021 22:51	WG1644309
1,1-Dichloroethene	U		0.188	1.00	1	04/01/2021 22:51	WG1644309
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/01/2021 22:51	WG1644309
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/01/2021 22:51	WG1644309
1,2-Dichloropropane	U		0.149	1.00	1	04/01/2021 22:51	WG1644309
1,1-Dichloropropene	U		0.142	1.00	1	04/01/2021 22:51	WG1644309
1,3-Dichloropropane	U		0.110	1.00	1	04/01/2021 22:51	WG1644309
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/01/2021 22:51	WG1644309
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/01/2021 22:51	WG1644309
2,2-Dichloropropane	U		0.161	1.00	1	04/01/2021 22:51	WG1644309
Dicyclopentadiene	U		0.253	1.00	1	04/01/2021 22:51	WG1644309
Di-isopropyl ether	U		0.105	1.00	1	04/01/2021 22:51	WG1644309
Ethylbenzene	U		0.137	1.00	1	04/01/2021 22:51	WG1644309
4-Ethyltoluene	U		0.208	1.00	1	04/01/2021 22:51	WG1644309
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/01/2021 22:51	WG1644309
n-Hexane	U		0.749	10.0	1	04/01/2021 22:51	WG1644309
Isopropylbenzene	U		0.105	1.00	1	04/01/2021 22:51	WG1644309
p-Isopropyltoluene	U		0.120	1.00	1	04/01/2021 22:51	WG1644309
2-Butanone (MEK)	U		1.19	10.0	1	04/01/2021 22:51	WG1644309
Methyl Cyclohexane	U		0.660	1.00	1	04/01/2021 22:51	WG1644309

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	04/01/2021 22:51	WG1644309
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/01/2021 22:51	WG1644309
Methyl tert-butyl ether	U		0.101	1.00	1	04/01/2021 22:51	WG1644309
Naphthalene	U		1.00	5.00	1	04/01/2021 22:51	WG1644309
Propene	U		0.936	2.50	1	04/01/2021 22:51	WG1644309
n-Propylbenzene	U		0.0993	1.00	1	04/01/2021 22:51	WG1644309
Styrene	U		0.118	1.00	1	04/01/2021 22:51	WG1644309
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/01/2021 22:51	WG1644309
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/01/2021 22:51	WG1644309
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/01/2021 22:51	WG1644309
Tetrachloroethene	U		0.300	1.00	1	04/01/2021 22:51	WG1644309
Toluene	U		0.278	1.00	1	04/01/2021 22:51	WG1644309
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/01/2021 22:51	WG1644309
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/01/2021 22:51	WG1644309
1,1,1-Trichloroethane	U		0.149	1.00	1	04/01/2021 22:51	WG1644309
1,1,2-Trichloroethane	U		0.158	1.00	1	04/01/2021 22:51	WG1644309
Trichloroethene	U		0.190	1.00	1	04/01/2021 22:51	WG1644309
Trichlorofluoromethane	U		0.160	5.00	1	04/01/2021 22:51	WG1644309
1,2,3-Trichloropropane	U		0.237	2.50	1	04/01/2021 22:51	WG1644309
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/01/2021 22:51	WG1644309
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 22:51	WG1644309
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 22:51	WG1644309
Vinyl chloride	U		0.234	1.00	1	04/01/2021 22:51	WG1644309
Xylenes, Total	U		0.174	3.00	1	04/01/2021 22:51	WG1644309
(S) Toluene-d8	*104*			*80.0-120*		*04/01/2021 22:51*	WG1644309
(S) 4-Bromofluorobenzene	*97.2*			*77.0-126*		*04/01/2021 22:51*	WG1644309
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/01/2021 22:51*	WG1644309

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	R7	0.597	3.00	1	04/01/2021 18:21	WG1644043
(S) Toluene-d8	*96.7*			*77.0-127*		*04/01/2021 18:21*	WG1644043

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	03/31/2021 03:56	WG1643467

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	04/01/2021 23:11	WG1644309
Acrolein	U		2.54	50.0	1	04/01/2021 23:11	WG1644309
Acrylonitrile	U		0.671	10.0	1	04/01/2021 23:11	WG1644309
Benzene	U		0.0941	1.00	1	04/01/2021 23:11	WG1644309
Bromobenzene	U		0.118	1.00	1	04/01/2021 23:11	WG1644309
Bromodichloromethane	U		0.136	1.00	1	04/01/2021 23:11	WG1644309
Bromoform	U		0.129	1.00	1	04/01/2021 23:11	WG1644309
Bromomethane	U		0.605	5.00	1	04/01/2021 23:11	WG1644309
1,3-Butadiene	U		0.299	2.00	1	04/01/2021 23:11	WG1644309
n-Butylbenzene	U		0.157	1.00	1	04/01/2021 23:11	WG1644309
sec-Butylbenzene	U		0.125	1.00	1	04/01/2021 23:11	WG1644309
tert-Butylbenzene	U		0.127	1.00	1	04/01/2021 23:11	WG1644309
Carbon tetrachloride	U		0.128	1.00	1	04/01/2021 23:11	WG1644309
Carbon disulfide	U		0.0962	1.00	1	04/01/2021 23:11	WG1644309
Chlorobenzene	U		0.116	1.00	1	04/01/2021 23:11	WG1644309
Chlorodibromomethane	U		0.140	1.00	1	04/01/2021 23:11	WG1644309
Chloroethane	U		0.192	5.00	1	04/01/2021 23:11	WG1644309
Chloroform	U		0.111	5.00	1	04/01/2021 23:11	WG1644309
Chloromethane	U		0.960	2.50	1	04/01/2021 23:11	WG1644309
Cyclohexane	U		0.188	1.00	1	04/01/2021 23:11	WG1644309
2-Chlorotoluene	U		0.106	1.00	1	04/01/2021 23:11	WG1644309
4-Chlorotoluene	U		0.114	1.00	1	04/01/2021 23:11	WG1644309
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/01/2021 23:11	WG1644309
1,2-Dibromoethane	U		0.126	1.00	1	04/01/2021 23:11	WG1644309
Dibromomethane	U		0.122	1.00	1	04/01/2021 23:11	WG1644309
1,2-Dichlorobenzene	U		0.107	1.00	1	04/01/2021 23:11	WG1644309
1,3-Dichlorobenzene	U		0.110	1.00	1	04/01/2021 23:11	WG1644309
1,4-Dichlorobenzene	U		0.120	1.00	1	04/01/2021 23:11	WG1644309
Dichlorodifluoromethane	U		0.374	5.00	1	04/01/2021 23:11	WG1644309
1,1-Dichloroethane	U		0.100	1.00	1	04/01/2021 23:11	WG1644309
1,2-Dichloroethane	U		0.0819	1.00	1	04/01/2021 23:11	WG1644309
1,1-Dichloroethene	U		0.188	1.00	1	04/01/2021 23:11	WG1644309
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/01/2021 23:11	WG1644309
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/01/2021 23:11	WG1644309
1,2-Dichloropropane	U		0.149	1.00	1	04/01/2021 23:11	WG1644309
1,1-Dichloropropene	U		0.142	1.00	1	04/01/2021 23:11	WG1644309
1,3-Dichloropropane	U		0.110	1.00	1	04/01/2021 23:11	WG1644309
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/01/2021 23:11	WG1644309
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/01/2021 23:11	WG1644309
2,2-Dichloropropane	U		0.161	1.00	1	04/01/2021 23:11	WG1644309
Dicyclopentadiene	U		0.253	1.00	1	04/01/2021 23:11	WG1644309
Di-isopropyl ether	U		0.105	1.00	1	04/01/2021 23:11	WG1644309
Ethylbenzene	U		0.137	1.00	1	04/01/2021 23:11	WG1644309
4-Ethyltoluene	U		0.208	1.00	1	04/01/2021 23:11	WG1644309
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/01/2021 23:11	WG1644309
n-Hexane	U		0.749	10.0	1	04/01/2021 23:11	WG1644309
Isopropylbenzene	0.123	E4	0.105	1.00	1	04/01/2021 23:11	WG1644309
p-Isopropyltoluene	U		0.120	1.00	1	04/01/2021 23:11	WG1644309
2-Butanone (MEK)	U		1.19	10.0	1	04/01/2021 23:11	WG1644309
Methyl Cyclohexane	U		0.660	1.00	1	04/01/2021 23:11	WG1644309

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	04/01/2021 23:11	WG1644309
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/01/2021 23:11	WG1644309
Methyl tert-butyl ether	U		0.101	1.00	1	04/01/2021 23:11	WG1644309
Naphthalene	U		1.00	5.00	1	04/01/2021 23:11	WG1644309
Propene	3.70		0.936	2.50	1	04/01/2021 23:11	WG1644309
n-Propylbenzene	U		0.0993	1.00	1	04/01/2021 23:11	WG1644309
Styrene	U		0.118	1.00	1	04/01/2021 23:11	WG1644309
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/01/2021 23:11	WG1644309
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/01/2021 23:11	WG1644309
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/01/2021 23:11	WG1644309
Tetrachloroethene	U		0.300	1.00	1	04/01/2021 23:11	WG1644309
Toluene	1.39		0.278	1.00	1	04/01/2021 23:11	WG1644309
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/01/2021 23:11	WG1644309
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/01/2021 23:11	WG1644309
1,1,1-Trichloroethane	U		0.149	1.00	1	04/01/2021 23:11	WG1644309
1,1,2-Trichloroethane	U		0.158	1.00	1	04/01/2021 23:11	WG1644309
Trichloroethene	U		0.190	1.00	1	04/01/2021 23:11	WG1644309
Trichlorofluoromethane	U		0.160	5.00	1	04/01/2021 23:11	WG1644309
1,2,3-Trichloropropane	U		0.237	2.50	1	04/01/2021 23:11	WG1644309
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/01/2021 23:11	WG1644309
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 23:11	WG1644309
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 23:11	WG1644309
Vinyl chloride	U		0.234	1.00	1	04/01/2021 23:11	WG1644309
Xylenes, Total	0.264	E4	0.174	3.00	1	04/01/2021 23:11	WG1644309
(S) Toluene-d8	*103*			*80.0-120*		*04/01/2021 23:11*	WG1644309
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*		*04/01/2021 23:11*	WG1644309
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*04/01/2021 23:11*	WG1644309

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	R7	0.597	3.00	1	04/01/2021 18:40	WG1644043
(S) Toluene-d8	*97.1*			*77.0-127*		*04/01/2021 18:40*	WG1644043

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	03/31/2021 04:23	WG1643467

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	04/01/2021 23:32	WG1644309
Acrolein	U		2.54	50.0	1	04/01/2021 23:32	WG1644309
Acrylonitrile	U		0.671	10.0	1	04/01/2021 23:32	WG1644309
Benzene	U		0.0941	1.00	1	04/01/2021 23:32	WG1644309
Bromobenzene	U		0.118	1.00	1	04/01/2021 23:32	WG1644309
Bromodichloromethane	U		0.136	1.00	1	04/01/2021 23:32	WG1644309
Bromoform	U		0.129	1.00	1	04/01/2021 23:32	WG1644309
Bromomethane	U		0.605	5.00	1	04/01/2021 23:32	WG1644309
1,3-Butadiene	U		0.299	2.00	1	04/01/2021 23:32	WG1644309
n-Butylbenzene	U		0.157	1.00	1	04/01/2021 23:32	WG1644309
sec-Butylbenzene	U		0.125	1.00	1	04/01/2021 23:32	WG1644309
tert-Butylbenzene	U		0.127	1.00	1	04/01/2021 23:32	WG1644309
Carbon tetrachloride	U		0.128	1.00	1	04/01/2021 23:32	WG1644309
Carbon disulfide	U		0.0962	1.00	1	04/01/2021 23:32	WG1644309
Chlorobenzene	U		0.116	1.00	1	04/01/2021 23:32	WG1644309
Chlorodibromomethane	U		0.140	1.00	1	04/01/2021 23:32	WG1644309
Chloroethane	U		0.192	5.00	1	04/01/2021 23:32	WG1644309
Chloroform	U		0.111	5.00	1	04/01/2021 23:32	WG1644309
Chloromethane	U		0.960	2.50	1	04/01/2021 23:32	WG1644309
Cyclohexane	U		0.188	1.00	1	04/01/2021 23:32	WG1644309
2-Chlorotoluene	U		0.106	1.00	1	04/01/2021 23:32	WG1644309
4-Chlorotoluene	U		0.114	1.00	1	04/01/2021 23:32	WG1644309
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/01/2021 23:32	WG1644309
1,2-Dibromoethane	U		0.126	1.00	1	04/01/2021 23:32	WG1644309
Dibromomethane	U		0.122	1.00	1	04/01/2021 23:32	WG1644309
1,2-Dichlorobenzene	U		0.107	1.00	1	04/01/2021 23:32	WG1644309
1,3-Dichlorobenzene	U		0.110	1.00	1	04/01/2021 23:32	WG1644309
1,4-Dichlorobenzene	U		0.120	1.00	1	04/01/2021 23:32	WG1644309
Dichlorodifluoromethane	U		0.374	5.00	1	04/01/2021 23:32	WG1644309
1,1-Dichloroethane	U		0.100	1.00	1	04/01/2021 23:32	WG1644309
1,2-Dichloroethane	U		0.0819	1.00	1	04/01/2021 23:32	WG1644309
1,1-Dichloroethene	U		0.188	1.00	1	04/01/2021 23:32	WG1644309
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/01/2021 23:32	WG1644309
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/01/2021 23:32	WG1644309
1,2-Dichloropropane	U		0.149	1.00	1	04/01/2021 23:32	WG1644309
1,1-Dichloropropene	U		0.142	1.00	1	04/01/2021 23:32	WG1644309
1,3-Dichloropropane	U		0.110	1.00	1	04/01/2021 23:32	WG1644309
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/01/2021 23:32	WG1644309
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/01/2021 23:32	WG1644309
2,2-Dichloropropane	U		0.161	1.00	1	04/01/2021 23:32	WG1644309
Dicyclopentadiene	U		0.253	1.00	1	04/01/2021 23:32	WG1644309
Di-isopropyl ether	U		0.105	1.00	1	04/01/2021 23:32	WG1644309
Ethylbenzene	U		0.137	1.00	1	04/01/2021 23:32	WG1644309
4-Ethyltoluene	U		0.208	1.00	1	04/01/2021 23:32	WG1644309
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/01/2021 23:32	WG1644309
n-Hexane	U		0.749	10.0	1	04/01/2021 23:32	WG1644309
Isopropylbenzene	U		0.105	1.00	1	04/01/2021 23:32	WG1644309
p-Isopropyltoluene	U		0.120	1.00	1	04/01/2021 23:32	WG1644309
2-Butanone (MEK)	U		1.19	10.0	1	04/01/2021 23:32	WG1644309
Methyl Cyclohexane	U		0.660	1.00	1	04/01/2021 23:32	WG1644309

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	04/01/2021 23:32	WG1644309
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/01/2021 23:32	WG1644309
Methyl tert-butyl ether	U		0.101	1.00	1	04/01/2021 23:32	WG1644309
Naphthalene	U		1.00	5.00	1	04/01/2021 23:32	WG1644309
Propene	U		0.936	2.50	1	04/01/2021 23:32	WG1644309
n-Propylbenzene	U		0.0993	1.00	1	04/01/2021 23:32	WG1644309
Styrene	U		0.118	1.00	1	04/01/2021 23:32	WG1644309
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/01/2021 23:32	WG1644309
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/01/2021 23:32	WG1644309
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/01/2021 23:32	WG1644309
Tetrachloroethene	U		0.300	1.00	1	04/01/2021 23:32	WG1644309
Toluene	U		0.278	1.00	1	04/01/2021 23:32	WG1644309
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/01/2021 23:32	WG1644309
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/01/2021 23:32	WG1644309
1,1,1-Trichloroethane	U		0.149	1.00	1	04/01/2021 23:32	WG1644309
1,1,2-Trichloroethane	U		0.158	1.00	1	04/01/2021 23:32	WG1644309
Trichloroethene	U		0.190	1.00	1	04/01/2021 23:32	WG1644309
Trichlorofluoromethane	U		0.160	5.00	1	04/01/2021 23:32	WG1644309
1,2,3-Trichloropropane	U		0.237	2.50	1	04/01/2021 23:32	WG1644309
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/01/2021 23:32	WG1644309
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 23:32	WG1644309
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 23:32	WG1644309
Vinyl chloride	U		0.234	1.00	1	04/01/2021 23:32	WG1644309
Xylenes, Total	U		0.174	3.00	1	04/01/2021 23:32	WG1644309
(S) Toluene-d8	*102*			*80.0-120*		*04/01/2021 23:32*	WG1644309
(S) 4-Bromofluorobenzene	*94.7*			*77.0-126*		*04/01/2021 23:32*	WG1644309
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/01/2021 23:32*	WG1644309

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	R7	0.597	3.00	1	04/01/2021 19:00	WG1644043
(S) Toluene-d8	*97.7*			*77.0-127*		*04/01/2021 19:00*	WG1644043

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	03/31/2021 04:49	WG1643467

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	04/01/2021 23:52	WG1644309
Acrolein	U		2.54	50.0	1	04/01/2021 23:52	WG1644309
Acrylonitrile	U		0.671	10.0	1	04/01/2021 23:52	WG1644309
Benzene	U		0.0941	1.00	1	04/01/2021 23:52	WG1644309
Bromobenzene	U		0.118	1.00	1	04/01/2021 23:52	WG1644309
Bromodichloromethane	U		0.136	1.00	1	04/01/2021 23:52	WG1644309
Bromoform	U		0.129	1.00	1	04/01/2021 23:52	WG1644309
Bromomethane	U		0.605	5.00	1	04/01/2021 23:52	WG1644309
1,3-Butadiene	U		0.299	2.00	1	04/01/2021 23:52	WG1644309
n-Butylbenzene	U		0.157	1.00	1	04/01/2021 23:52	WG1644309
sec-Butylbenzene	U		0.125	1.00	1	04/01/2021 23:52	WG1644309
tert-Butylbenzene	U		0.127	1.00	1	04/01/2021 23:52	WG1644309
Carbon tetrachloride	U		0.128	1.00	1	04/01/2021 23:52	WG1644309
Carbon disulfide	U		0.0962	1.00	1	04/01/2021 23:52	WG1644309
Chlorobenzene	U		0.116	1.00	1	04/01/2021 23:52	WG1644309
Chlorodibromomethane	U		0.140	1.00	1	04/01/2021 23:52	WG1644309
Chloroethane	U		0.192	5.00	1	04/01/2021 23:52	WG1644309
Chloroform	U		0.111	5.00	1	04/01/2021 23:52	WG1644309
Chloromethane	U		0.960	2.50	1	04/01/2021 23:52	WG1644309
Cyclohexane	U		0.188	1.00	1	04/01/2021 23:52	WG1644309
2-Chlorotoluene	U		0.106	1.00	1	04/01/2021 23:52	WG1644309
4-Chlorotoluene	U		0.114	1.00	1	04/01/2021 23:52	WG1644309
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/01/2021 23:52	WG1644309
1,2-Dibromoethane	U		0.126	1.00	1	04/01/2021 23:52	WG1644309
Dibromomethane	U		0.122	1.00	1	04/01/2021 23:52	WG1644309
1,2-Dichlorobenzene	U		0.107	1.00	1	04/01/2021 23:52	WG1644309
1,3-Dichlorobenzene	U		0.110	1.00	1	04/01/2021 23:52	WG1644309
1,4-Dichlorobenzene	U		0.120	1.00	1	04/01/2021 23:52	WG1644309
Dichlorodifluoromethane	U		0.374	5.00	1	04/01/2021 23:52	WG1644309
1,1-Dichloroethane	U		0.100	1.00	1	04/01/2021 23:52	WG1644309
1,2-Dichloroethane	U		0.0819	1.00	1	04/01/2021 23:52	WG1644309
1,1-Dichloroethene	U		0.188	1.00	1	04/01/2021 23:52	WG1644309
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/01/2021 23:52	WG1644309
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/01/2021 23:52	WG1644309
1,2-Dichloropropane	U		0.149	1.00	1	04/01/2021 23:52	WG1644309
1,1-Dichloropropene	U		0.142	1.00	1	04/01/2021 23:52	WG1644309
1,3-Dichloropropane	U		0.110	1.00	1	04/01/2021 23:52	WG1644309
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/01/2021 23:52	WG1644309
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/01/2021 23:52	WG1644309
2,2-Dichloropropane	U		0.161	1.00	1	04/01/2021 23:52	WG1644309
Dicyclopentadiene	U		0.253	1.00	1	04/01/2021 23:52	WG1644309
Di-isopropyl ether	U		0.105	1.00	1	04/01/2021 23:52	WG1644309
Ethylbenzene	U		0.137	1.00	1	04/01/2021 23:52	WG1644309
4-Ethyltoluene	U		0.208	1.00	1	04/01/2021 23:52	WG1644309
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/01/2021 23:52	WG1644309
n-Hexane	U		0.749	10.0	1	04/01/2021 23:52	WG1644309
Isopropylbenzene	U		0.105	1.00	1	04/01/2021 23:52	WG1644309
p-Isopropyltoluene	U		0.120	1.00	1	04/01/2021 23:52	WG1644309
2-Butanone (MEK)	U		1.19	10.0	1	04/01/2021 23:52	WG1644309
Methyl Cyclohexane	U		0.660	1.00	1	04/01/2021 23:52	WG1644309

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	04/01/2021 23:52	WG1644309
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/01/2021 23:52	WG1644309
Methyl tert-butyl ether	U		0.101	1.00	1	04/01/2021 23:52	WG1644309
Naphthalene	U		1.00	5.00	1	04/01/2021 23:52	WG1644309
Propene	U		0.936	2.50	1	04/01/2021 23:52	WG1644309
n-Propylbenzene	U		0.0993	1.00	1	04/01/2021 23:52	WG1644309
Styrene	U		0.118	1.00	1	04/01/2021 23:52	WG1644309
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/01/2021 23:52	WG1644309
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/01/2021 23:52	WG1644309
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/01/2021 23:52	WG1644309
Tetrachloroethene	U		0.300	1.00	1	04/01/2021 23:52	WG1644309
Toluene	U		0.278	1.00	1	04/01/2021 23:52	WG1644309
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/01/2021 23:52	WG1644309
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/01/2021 23:52	WG1644309
1,1,1-Trichloroethane	U		0.149	1.00	1	04/01/2021 23:52	WG1644309
1,1,2-Trichloroethane	U		0.158	1.00	1	04/01/2021 23:52	WG1644309
Trichloroethene	U		0.190	1.00	1	04/01/2021 23:52	WG1644309
Trichlorofluoromethane	U		0.160	5.00	1	04/01/2021 23:52	WG1644309
1,2,3-Trichloropropane	U		0.237	2.50	1	04/01/2021 23:52	WG1644309
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/01/2021 23:52	WG1644309
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 23:52	WG1644309
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/01/2021 23:52	WG1644309
Vinyl chloride	U		0.234	1.00	1	04/01/2021 23:52	WG1644309
Xylenes, Total	U		0.174	3.00	1	04/01/2021 23:52	WG1644309
(S) Toluene-d8	*103*			*80.0-120*		*04/01/2021 23:52*	WG1644309
(S) 4-Bromofluorobenzene	*93.8*			*77.0-126*		*04/01/2021 23:52*	WG1644309
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/01/2021 23:52*	WG1644309

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	R7	0.597	3.00	1	04/01/2021 19:20	WG1644043
(S) Toluene-d8	*97.6*			*77.0-127*		*04/01/2021 19:20*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	0.856	E4	0.300	4.00	1	03/31/2021 21:51	WG1643742

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	04/02/2021 00:13	WG1644309
Acrolein	U		2.54	50.0	1	04/02/2021 00:13	WG1644309
Acrylonitrile	U		0.671	10.0	1	04/02/2021 00:13	WG1644309
Benzene	U		0.0941	1.00	1	04/02/2021 00:13	WG1644309
Bromobenzene	U		0.118	1.00	1	04/02/2021 00:13	WG1644309
Bromodichloromethane	U		0.136	1.00	1	04/02/2021 00:13	WG1644309
Bromoform	U		0.129	1.00	1	04/02/2021 00:13	WG1644309
Bromomethane	U		0.605	5.00	1	04/02/2021 00:13	WG1644309
1,3-Butadiene	U		0.299	2.00	1	04/02/2021 00:13	WG1644309
n-Butylbenzene	U		0.157	1.00	1	04/02/2021 00:13	WG1644309
sec-Butylbenzene	U		0.125	1.00	1	04/02/2021 00:13	WG1644309
tert-Butylbenzene	U		0.127	1.00	1	04/02/2021 00:13	WG1644309
Carbon tetrachloride	U		0.128	1.00	1	04/02/2021 00:13	WG1644309
Carbon disulfide	U		0.0962	1.00	1	04/02/2021 00:13	WG1644309
Chlorobenzene	U		0.116	1.00	1	04/02/2021 00:13	WG1644309
Chlorodibromomethane	U		0.140	1.00	1	04/02/2021 00:13	WG1644309
Chloroethane	U		0.192	5.00	1	04/02/2021 00:13	WG1644309
Chloroform	U		0.111	5.00	1	04/02/2021 00:13	WG1644309
Chloromethane	U		0.960	2.50	1	04/02/2021 00:13	WG1644309
Cyclohexane	U		0.188	1.00	1	04/02/2021 00:13	WG1644309
2-Chlorotoluene	U		0.106	1.00	1	04/02/2021 00:13	WG1644309
4-Chlorotoluene	U		0.114	1.00	1	04/02/2021 00:13	WG1644309
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/02/2021 00:13	WG1644309
1,2-Dibromoethane	U		0.126	1.00	1	04/02/2021 00:13	WG1644309
Dibromomethane	U		0.122	1.00	1	04/02/2021 00:13	WG1644309
1,2-Dichlorobenzene	U		0.107	1.00	1	04/02/2021 00:13	WG1644309
1,3-Dichlorobenzene	U		0.110	1.00	1	04/02/2021 00:13	WG1644309
1,4-Dichlorobenzene	U		0.120	1.00	1	04/02/2021 00:13	WG1644309
Dichlorodifluoromethane	U		0.374	5.00	1	04/02/2021 00:13	WG1644309
1,1-Dichloroethane	U		0.100	1.00	1	04/02/2021 00:13	WG1644309
1,2-Dichloroethane	U		0.0819	1.00	1	04/02/2021 00:13	WG1644309
1,1-Dichloroethene	0.605	E4	0.188	1.00	1	04/02/2021 00:13	WG1644309
cis-1,2-Dichloroethene	1.54		0.126	1.00	1	04/02/2021 00:13	WG1644309
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/02/2021 00:13	WG1644309
1,2-Dichloropropane	U		0.149	1.00	1	04/02/2021 00:13	WG1644309
1,1-Dichloropropene	U		0.142	1.00	1	04/02/2021 00:13	WG1644309
1,3-Dichloropropane	U		0.110	1.00	1	04/02/2021 00:13	WG1644309
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/02/2021 00:13	WG1644309
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/02/2021 00:13	WG1644309
2,2-Dichloropropane	U		0.161	1.00	1	04/02/2021 00:13	WG1644309
Dicyclopentadiene	U		0.253	1.00	1	04/02/2021 00:13	WG1644309
Di-isopropyl ether	U		0.105	1.00	1	04/02/2021 00:13	WG1644309
Ethylbenzene	U		0.137	1.00	1	04/02/2021 00:13	WG1644309
4-Ethyltoluene	U		0.208	1.00	1	04/02/2021 00:13	WG1644309
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/02/2021 00:13	WG1644309
n-Hexane	U		0.749	10.0	1	04/02/2021 00:13	WG1644309
Isopropylbenzene	U		0.105	1.00	1	04/02/2021 00:13	WG1644309
p-Isopropyltoluene	U		0.120	1.00	1	04/02/2021 00:13	WG1644309
2-Butanone (MEK)	U		1.19	10.0	1	04/02/2021 00:13	WG1644309
Methyl Cyclohexane	U		0.660	1.00	1	04/02/2021 00:13	WG1644309

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	04/02/2021 00:13	WG1644309
4-Methyl-2-pentanone (MIBK)	1.22	E4	0.478	10.0	1	04/02/2021 00:13	WG1644309
Methyl tert-butyl ether	U		0.101	1.00	1	04/02/2021 00:13	WG1644309
Naphthalene	U		1.00	5.00	1	04/02/2021 00:13	WG1644309
Propene	U		0.936	2.50	1	04/02/2021 00:13	WG1644309
n-Propylbenzene	U		0.0993	1.00	1	04/02/2021 00:13	WG1644309
Styrene	U		0.118	1.00	1	04/02/2021 00:13	WG1644309
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/02/2021 00:13	WG1644309
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/02/2021 00:13	WG1644309
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/02/2021 00:13	WG1644309
Tetrachloroethene	U		0.300	1.00	1	04/02/2021 00:13	WG1644309
Toluene	U		0.278	1.00	1	04/02/2021 00:13	WG1644309
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/02/2021 00:13	WG1644309
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/02/2021 00:13	WG1644309
1,1,1-Trichloroethane	U		0.149	1.00	1	04/02/2021 00:13	WG1644309
1,1,2-Trichloroethane	U		0.158	1.00	1	04/02/2021 00:13	WG1644309
Trichloroethene	12.9		0.190	1.00	1	04/02/2021 00:13	WG1644309
Trichlorofluoromethane	U		0.160	5.00	1	04/02/2021 00:13	WG1644309
1,2,3-Trichloropropane	U		0.237	2.50	1	04/02/2021 00:13	WG1644309
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/02/2021 00:13	WG1644309
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 00:13	WG1644309
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 00:13	WG1644309
Vinyl chloride	U		0.234	1.00	1	04/02/2021 00:13	WG1644309
Xylenes, Total	U		0.174	3.00	1	04/02/2021 00:13	WG1644309
(S) Toluene-d8	*101*			*80.0-120*		*04/02/2021 00:13*	WG1644309
(S) 4-Bromofluorobenzene	*96.9*			*77.0-126*		*04/02/2021 00:13*	WG1644309
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/02/2021 00:13*	WG1644309

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	5.33	R7	0.597	3.00	1	04/01/2021 19:40	WG1644043
(S) Toluene-d8	*97.0*			*77.0-127*		*04/01/2021 19:40*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	822000		3000	40000	10000	03/31/2021 22:17	WG1643005

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		226	1000	20	04/02/2021 00:33	WG1644309
Acrolein	U		50.8	1000	20	04/02/2021 00:33	WG1644309
Acrylonitrile	U		13.4	200	20	04/02/2021 00:33	WG1644309
Benzene	296		1.88	20.0	20	04/02/2021 00:33	WG1644309
Bromobenzene	U		2.36	20.0	20	04/02/2021 00:33	WG1644309
Bromodichloromethane	U		2.72	20.0	20	04/02/2021 00:33	WG1644309
Bromoform	U		2.58	20.0	20	04/02/2021 00:33	WG1644309
Bromomethane	U		12.1	100	20	04/02/2021 00:33	WG1644309
1,3-Butadiene	U		5.98	40.0	20	04/02/2021 00:33	WG1644309
n-Butylbenzene	U		3.14	20.0	20	04/02/2021 00:33	WG1644309
sec-Butylbenzene	U		2.50	20.0	20	04/02/2021 00:33	WG1644309
tert-Butylbenzene	U		2.54	20.0	20	04/02/2021 00:33	WG1644309
Carbon tetrachloride	U		2.56	20.0	20	04/02/2021 00:33	WG1644309
Carbon disulfide	U		1.92	20.0	20	04/02/2021 00:33	WG1644309
Chlorobenzene	U		2.32	20.0	20	04/02/2021 00:33	WG1644309
Chlorodibromomethane	U		2.80	20.0	20	04/02/2021 00:33	WG1644309
Chloroethane	U		3.84	100	20	04/02/2021 00:33	WG1644309
Chloroform	85.8	E4	2.22	100	20	04/02/2021 00:33	WG1644309
Chloromethane	U		19.2	50.0	20	04/02/2021 00:33	WG1644309
Cyclohexane	U		3.76	20.0	20	04/02/2021 00:33	WG1644309
2-Chlorotoluene	U		2.12	20.0	20	04/02/2021 00:33	WG1644309
4-Chlorotoluene	U		2.28	20.0	20	04/02/2021 00:33	WG1644309
1,2-Dibromo-3-Chloropropane	U		5.52	100	20	04/02/2021 00:33	WG1644309
1,2-Dibromoethane	U		2.52	20.0	20	04/02/2021 00:33	WG1644309
Dibromomethane	U		2.44	20.0	20	04/02/2021 00:33	WG1644309
1,2-Dichlorobenzene	5.21	E4	2.14	20.0	20	04/02/2021 00:33	WG1644309
1,3-Dichlorobenzene	U		2.20	20.0	20	04/02/2021 00:33	WG1644309
1,4-Dichlorobenzene	U		2.40	20.0	20	04/02/2021 00:33	WG1644309
Dichlorodifluoromethane	U		7.48	100	20	04/02/2021 00:33	WG1644309
1,1-Dichloroethane	61.5		2.00	20.0	20	04/02/2021 00:33	WG1644309
1,2-Dichloroethane	37.8		1.64	20.0	20	04/02/2021 00:33	WG1644309
1,1-Dichloroethene	3570		3.76	20.0	20	04/02/2021 00:33	WG1644309
cis-1,2-Dichloroethene	12.9	E4	2.52	20.0	20	04/02/2021 00:33	WG1644309
trans-1,2-Dichloroethene	7.05	E4	2.98	20.0	20	04/02/2021 00:33	WG1644309
1,2-Dichloropropane	U		2.98	20.0	20	04/02/2021 00:33	WG1644309
1,1-Dichloropropene	U		2.84	20.0	20	04/02/2021 00:33	WG1644309
1,3-Dichloropropane	U		2.20	20.0	20	04/02/2021 00:33	WG1644309
cis-1,3-Dichloropropene	U		2.22	20.0	20	04/02/2021 00:33	WG1644309
trans-1,3-Dichloropropene	U		2.36	20.0	20	04/02/2021 00:33	WG1644309
2,2-Dichloropropane	U		3.22	20.0	20	04/02/2021 00:33	WG1644309
Dicyclopentadiene	U		5.06	20.0	20	04/02/2021 00:33	WG1644309
Di-isopropyl ether	U		2.10	20.0	20	04/02/2021 00:33	WG1644309
Ethylbenzene	19.1	E4	2.74	20.0	20	04/02/2021 00:33	WG1644309
4-Ethyltoluene	U		4.16	20.0	20	04/02/2021 00:33	WG1644309
Hexachloro-1,3-butadiene	U		6.74	20.0	20	04/02/2021 00:33	WG1644309
n-Hexane	U		15.0	200	20	04/02/2021 00:33	WG1644309
Isopropylbenzene	U		2.10	20.0	20	04/02/2021 00:33	WG1644309
p-Isopropyltoluene	U		2.40	20.0	20	04/02/2021 00:33	WG1644309
2-Butanone (MEK)	U		23.8	200	20	04/02/2021 00:33	WG1644309
Methyl Cyclohexane	U		13.2	20.0	20	04/02/2021 00:33	WG1644309

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	136000		2150	25000	5000	04/06/2021 22:02	WG1646650
4-Methyl-2-pentanone (MIBK)	U		9.56	200	20	04/02/2021 00:33	WG1644309
Methyl tert-butyl ether	U		2.02	20.0	20	04/02/2021 00:33	WG1644309
Naphthalene	U		20.0	100	20	04/02/2021 00:33	WG1644309
Propene	U		18.7	50.0	20	04/02/2021 00:33	WG1644309
n-Propylbenzene	U		1.99	20.0	20	04/02/2021 00:33	WG1644309
Styrene	U		2.36	20.0	20	04/02/2021 00:33	WG1644309
1,1,1,2-Tetrachloroethane	U		2.94	20.0	20	04/02/2021 00:33	WG1644309
1,1,2,2-Tetrachloroethane	U		2.66	20.0	20	04/02/2021 00:33	WG1644309
1,1,2-Trichlorotrifluoroethane	U		3.60	20.0	20	04/02/2021 00:33	WG1644309
Tetrachloroethene	73.5		6.00	20.0	20	04/02/2021 00:33	WG1644309
Toluene	327		5.56	20.0	20	04/02/2021 00:33	WG1644309
1,2,3-Trichlorobenzene	U		4.60	20.0	20	04/02/2021 00:33	WG1644309
1,2,4-Trichlorobenzene	U		9.62	20.0	20	04/02/2021 00:33	WG1644309
1,1,1-Trichloroethane	U		2.98	20.0	20	04/02/2021 00:33	WG1644309
1,1,2-Trichloroethane	92.0		3.16	20.0	20	04/02/2021 00:33	WG1644309
Trichloroethene	76800		950	5000	5000	04/06/2021 22:02	WG1646650
Trichlorofluoromethane	U		3.20	100	20	04/02/2021 00:33	WG1644309
1,2,3-Trichloropropane	U		4.74	50.0	20	04/02/2021 00:33	WG1644309
1,2,4-Trimethylbenzene	U		6.44	20.0	20	04/02/2021 00:33	WG1644309
1,2,3-Trimethylbenzene	3.57	E4	2.08	20.0	20	04/02/2021 00:33	WG1644309
1,3,5-Trimethylbenzene	U		2.08	20.0	20	04/02/2021 00:33	WG1644309
Vinyl chloride	U		4.68	20.0	20	04/02/2021 00:33	WG1644309
Xylenes, Total	119		3.48	60.0	20	04/02/2021 00:33	WG1644309
(S) Toluene-d8	*107*			*80.0-120*		*04/02/2021 00:33*	WG1644309
(S) Toluene-d8	*101*			*80.0-120*		*04/06/2021 22:02*	WG1646650
(S) 4-Bromofluorobenzene	*91.9*			*77.0-126*		*04/02/2021 00:33*	WG1644309
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*04/06/2021 22:02*	WG1646650
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/02/2021 00:33*	WG1644309
(S) 1,2-Dichloroethane-d4	*130*			*70.0-130*		*04/06/2021 22:02*	WG1646650

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	2880		119	600	200	04/07/2021 15:52	WG1646819
(S) Toluene-d8	*90.4*			*77.0-127*		*04/07/2021 15:52*	WG1646819

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	803000		6000	80000	20000	04/05/2021 18:07	WG1645914

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		226	1000	20	04/02/2021 00:54	WG1644309
Acrolein	U		50.8	1000	20	04/02/2021 00:54	WG1644309
Acrylonitrile	U		13.4	200	20	04/02/2021 00:54	WG1644309
Benzene	292		1.88	20.0	20	04/02/2021 00:54	WG1644309
Bromobenzene	U		2.36	20.0	20	04/02/2021 00:54	WG1644309
Bromodichloromethane	U		2.72	20.0	20	04/02/2021 00:54	WG1644309
Bromoform	U		2.58	20.0	20	04/02/2021 00:54	WG1644309
Bromomethane	U		12.1	100	20	04/02/2021 00:54	WG1644309
1,3-Butadiene	U		5.98	40.0	20	04/02/2021 00:54	WG1644309
n-Butylbenzene	U		3.14	20.0	20	04/02/2021 00:54	WG1644309
sec-Butylbenzene	U		2.50	20.0	20	04/02/2021 00:54	WG1644309
tert-Butylbenzene	U		2.54	20.0	20	04/02/2021 00:54	WG1644309
Carbon tetrachloride	U		2.56	20.0	20	04/02/2021 00:54	WG1644309
Carbon disulfide	U		1.92	20.0	20	04/02/2021 00:54	WG1644309
Chlorobenzene	U		2.32	20.0	20	04/02/2021 00:54	WG1644309
Chlorodibromomethane	U		2.80	20.0	20	04/02/2021 00:54	WG1644309
Chloroethane	U		3.84	100	20	04/02/2021 00:54	WG1644309
Chloroform	86.2	E4	2.22	100	20	04/02/2021 00:54	WG1644309
Chloromethane	U		19.2	50.0	20	04/02/2021 00:54	WG1644309
Cyclohexane	U		3.76	20.0	20	04/02/2021 00:54	WG1644309
2-Chlorotoluene	U		2.12	20.0	20	04/02/2021 00:54	WG1644309
4-Chlorotoluene	U		2.28	20.0	20	04/02/2021 00:54	WG1644309
1,2-Dibromo-3-Chloropropane	U		5.52	100	20	04/02/2021 00:54	WG1644309
1,2-Dibromoethane	U		2.52	20.0	20	04/02/2021 00:54	WG1644309
Dibromomethane	U		2.44	20.0	20	04/02/2021 00:54	WG1644309
1,2-Dichlorobenzene	4.63	E4	2.14	20.0	20	04/02/2021 00:54	WG1644309
1,3-Dichlorobenzene	U		2.20	20.0	20	04/02/2021 00:54	WG1644309
1,4-Dichlorobenzene	U		2.40	20.0	20	04/02/2021 00:54	WG1644309
Dichlorodifluoromethane	U		7.48	100	20	04/02/2021 00:54	WG1644309
1,1-Dichloroethane	59.5		2.00	20.0	20	04/02/2021 00:54	WG1644309
1,2-Dichloroethane	36.8		1.64	20.0	20	04/02/2021 00:54	WG1644309
1,1-Dichloroethene	3520		3.76	20.0	20	04/02/2021 00:54	WG1644309
cis-1,2-Dichloroethene	12.1	E4	2.52	20.0	20	04/02/2021 00:54	WG1644309
trans-1,2-Dichloroethene	8.02	E4	2.98	20.0	20	04/02/2021 00:54	WG1644309
1,2-Dichloropropane	U		2.98	20.0	20	04/02/2021 00:54	WG1644309
1,1-Dichloropropene	U		2.84	20.0	20	04/02/2021 00:54	WG1644309
1,3-Dichloropropane	U		2.20	20.0	20	04/02/2021 00:54	WG1644309
cis-1,3-Dichloropropene	U		2.22	20.0	20	04/02/2021 00:54	WG1644309
trans-1,3-Dichloropropene	U		2.36	20.0	20	04/02/2021 00:54	WG1644309
2,2-Dichloropropane	U		3.22	20.0	20	04/02/2021 00:54	WG1644309
Dicyclopentadiene	U		5.06	20.0	20	04/02/2021 00:54	WG1644309
Di-isopropyl ether	U		2.10	20.0	20	04/02/2021 00:54	WG1644309
Ethylbenzene	19.9	E4	2.74	20.0	20	04/02/2021 00:54	WG1644309
4-Ethyltoluene	U		4.16	20.0	20	04/02/2021 00:54	WG1644309
Hexachloro-1,3-butadiene	U		6.74	20.0	20	04/02/2021 00:54	WG1644309
n-Hexane	U		15.0	200	20	04/02/2021 00:54	WG1644309
Isopropylbenzene	U		2.10	20.0	20	04/02/2021 00:54	WG1644309
p-Isopropyltoluene	U		2.40	20.0	20	04/02/2021 00:54	WG1644309
2-Butanone (MEK)	U		23.8	200	20	04/02/2021 00:54	WG1644309
Methyl Cyclohexane	U		13.2	20.0	20	04/02/2021 00:54	WG1644309

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	126000		2150	25000	5000	04/06/2021 22:22	WG1646650
4-Methyl-2-pentanone (MIBK)	U		9.56	200	20	04/02/2021 00:54	WG1644309
Methyl tert-butyl ether	U		2.02	20.0	20	04/02/2021 00:54	WG1644309
Naphthalene	U		20.0	100	20	04/02/2021 00:54	WG1644309
Propene	U		18.7	50.0	20	04/02/2021 00:54	WG1644309
n-Propylbenzene	U		1.99	20.0	20	04/02/2021 00:54	WG1644309
Styrene	U		2.36	20.0	20	04/02/2021 00:54	WG1644309
1,1,1,2-Tetrachloroethane	U		2.94	20.0	20	04/02/2021 00:54	WG1644309
1,1,2,2-Tetrachloroethane	U		2.66	20.0	20	04/02/2021 00:54	WG1644309
1,1,2-Trichlorotrifluoroethane	U		3.60	20.0	20	04/02/2021 00:54	WG1644309
Tetrachloroethene	73.9		6.00	20.0	20	04/02/2021 00:54	WG1644309
Toluene	323		5.56	20.0	20	04/02/2021 00:54	WG1644309
1,2,3-Trichlorobenzene	U		4.60	20.0	20	04/02/2021 00:54	WG1644309
1,2,4-Trichlorobenzene	U		9.62	20.0	20	04/02/2021 00:54	WG1644309
1,1,1-Trichloroethane	U		2.98	20.0	20	04/02/2021 00:54	WG1644309
1,1,2-Trichloroethane	88.9		3.16	20.0	20	04/02/2021 00:54	WG1644309
Trichloroethene	71800		950	5000	5000	04/06/2021 22:22	WG1646650
Trichlorofluoromethane	U		3.20	100	20	04/02/2021 00:54	WG1644309
1,2,3-Trichloropropane	U		4.74	50.0	20	04/02/2021 00:54	WG1644309
1,2,4-Trimethylbenzene	U		6.44	20.0	20	04/02/2021 00:54	WG1644309
1,2,3-Trimethylbenzene	3.13	E4	2.08	20.0	20	04/02/2021 00:54	WG1644309
1,3,5-Trimethylbenzene	U		2.08	20.0	20	04/02/2021 00:54	WG1644309
Vinyl chloride	U		4.68	20.0	20	04/02/2021 00:54	WG1644309
Xylenes, Total	116		3.48	60.0	20	04/02/2021 00:54	WG1644309
(S) Toluene-d8	*106*			*80.0-120*		*04/02/2021 00:54*	WG1644309
(S) Toluene-d8	*104*			*80.0-120*		*04/06/2021 22:22*	WG1646650
(S) 4-Bromofluorobenzene	*92.1*			*77.0-126*		*04/02/2021 00:54*	WG1644309
(S) 4-Bromofluorobenzene	*106*			*77.0-126*		*04/06/2021 22:22*	WG1646650
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*04/02/2021 00:54*	WG1644309
(S) 1,2-Dichloroethane-d4	*127*			*70.0-130*		*04/06/2021 22:22*	WG1646650

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	2550		119	600	200	04/07/2021 16:12	WG1646819
(S) Toluene-d8	*90.4*			*77.0-127*		*04/07/2021 16:12*	WG1646819

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	2.78	E4 L1 R8	0.300	4.00	1	04/03/2021 12:25	WG1643272

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	04/02/2021 05:41	WG1644384
Acrolein	U		2.54	50.0	1	04/02/2021 05:41	WG1644384
Acrylonitrile	U		0.671	10.0	1	04/02/2021 05:41	WG1644384
Benzene	U		0.0941	1.00	1	04/02/2021 05:41	WG1644384
Bromobenzene	U		0.118	1.00	1	04/02/2021 05:41	WG1644384
Bromodichloromethane	U		0.136	1.00	1	04/02/2021 05:41	WG1644384
Bromoform	U		0.129	1.00	1	04/02/2021 05:41	WG1644384
Bromomethane	U		0.605	5.00	1	04/02/2021 05:41	WG1644384
1,3-Butadiene	U		0.299	2.00	1	04/02/2021 05:41	WG1644384
n-Butylbenzene	U		0.157	1.00	1	04/02/2021 05:41	WG1644384
sec-Butylbenzene	U		0.125	1.00	1	04/02/2021 05:41	WG1644384
tert-Butylbenzene	U		0.127	1.00	1	04/02/2021 05:41	WG1644384
Carbon tetrachloride	U		0.128	1.00	1	04/02/2021 05:41	WG1644384
Carbon disulfide	U		0.0962	1.00	1	04/02/2021 05:41	WG1644384
Chlorobenzene	U		0.116	1.00	1	04/02/2021 05:41	WG1644384
Chlorodibromomethane	U		0.140	1.00	1	04/02/2021 05:41	WG1644384
Chloroethane	U		0.192	5.00	1	04/02/2021 05:41	WG1644384
Chloroform	U		0.111	5.00	1	04/02/2021 05:41	WG1644384
Chloromethane	U		0.960	2.50	1	04/02/2021 05:41	WG1644384
Cyclohexane	U		0.188	1.00	1	04/02/2021 05:41	WG1644384
2-Chlorotoluene	U		0.106	1.00	1	04/02/2021 05:41	WG1644384
4-Chlorotoluene	U		0.114	1.00	1	04/02/2021 05:41	WG1644384
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/02/2021 05:41	WG1644384
1,2-Dibromoethane	U		0.126	1.00	1	04/02/2021 05:41	WG1644384
Dibromomethane	U		0.122	1.00	1	04/02/2021 05:41	WG1644384
1,2-Dichlorobenzene	U		0.107	1.00	1	04/02/2021 05:41	WG1644384
1,3-Dichlorobenzene	U		0.110	1.00	1	04/02/2021 05:41	WG1644384
1,4-Dichlorobenzene	U		0.120	1.00	1	04/02/2021 05:41	WG1644384
Dichlorodifluoromethane	U		0.374	5.00	1	04/02/2021 05:41	WG1644384
1,1-Dichloroethane	U		0.100	1.00	1	04/02/2021 05:41	WG1644384
1,2-Dichloroethane	U		0.0819	1.00	1	04/02/2021 05:41	WG1644384
1,1-Dichloroethene	U		0.188	1.00	1	04/02/2021 05:41	WG1644384
cis-1,2-Dichloroethene	0.816	E4	0.126	1.00	1	04/02/2021 05:41	WG1644384
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/02/2021 05:41	WG1644384
1,2-Dichloropropane	U		0.149	1.00	1	04/02/2021 05:41	WG1644384
1,1-Dichloropropene	U		0.142	1.00	1	04/02/2021 05:41	WG1644384
1,3-Dichloropropane	U		0.110	1.00	1	04/02/2021 05:41	WG1644384
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/02/2021 05:41	WG1644384
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/02/2021 05:41	WG1644384
2,2-Dichloropropane	U		0.161	1.00	1	04/02/2021 05:41	WG1644384
Dicyclopentadiene	U		0.253	1.00	1	04/02/2021 05:41	WG1644384
Di-isopropyl ether	U		0.105	1.00	1	04/02/2021 05:41	WG1644384
Ethylbenzene	U		0.137	1.00	1	04/02/2021 05:41	WG1644384
4-Ethyltoluene	U		0.208	1.00	1	04/02/2021 05:41	WG1644384
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/02/2021 05:41	WG1644384
n-Hexane	U		0.749	10.0	1	04/02/2021 05:41	WG1644384
Isopropylbenzene	U		0.105	1.00	1	04/02/2021 05:41	WG1644384
p-Isopropyltoluene	U		0.120	1.00	1	04/02/2021 05:41	WG1644384
2-Butanone (MEK)	U		1.19	10.0	1	04/02/2021 05:41	WG1644384
Methyl Cyclohexane	U		0.660	1.00	1	04/02/2021 05:41	WG1644384

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	04/02/2021 05:41	WG1644384
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/02/2021 05:41	WG1644384
Methyl tert-butyl ether	U		0.101	1.00	1	04/02/2021 05:41	WG1644384
Naphthalene	U		1.00	5.00	1	04/02/2021 05:41	WG1644384
Propene	0.961	E4	0.936	2.50	1	04/02/2021 05:41	WG1644384
n-Propylbenzene	U		0.0993	1.00	1	04/02/2021 05:41	WG1644384
Styrene	U		0.118	1.00	1	04/02/2021 05:41	WG1644384
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/02/2021 05:41	WG1644384
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/02/2021 05:41	WG1644384
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/02/2021 05:41	WG1644384
Tetrachloroethene	U		0.300	1.00	1	04/02/2021 05:41	WG1644384
Toluene	U		0.278	1.00	1	04/02/2021 05:41	WG1644384
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/02/2021 05:41	WG1644384
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/02/2021 05:41	WG1644384
1,1,1-Trichloroethane	U		0.149	1.00	1	04/02/2021 05:41	WG1644384
1,1,2-Trichloroethane	U		0.158	1.00	1	04/02/2021 05:41	WG1644384
Trichloroethene	5.00		0.190	1.00	1	04/02/2021 05:41	WG1644384
Trichlorofluoromethane	U		0.160	5.00	1	04/02/2021 05:41	WG1644384
1,2,3-Trichloropropane	U		0.237	2.50	1	04/02/2021 05:41	WG1644384
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/02/2021 05:41	WG1644384
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 05:41	WG1644384
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 05:41	WG1644384
Vinyl chloride	U		0.234	1.00	1	04/02/2021 05:41	WG1644384
Xylenes, Total	U		0.174	3.00	1	04/02/2021 05:41	WG1644384
(S) Toluene-d8	*104*			*80.0-120*		*04/02/2021 05:41*	WG1644384
(S) 4-Bromofluorobenzene	*93.6*			*77.0-126*		*04/02/2021 05:41*	WG1644384
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/02/2021 05:41*	WG1644384

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	04/07/2021 15:33	WG1646819
(S) Toluene-d8	*99.9*			*77.0-127*		*04/07/2021 15:33*	WG1646819

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	109000		1500	20000	5000	04/05/2021 21:12	WG1645914

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	04/02/2021 06:01	WG1644384
Acrolein	U		2.54	50.0	1	04/02/2021 06:01	WG1644384
Acrylonitrile	U		0.671	10.0	1	04/02/2021 06:01	WG1644384
Benzene	0.365	E4	0.0941	1.00	1	04/02/2021 06:01	WG1644384
Bromobenzene	U		0.118	1.00	1	04/02/2021 06:01	WG1644384
Bromodichloromethane	U		0.136	1.00	1	04/02/2021 06:01	WG1644384
Bromoform	U		0.129	1.00	1	04/02/2021 06:01	WG1644384
Bromomethane	U		0.605	5.00	1	04/02/2021 06:01	WG1644384
1,3-Butadiene	U		0.299	2.00	1	04/02/2021 06:01	WG1644384
n-Butylbenzene	U		0.157	1.00	1	04/02/2021 06:01	WG1644384
sec-Butylbenzene	U		0.125	1.00	1	04/02/2021 06:01	WG1644384
tert-Butylbenzene	U		0.127	1.00	1	04/02/2021 06:01	WG1644384
Carbon tetrachloride	U		0.128	1.00	1	04/02/2021 06:01	WG1644384
Carbon disulfide	U		0.0962	1.00	1	04/02/2021 06:01	WG1644384
Chlorobenzene	U		0.116	1.00	1	04/02/2021 06:01	WG1644384
Chlorodibromomethane	U		0.140	1.00	1	04/02/2021 06:01	WG1644384
Chloroethane	U		0.192	5.00	1	04/02/2021 06:01	WG1644384
Chloroform	1.23	E4	0.111	5.00	1	04/02/2021 06:01	WG1644384
Chloromethane	U		0.960	2.50	1	04/02/2021 06:01	WG1644384
Cyclohexane	U		0.188	1.00	1	04/02/2021 06:01	WG1644384
2-Chlorotoluene	U		0.106	1.00	1	04/02/2021 06:01	WG1644384
4-Chlorotoluene	U		0.114	1.00	1	04/02/2021 06:01	WG1644384
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/02/2021 06:01	WG1644384
1,2-Dibromoethane	U		0.126	1.00	1	04/02/2021 06:01	WG1644384
Dibromomethane	U		0.122	1.00	1	04/02/2021 06:01	WG1644384
1,2-Dichlorobenzene	U		0.107	1.00	1	04/02/2021 06:01	WG1644384
1,3-Dichlorobenzene	U		0.110	1.00	1	04/02/2021 06:01	WG1644384
1,4-Dichlorobenzene	U		0.120	1.00	1	04/02/2021 06:01	WG1644384
Dichlorodifluoromethane	U		0.374	5.00	1	04/02/2021 06:01	WG1644384
1,1-Dichloroethane	0.889	E4	0.100	1.00	1	04/02/2021 06:01	WG1644384
1,2-Dichloroethane	0.288	E4	0.0819	1.00	1	04/02/2021 06:01	WG1644384
1,1-Dichloroethene	149		0.188	1.00	1	04/02/2021 06:01	WG1644384
cis-1,2-Dichloroethene	0.127	E4	0.126	1.00	1	04/02/2021 06:01	WG1644384
trans-1,2-Dichloroethene	0.163	E4	0.149	1.00	1	04/02/2021 06:01	WG1644384
1,2-Dichloropropane	U		0.149	1.00	1	04/02/2021 06:01	WG1644384
1,1-Dichloropropene	U		0.142	1.00	1	04/02/2021 06:01	WG1644384
1,3-Dichloropropane	U		0.110	1.00	1	04/02/2021 06:01	WG1644384
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/02/2021 06:01	WG1644384
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/02/2021 06:01	WG1644384
2,2-Dichloropropane	U		0.161	1.00	1	04/02/2021 06:01	WG1644384
Dicyclopentadiene	U		0.253	1.00	1	04/02/2021 06:01	WG1644384
Di-isopropyl ether	U		0.105	1.00	1	04/02/2021 06:01	WG1644384
Ethylbenzene	U		0.137	1.00	1	04/02/2021 06:01	WG1644384
4-Ethyltoluene	U		0.208	1.00	1	04/02/2021 06:01	WG1644384
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/02/2021 06:01	WG1644384
n-Hexane	U		0.749	10.0	1	04/02/2021 06:01	WG1644384
Isopropylbenzene	U		0.105	1.00	1	04/02/2021 06:01	WG1644384
p-Isopropyltoluene	U		0.120	1.00	1	04/02/2021 06:01	WG1644384
2-Butanone (MEK)	U		1.19	10.0	1	04/02/2021 06:01	WG1644384
Methyl Cyclohexane	U		0.660	1.00	1	04/02/2021 06:01	WG1644384

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	04/02/2021 06:01	WG1644384
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/02/2021 06:01	WG1644384
Methyl tert-butyl ether	U		0.101	1.00	1	04/02/2021 06:01	WG1644384
Naphthalene	U		1.00	5.00	1	04/02/2021 06:01	WG1644384
Propene	U		0.936	2.50	1	04/02/2021 06:01	WG1644384
n-Propylbenzene	U		0.0993	1.00	1	04/02/2021 06:01	WG1644384
Styrene	U		0.118	1.00	1	04/02/2021 06:01	WG1644384
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/02/2021 06:01	WG1644384
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/02/2021 06:01	WG1644384
1,1,2-Trichlorotrifluoroethane	0.229	E4	0.180	1.00	1	04/02/2021 06:01	WG1644384
Tetrachloroethene	1.04		0.300	1.00	1	04/02/2021 06:01	WG1644384
Toluene	U		0.278	1.00	1	04/02/2021 06:01	WG1644384
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/02/2021 06:01	WG1644384
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/02/2021 06:01	WG1644384
1,1,1-Trichloroethane	U		0.149	1.00	1	04/02/2021 06:01	WG1644384
1,1,2-Trichloroethane	1.72		0.158	1.00	1	04/02/2021 06:01	WG1644384
Trichloroethene	262		0.950	5.00	5	04/06/2021 14:04	WG1646436
Trichlorofluoromethane	U		0.160	5.00	1	04/02/2021 06:01	WG1644384
1,2,3-Trichloropropane	U		0.237	2.50	1	04/02/2021 06:01	WG1644384
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/02/2021 06:01	WG1644384
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 06:01	WG1644384
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 06:01	WG1644384
Vinyl chloride	U		0.234	1.00	1	04/02/2021 06:01	WG1644384
Xylenes, Total	U		0.174	3.00	1	04/02/2021 06:01	WG1644384
(S) Toluene-d8	*103*			*80.0-120*		*04/02/2021 06:01*	WG1644384
(S) Toluene-d8	*98.5*			*80.0-120*		*04/06/2021 14:04*	WG1646436
(S) 4-Bromofluorobenzene	*94.6*			*77.0-126*		*04/02/2021 06:01*	WG1644384
(S) 4-Bromofluorobenzene	*97.1*			*77.0-126*		*04/06/2021 14:04*	WG1646436
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/02/2021 06:01*	WG1644384
(S) 1,2-Dichloroethane-d4	*125*			*70.0-130*		*04/06/2021 14:04*	WG1646436

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	340	R7	0.597	3.00	1	04/01/2021 20:59	WG1644043
(S) Toluene-d8	*91.6*			*77.0-127*		*04/01/2021 20:59*	WG1644043

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	04/02/2021 06:21	WG1644384
Acrolein	U		2.54	50.0	1	04/02/2021 06:21	WG1644384
Acrylonitrile	U		0.671	10.0	1	04/02/2021 06:21	WG1644384
Benzene	U		0.0941	1.00	1	04/02/2021 06:21	WG1644384
Bromobenzene	U		0.118	1.00	1	04/02/2021 06:21	WG1644384
Bromodichloromethane	U		0.136	1.00	1	04/02/2021 06:21	WG1644384
Bromoform	U		0.129	1.00	1	04/02/2021 06:21	WG1644384
Bromomethane	U		0.605	5.00	1	04/02/2021 06:21	WG1644384
1,3-Butadiene	U		0.299	2.00	1	04/02/2021 06:21	WG1644384
n-Butylbenzene	U		0.157	1.00	1	04/02/2021 06:21	WG1644384
sec-Butylbenzene	U		0.125	1.00	1	04/02/2021 06:21	WG1644384
tert-Butylbenzene	U		0.127	1.00	1	04/02/2021 06:21	WG1644384
Carbon tetrachloride	U		0.128	1.00	1	04/02/2021 06:21	WG1644384
Carbon disulfide	U		0.0962	1.00	1	04/02/2021 06:21	WG1644384
Chlorobenzene	U		0.116	1.00	1	04/02/2021 06:21	WG1644384
Chlorodibromomethane	U		0.140	1.00	1	04/02/2021 06:21	WG1644384
Chloroethane	U		0.192	5.00	1	04/02/2021 06:21	WG1644384
Chloroform	U		0.111	5.00	1	04/02/2021 06:21	WG1644384
Chloromethane	U		0.960	2.50	1	04/02/2021 06:21	WG1644384
Cyclohexane	U		0.188	1.00	1	04/02/2021 06:21	WG1644384
2-Chlorotoluene	U		0.106	1.00	1	04/02/2021 06:21	WG1644384
4-Chlorotoluene	U		0.114	1.00	1	04/02/2021 06:21	WG1644384
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/02/2021 06:21	WG1644384
1,2-Dibromoethane	U		0.126	1.00	1	04/02/2021 06:21	WG1644384
Dibromomethane	U		0.122	1.00	1	04/02/2021 06:21	WG1644384
1,2-Dichlorobenzene	U		0.107	1.00	1	04/02/2021 06:21	WG1644384
1,3-Dichlorobenzene	U		0.110	1.00	1	04/02/2021 06:21	WG1644384
1,4-Dichlorobenzene	U		0.120	1.00	1	04/02/2021 06:21	WG1644384
Dichlorodifluoromethane	U		0.374	5.00	1	04/02/2021 06:21	WG1644384
1,1-Dichloroethane	U		0.100	1.00	1	04/02/2021 06:21	WG1644384
1,2-Dichloroethane	U		0.0819	1.00	1	04/02/2021 06:21	WG1644384
1,1-Dichloroethene	U		0.188	1.00	1	04/02/2021 06:21	WG1644384
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/02/2021 06:21	WG1644384
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/02/2021 06:21	WG1644384
1,2-Dichloropropane	U		0.149	1.00	1	04/02/2021 06:21	WG1644384
1,1-Dichloropropene	U		0.142	1.00	1	04/02/2021 06:21	WG1644384
1,3-Dichloropropane	U		0.110	1.00	1	04/02/2021 06:21	WG1644384
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/02/2021 06:21	WG1644384
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/02/2021 06:21	WG1644384
2,2-Dichloropropane	U		0.161	1.00	1	04/02/2021 06:21	WG1644384
Dicyclopentadiene	U		0.253	1.00	1	04/02/2021 06:21	WG1644384
Di-isopropyl ether	U		0.105	1.00	1	04/02/2021 06:21	WG1644384
Ethylbenzene	U		0.137	1.00	1	04/02/2021 06:21	WG1644384
4-Ethyltoluene	U		0.208	1.00	1	04/02/2021 06:21	WG1644384
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/02/2021 06:21	WG1644384
n-Hexane	U		0.749	10.0	1	04/02/2021 06:21	WG1644384
Isopropylbenzene	U		0.105	1.00	1	04/02/2021 06:21	WG1644384
p-Isopropyltoluene	U		0.120	1.00	1	04/02/2021 06:21	WG1644384
2-Butanone (MEK)	U		1.19	10.0	1	04/02/2021 06:21	WG1644384
Methyl Cyclohexane	U		0.660	1.00	1	04/02/2021 06:21	WG1644384
Methylene Chloride	U		0.430	5.00	1	04/02/2021 06:21	WG1644384
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/02/2021 06:21	WG1644384
Methyl tert-butyl ether	U		0.101	1.00	1	04/02/2021 06:21	WG1644384
Naphthalene	U		1.00	5.00	1	04/02/2021 06:21	WG1644384
Propene	U		0.936	2.50	1	04/02/2021 06:21	WG1644384
n-Propylbenzene	U		0.0993	1.00	1	04/02/2021 06:21	WG1644384

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Styrene	U		0.118	1.00	1	04/02/2021 06:21	WG1644384
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/02/2021 06:21	WG1644384
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/02/2021 06:21	WG1644384
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/02/2021 06:21	WG1644384
Tetrachloroethene	U		0.300	1.00	1	04/02/2021 06:21	WG1644384
Toluene	U		0.278	1.00	1	04/02/2021 06:21	WG1644384
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/02/2021 06:21	WG1644384
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/02/2021 06:21	WG1644384
1,1,1-Trichloroethane	U		0.149	1.00	1	04/02/2021 06:21	WG1644384
1,1,2-Trichloroethane	U		0.158	1.00	1	04/02/2021 06:21	WG1644384
Trichloroethene	U		0.190	1.00	1	04/06/2021 13:44	WG1646436
Trichlorofluoromethane	U		0.160	5.00	1	04/02/2021 06:21	WG1644384
1,2,3-Trichloropropane	U		0.237	2.50	1	04/02/2021 06:21	WG1644384
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/02/2021 06:21	WG1644384
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 06:21	WG1644384
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 06:21	WG1644384
Vinyl chloride	U		0.234	1.00	1	04/02/2021 06:21	WG1644384
Xylenes, Total	U		0.174	3.00	1	04/02/2021 06:21	WG1644384
(S) Toluene-d8	*103*			*80.0-120*		*04/02/2021 06:21*	WG1644384
(S) Toluene-d8	*98.3*			*80.0-120*		*04/06/2021 13:44*	WG1646436
(S) 4-Bromofluorobenzene	*94.5*			*77.0-126*		*04/02/2021 06:21*	WG1644384
(S) 4-Bromofluorobenzene	*96.5*			*77.0-126*		*04/06/2021 13:44*	WG1646436
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*04/02/2021 06:21*	WG1644384
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*04/06/2021 13:44*	WG1646436

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	U	R7	0.597	3.00	1	04/01/2021 21:19	WG1644043
(S) Toluene-d8	*97.7*			*77.0-127*		*04/01/2021 21:19*	WG1644043

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	
Acetone	U		11.3	50.0	1	04/02/2021 04:39	WG1644384
Acrolein	U		2.54	50.0	1	04/02/2021 04:39	WG1644384
Acrylonitrile	U		0.671	10.0	1	04/02/2021 04:39	WG1644384
Benzene	U		0.0941	1.00	1	04/02/2021 04:39	WG1644384
Bromobenzene	U		0.118	1.00	1	04/02/2021 04:39	WG1644384
Bromodichloromethane	U		0.136	1.00	1	04/02/2021 04:39	WG1644384
Bromoform	U		0.129	1.00	1	04/02/2021 04:39	WG1644384
Bromomethane	U		0.605	5.00	1	04/02/2021 04:39	WG1644384
1,3-Butadiene	U		0.299	2.00	1	04/02/2021 04:39	WG1644384
n-Butylbenzene	U		0.157	1.00	1	04/02/2021 04:39	WG1644384
sec-Butylbenzene	U		0.125	1.00	1	04/02/2021 04:39	WG1644384
tert-Butylbenzene	U		0.127	1.00	1	04/02/2021 04:39	WG1644384
Carbon tetrachloride	U		0.128	1.00	1	04/02/2021 04:39	WG1644384
Carbon disulfide	0.187	E4	0.0962	1.00	1	04/02/2021 04:39	WG1644384
Chlorobenzene	U		0.116	1.00	1	04/02/2021 04:39	WG1644384
Chlorodibromomethane	U		0.140	1.00	1	04/02/2021 04:39	WG1644384
Chloroethane	U		0.192	5.00	1	04/02/2021 04:39	WG1644384
Chloroform	U		0.111	5.00	1	04/02/2021 04:39	WG1644384
Chloromethane	U		0.960	2.50	1	04/02/2021 04:39	WG1644384
Cyclohexane	U		0.188	1.00	1	04/02/2021 04:39	WG1644384
2-Chlorotoluene	U		0.106	1.00	1	04/02/2021 04:39	WG1644384
4-Chlorotoluene	U		0.114	1.00	1	04/02/2021 04:39	WG1644384
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/02/2021 04:39	WG1644384
1,2-Dibromoethane	U		0.126	1.00	1	04/02/2021 04:39	WG1644384
Dibromomethane	U		0.122	1.00	1	04/02/2021 04:39	WG1644384
1,2-Dichlorobenzene	U		0.107	1.00	1	04/02/2021 04:39	WG1644384
1,3-Dichlorobenzene	U		0.110	1.00	1	04/02/2021 04:39	WG1644384
1,4-Dichlorobenzene	U		0.120	1.00	1	04/02/2021 04:39	WG1644384
Dichlorodifluoromethane	U		0.374	5.00	1	04/02/2021 04:39	WG1644384
1,1-Dichloroethane	U		0.100	1.00	1	04/02/2021 04:39	WG1644384
1,2-Dichloroethane	U		0.0819	1.00	1	04/02/2021 04:39	WG1644384
1,1-Dichloroethene	U		0.188	1.00	1	04/02/2021 04:39	WG1644384
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/02/2021 04:39	WG1644384
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/02/2021 04:39	WG1644384
1,2-Dichloropropane	U		0.149	1.00	1	04/02/2021 04:39	WG1644384
1,1-Dichloropropene	U		0.142	1.00	1	04/02/2021 04:39	WG1644384
1,3-Dichloropropane	U		0.110	1.00	1	04/02/2021 04:39	WG1644384
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/02/2021 04:39	WG1644384
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/02/2021 04:39	WG1644384
2,2-Dichloropropane	U		0.161	1.00	1	04/02/2021 04:39	WG1644384
Dicyclopentadiene	U		0.253	1.00	1	04/02/2021 04:39	WG1644384
Di-isopropyl ether	U		0.105	1.00	1	04/02/2021 04:39	WG1644384
Ethylbenzene	U		0.137	1.00	1	04/02/2021 04:39	WG1644384
4-Ethyltoluene	U		0.208	1.00	1	04/02/2021 04:39	WG1644384
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/02/2021 04:39	WG1644384
n-Hexane	U		0.749	10.0	1	04/02/2021 04:39	WG1644384
Isopropylbenzene	U		0.105	1.00	1	04/02/2021 04:39	WG1644384
p-Isopropyltoluene	U		0.120	1.00	1	04/02/2021 04:39	WG1644384
2-Butanone (MEK)	U		1.19	10.0	1	04/02/2021 04:39	WG1644384
Methyl Cyclohexane	U		0.660	1.00	1	04/02/2021 04:39	WG1644384
Methylene Chloride	U		0.430	5.00	1	04/02/2021 04:39	WG1644384
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/02/2021 04:39	WG1644384
Methyl tert-butyl ether	U		0.101	1.00	1	04/02/2021 04:39	WG1644384
Naphthalene	U		1.00	5.00	1	04/02/2021 04:39	WG1644384
Propene	U		0.936	2.50	1	04/02/2021 04:39	WG1644384
n-Propylbenzene	U		0.0993	1.00	1	04/02/2021 04:39	WG1644384

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	04/02/2021 04:39	WG1644384
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/02/2021 04:39	WG1644384
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/02/2021 04:39	WG1644384
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/02/2021 04:39	WG1644384
Tetrachloroethene	U		0.300	1.00	1	04/02/2021 04:39	WG1644384
Toluene	U		0.278	1.00	1	04/02/2021 04:39	WG1644384
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/02/2021 04:39	WG1644384
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/02/2021 04:39	WG1644384
1,1,1-Trichloroethane	U		0.149	1.00	1	04/02/2021 04:39	WG1644384
1,1,2-Trichloroethane	U		0.158	1.00	1	04/02/2021 04:39	WG1644384
Trichloroethene	U		0.190	1.00	1	04/02/2021 04:39	WG1644384
Trichlorofluoromethane	U		0.160	5.00	1	04/02/2021 04:39	WG1644384
1,2,3-Trichloropropane	U		0.237	2.50	1	04/02/2021 04:39	WG1644384
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/02/2021 04:39	WG1644384
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 04:39	WG1644384
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 04:39	WG1644384
Vinyl chloride	U		0.234	1.00	1	04/02/2021 04:39	WG1644384
Xylenes, Total	U		0.174	3.00	1	04/02/2021 04:39	WG1644384
(S) Toluene-d8	*97.4*			*80.0-120*		*04/02/2021 04:39*	WG1644384
(S) 4-Bromofluorobenzene	*73.6*	S6		*77.0-126*		*04/02/2021 04:39*	WG1644384
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*04/02/2021 04:39*	WG1644384

Method Blank (MB)

(MB) R3637016-1 03/31/21 14:13

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

L1332403-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1332403-06 03/31/21 17:44 • (DUP) R3637016-3 03/31/21 18:11

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

L1332177-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1332177-10 04/01/21 03:34 • (DUP) R3637016-4 04/01/21 04:01

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

Laboratory Control Sample (LCS)

(LCS) R3637016-2 03/31/21 15:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	9.62	96.2	90.0-110	

L1332177-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332177-10 04/01/21 03:34 • (MS) R3637016-5 04/01/21 04:27 • (MSD) R3637016-6 04/01/21 04:53

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	7.42	7.02	74.2	70.2	1	80.0-120	M2	M2	5.53	15

Method Blank (MB)

(MB) R3638110-1 04/03/21 09:46

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

L1332129-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1332129-10 04/03/21 12:25 • (DUP) R3638110-3 04/03/21 12:51

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	2.78	2.18	1	24.0	E4 R8	15

Laboratory Control Sample (LCS)

(LCS) R3638110-2 04/03/21 10:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	11.7	117	90.0-110	L1

QUALITY CONTROL SUMMARY

L1332129-01,02,03,04,05,06

Method Blank (MB)

(MB) R3636753-2 03/30/21 17:47

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) R3636753-1 03/30/21 16:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	10.2	102	90.0-110	

L1331921-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1331921-01 03/30/21 20:01 • (MS) R3636753-3 03/31/21 07:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	9.84	98.4	1	80.0-120	

L1331921-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1331921-02 03/30/21 20:27 • (MS) R3636753-4 03/31/21 08:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.2	102	1	80.0-120	

L1331921-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1331921-03 03/30/21 21:47 • (MS) R3636753-5 03/31/21 08:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.4	104	1	80.0-120	

L1332129-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332129-01 03/31/21 01:44 • (MS) R3636753-6 03/31/21 09:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	92.0	104	119	1	80.0-120	E1

L1332129-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332129-02 03/31/21 03:04 • (MS) R3636753-7 03/31/21 09:40

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	1.99	12.2	102	1	80.0-120	

L1332129-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332129-03 03/31/21 03:30 • (MS) R3636753-8 03/31/21 10:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	7.80	17.9	101	1	80.0-120	

L1332129-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332129-04 03/31/21 03:56 • (MS) R3636753-9 03/31/21 10:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.2	102	1	80.0-120	

L1332129-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332129-05 03/31/21 04:23 • (MS) R3636753-10 03/31/21 10:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.8	108	1	80.0-120	

L1332129-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332129-06 03/31/21 04:49 • (MS) R3636753-11 03/31/21 11:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.9	109	1	80.0-120	

Method Blank (MB)

(MB) R3637017-2 03/31/21 15:32

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) R3637017-1 03/31/21 15:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	9.62	96.2	90.0-110	

L1332403-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332403-04 03/31/21 20:05 • (MS) R3637017-3 03/31/21 20:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	22.6	33.6	110	1	80.0-120	

Sample Narrative:
OS: FILTERED TWICE

L1332403-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332403-05 03/31/21 20:58 • (MS) R3637017-4 03/31/21 21:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.1	101	1	80.0-120	

Sample Narrative:
OS: FILTERED TWICE

L1332129-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332129-07 03/31/21 21:51 • (MS) R3637017-5 04/01/21 07:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	0.856	12.4	116	1	80.0-120	

L1332177-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-01 03/31/21 22:44 • (MS) R3637017-6 04/01/21 07:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	12.5	125	1	80.0-120	M1

L1332177-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-02 03/31/21 23:10 • (MS) R3637017-7 04/01/21 07:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.6	106	1	80.0-120	

L1332177-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-03 03/31/21 23:36 • (MS) R3637017-8 04/01/21 08:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	9.33	93.3	1	80.0-120	

L1332177-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-04 04/01/21 00:03 • (MS) R3637017-9 04/01/21 08:51

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	11.2	112	1	80.0-120	

L1332177-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-05 04/01/21 01:22 • (MS) R3637017-10 04/01/21 09:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	11.5	115	1	80.0-120	

L1332177-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-06 04/01/21 01:48 • (MS) R3637017-11 04/01/21 09:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	3.68	14.7	110	1	80.0-120	

L1332177-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-07 04/01/21 02:15 • (MS) R3637017-12 04/01/21 10:10

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	11.2	112	1	80.0-120	

L1332177-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-08 04/01/21 02:41 • (MS) R3637017-13 04/01/21 10:37

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	9.50	12.1	26.4	1	80.0-120	M2

L1332177-09 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-09 04/01/21 03:08 • (MS) R3637017-14 04/01/21 11:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	15.2	152	1	80.0-120	M1

L1332177-11 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-11 04/01/21 05:20 • (MS) R3637017-15 04/01/21 12:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.0	100	1	80.0-120	

L1332177-12 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332177-12 04/01/21 06:39 • (MS) R3637017-16 04/01/21 12:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	10.0	100	1	80.0-120	

Method Blank (MB)

(MB) R3638474-1 04/05/21 13:38

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

L1333934-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1333934-03 04/05/21 17:15 • (DUP) R3638474-3 04/05/21 17:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	553	583	50	5.33		15

L1332422-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1332422-04 04/06/21 02:03 • (DUP) R3638474-6 04/06/21 02:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	41.2	41.0	1	0.420		15

Laboratory Control Sample (LCS)

(LCS) R3638474-2 04/05/21 14:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	9.43	94.3	90.0-110	

L1332422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332422-03 04/06/21 00:44 • (MS) R3638474-4 04/06/21 01:10 • (MSD) R3638474-5 04/06/21 01:36

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	11700	17600	17500	118	116	500	80.0-120			0.539	15

L1332422-12 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332422-12 04/06/21 06:53 • (MS) R3638474-7 04/06/21 07:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	39.9	79.9	5	80.0-120	M2

Method Blank (MB)

(MB) R3638682-3 04/01/21 17:39

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) R3638682-3 04/01/21 17:39

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	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.9*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

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

(LCS) R3638682-1 04/01/21 16:38 • (LCSD) R3638682-2 04/01/21 16:58

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	26.1	26.0	104	104	19.0-160			0.384	27
Acrolein	25.0	24.7	23.6	98.8	94.4	30.0-160			4.55	26
Acrylonitrile	25.0	26.9	27.6	108	110	55.0-149			2.57	20
Benzene	5.00	4.36	4.43	87.2	88.6	70.0-123			1.59	20
Bromobenzene	5.00	5.46	5.85	109	117	73.0-121			6.90	20
Bromodichloromethane	5.00	4.56	4.52	91.2	90.4	75.0-120			0.881	20
Bromoform	5.00	3.99	4.26	79.8	85.2	68.0-132			6.55	20
Bromomethane	5.00	4.27	4.13	85.4	82.6	30.0-160			3.33	25
1,3-Butadiene	5.00	4.35	4.16	87.0	83.2	45.0-147			4.47	20
n-Butylbenzene	5.00	4.67	4.84	93.4	96.8	73.0-125			3.58	20
sec-Butylbenzene	5.00	4.77	4.96	95.4	99.2	75.0-125			3.91	20
tert-Butylbenzene	5.00	4.23	4.69	84.6	93.8	76.0-124			10.3	20
Carbon disulfide	5.00	3.81	3.72	76.2	74.4	61.0-128			2.39	20
Carbon tetrachloride	5.00	3.96	4.03	79.2	80.6	68.0-126			1.75	20
Chlorobenzene	5.00	4.82	4.76	96.4	95.2	80.0-121			1.25	20
Chlorodibromomethane	5.00	4.23	4.38	84.6	87.6	77.0-125			3.48	20
Chloroethane	5.00	4.45	4.20	89.0	84.0	47.0-150			5.78	20
Chloroform	5.00	4.65	4.63	93.0	92.6	73.0-120			0.431	20
Chloromethane	5.00	4.67	4.54	93.4	90.8	41.0-142			2.82	20
Cyclohexane	5.00	4.08	3.86	81.6	77.2	71.0-124			5.54	20
2-Chlorotoluene	5.00	4.93	5.36	98.6	107	76.0-123			8.36	20
4-Chlorotoluene	5.00	4.86	5.37	97.2	107	75.0-122			9.97	20
1,2-Dibromo-3-Chloropropane	5.00	4.16	4.34	83.2	86.8	58.0-134			4.24	20
1,2-Dibromoethane	5.00	4.99	5.17	99.8	103	80.0-122			3.54	20
Dibromomethane	5.00	4.54	4.97	90.8	99.4	80.0-120			9.04	20
1,2-Dichlorobenzene	5.00	4.81	5.19	96.2	104	79.0-121			7.60	20
1,3-Dichlorobenzene	5.00	4.88	5.29	97.6	106	79.0-120			8.06	20
1,4-Dichlorobenzene	5.00	4.78	5.22	95.6	104	79.0-120			8.80	20
Dichlorodifluoromethane	5.00	4.38	4.14	87.6	82.8	51.0-149			5.63	20
1,1-Dichloroethane	5.00	4.64	4.62	92.8	92.4	70.0-126			0.432	20
1,2-Dichloroethane	5.00	4.71	4.95	94.2	99.0	70.0-128			4.97	20
1,1-Dichloroethene	5.00	4.37	4.38	87.4	87.6	71.0-124			0.229	20
cis-1,2-Dichloroethene	5.00	4.45	4.44	89.0	88.8	73.0-120			0.225	20
trans-1,2-Dichloroethene	5.00	4.01	4.26	80.2	85.2	73.0-120			6.05	20
1,2-Dichloropropane	5.00	4.81	4.77	96.2	95.4	77.0-125			0.835	20
1,1-Dichloropropene	5.00	4.66	4.76	93.2	95.2	74.0-126			2.12	20
1,3-Dichloropropane	5.00	5.17	5.28	103	106	80.0-120			2.11	20
cis-1,3-Dichloropropene	5.00	4.47	4.68	89.4	93.6	80.0-123			4.59	20
trans-1,3-Dichloropropene	5.00	4.61	4.74	92.2	94.8	78.0-124			2.78	20
2,2-Dichloropropane	5.00	3.95	4.01	79.0	80.2	58.0-130			1.51	20

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

(LCS) R3638682-1 04/01/21 16:38 • (LCSD) R3638682-2 04/01/21 16:58

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	4.04	4.49	80.8	89.8	74.0-126			10.6	20
Di-isopropyl ether	5.00	4.86	4.99	97.2	99.8	58.0-138			2.64	20
Ethylbenzene	5.00	4.66	4.40	93.2	88.0	79.0-123			5.74	20
4-Ethyltoluene	5.00	4.83	5.59	96.6	112	74.0-127			14.6	20
Hexachloro-1,3-butadiene	5.00	4.49	4.14	89.8	82.8	54.0-138			8.11	20
n-Hexane	5.00	5.11	5.29	102	106	57.0-133			3.46	20
Isopropylbenzene	5.00	3.99	3.97	79.8	79.4	76.0-127			0.503	20
p-Isopropyltoluene	5.00	4.36	4.83	87.2	96.6	76.0-125			10.2	20
2-Butanone (MEK)	25.0	27.4	27.1	110	108	44.0-160			1.10	20
Methyl Cyclohexane	5.00	4.16	3.96	83.2	79.2	68.0-126			4.93	20
Methylene Chloride	5.00	4.96	5.09	99.2	102	67.0-120			2.59	20
4-Methyl-2-pentanone (MIBK)	25.0	26.7	26.6	107	106	68.0-142			0.375	20
Methyl tert-butyl ether	5.00	4.03	4.26	80.6	85.2	68.0-125			5.55	20
Naphthalene	5.00	4.51	4.23	90.2	84.6	54.0-135			6.41	20
Propene	5.00	3.12	3.16	62.4	63.2	30.0-160			1.27	20
n-Propylbenzene	5.00	5.18	5.66	104	113	77.0-124			8.86	20
Styrene	5.00	4.33	4.21	86.6	84.2	73.0-130			2.81	20
1,1,1,2-Tetrachloroethane	5.00	4.34	4.28	86.8	85.6	75.0-125			1.39	20
1,1,2,2-Tetrachloroethane	5.00	5.54	6.05	111	121	65.0-130			8.80	20
Tetrachloroethene	5.00	4.31	4.29	86.2	85.8	72.0-132			0.465	20
Toluene	5.00	4.62	4.56	92.4	91.2	79.0-120			1.31	20
1,1,2-Trichlorotrifluoroethane	5.00	4.54	4.22	90.8	84.4	69.0-132			7.31	20
1,2,3-Trichlorobenzene	5.00	5.10	4.47	102	89.4	50.0-138			13.2	20
1,2,4-Trichlorobenzene	5.00	4.81	4.54	96.2	90.8	57.0-137			5.78	20
1,1,1-Trichloroethane	5.00	4.24	4.20	84.8	84.0	73.0-124			0.948	20
1,1,2-Trichloroethane	5.00	4.94	5.12	98.8	102	80.0-120			3.58	20
Trichloroethene	5.00	4.34	4.45	86.8	89.0	78.0-124			2.50	20
Trichlorofluoromethane	5.00	4.41	4.15	88.2	83.0	59.0-147			6.07	20
1,2,3-Trichloropropane	5.00	4.75	5.37	95.0	107	73.0-130			12.3	20
1,2,3-Trimethylbenzene	5.00	4.63	4.95	92.6	99.0	77.0-120			6.68	20
1,2,4-Trimethylbenzene	5.00	4.40	4.77	88.0	95.4	76.0-121			8.07	20
1,3,5-Trimethylbenzene	5.00	4.84	5.23	96.8	105	76.0-122			7.75	20
Vinyl chloride	5.00	4.41	4.45	88.2	89.0	67.0-131			0.903	20
Xylenes, Total	15.0	13.0	13.1	86.7	87.3	79.0-123			0.766	20
(S) Toluene-d8				*102*	*102*	*80.0-120*				
(S) 4-Bromofluorobenzene				*98.4*	*94.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*100*	*105*	*70.0-130*				

L1331726-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1331726-23 04/01/21 20:08 • (MS) R3638682-4 04/02/21 01:15 • (MSD) R3638682-5 04/02/21 01:35

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	33.9	36.2	136	145	1	10.0-160			6.56	35
Acrolein	25.0	U	80.0	81.5	320	326	1	10.0-160	M1	M1	1.86	39
Acrylonitrile	25.0	U	41.6	43.7	166	175	1	21.0-160	M1	M1	4.92	32
Benzene	5.00	5.07	9.25	9.78	83.6	94.2	1	17.0-158			5.57	27
Bromobenzene	5.00	U	6.34	7.47	127	149	1	30.0-149			16.4	28
Bromodichloromethane	5.00	U	5.19	6.13	104	123	1	31.0-150			16.6	27
Bromoform	5.00	U	4.66	5.06	93.2	101	1	29.0-150			8.23	29
Bromomethane	5.00	U	3.89	4.93	77.8	98.6	1	10.0-160			23.6	38
1,3-Butadiene	5.00	U	4.71	5.53	94.2	111	1	10.0-160			16.0	22
n-Butylbenzene	5.00	U	5.22	6.25	104	125	1	31.0-150			18.0	30
sec-Butylbenzene	5.00	0.263	5.50	6.70	110	134	1	33.0-155			19.7	29
tert-Butylbenzene	5.00	U	5.05	6.37	101	127	1	34.0-153			23.1	28
Carbon disulfide	5.00	U	4.14	5.27	82.8	105	1	10.0-156			24.0	28
Carbon tetrachloride	5.00	U	4.17	5.21	83.4	104	1	23.0-159			22.2	28
Chlorobenzene	5.00	U	4.98	5.92	99.6	118	1	33.0-152			17.2	27
Chlorodibromomethane	5.00	U	4.61	5.31	92.2	106	1	37.0-149			14.1	27
Chloroethane	5.00	U	4.52	5.42	90.4	108	1	10.0-160			18.1	30
Chloroform	5.00	U	5.42	6.28	108	126	1	29.0-154			14.7	28
Chloromethane	5.00	U	4.46	5.75	89.2	115	1	10.0-160			25.3	29
Cyclohexane	5.00	U	12.2	12.7	244	254	1	19.0-160	M1	M1	4.02	23
2-Chlorotoluene	5.00	U	5.58	6.87	112	137	1	32.0-153			20.7	28
4-Chlorotoluene	5.00	U	5.56	6.93	111	139	1	32.0-150			21.9	28
1,2-Dibromo-3-Chloropropane	5.00	U	5.77	5.15	115	103	1	22.0-151			11.4	34
1,2-Dibromoethane	5.00	U	5.41	5.93	108	119	1	34.0-147			9.17	27
Dibromomethane	5.00	U	5.09	5.70	102	114	1	30.0-151			11.3	27
1,2-Dichlorobenzene	5.00	U	5.20	6.36	104	127	1	34.0-149			20.1	28
1,3-Dichlorobenzene	5.00	U	5.67	6.62	113	132	1	36.0-146			15.5	27
1,4-Dichlorobenzene	5.00	U	5.33	6.37	107	127	1	35.0-142			17.8	27
Dichlorodifluoromethane	5.00	U	4.36	5.53	87.2	111	1	10.0-160			23.7	29
1,1-Dichloroethane	5.00	U	4.67	5.66	93.4	113	1	25.0-158			19.2	27
1,2-Dichloroethane	5.00	1.62	6.76	7.08	103	109	1	29.0-151			4.62	27
1,1-Dichloroethene	5.00	U	4.44	5.81	88.8	116	1	11.0-160			26.7	29
cis-1,2-Dichloroethene	5.00	U	4.36	5.32	87.2	106	1	10.0-160			19.8	27
trans-1,2-Dichloroethene	5.00	U	4.14	5.27	82.8	105	1	17.0-153			24.0	27
1,2-Dichloropropane	5.00	U	4.86	5.82	97.2	116	1	30.0-156			18.0	27
1,1-Dichloropropene	5.00	U	5.03	6.26	101	125	1	25.0-158			21.8	27
1,3-Dichloropropane	5.00	U	5.68	6.43	114	129	1	38.0-147			12.4	27
cis-1,3-Dichloropropene	5.00	U	4.74	5.32	94.8	106	1	34.0-149			11.5	28
trans-1,3-Dichloropropene	5.00	U	4.79	5.74	95.8	115	1	32.0-149			18.0	28
2,2-Dichloropropane	5.00	U	3.78	4.55	75.6	91.0	1	24.0-152			18.5	29

L1331726-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1331726-23 04/01/21 20:08 • (MS) R3638682-4 04/02/21 01:15 • (MSD) R3638682-5 04/02/21 01:35

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	4.86	6.07	97.2	121	1	51.0-139		R5	22.1	20
Di-isopropyl ether	5.00	U	5.09	5.80	102	116	1	21.0-160			13.0	28
Ethylbenzene	5.00	0.303	4.81	5.92	96.2	118	1	30.0-155			20.7	27
4-Ethyltoluene	5.00	U	6.02	7.30	120	146	1	10.0-160			19.2	20
Hexachloro-1,3-butadiene	5.00	U	4.47	5.80	89.4	116	1	20.0-154			25.9	34
n-Hexane	5.00	U	5.82	6.91	116	138	1	10.0-153			17.1	28
Isopropylbenzene	5.00	0.137	4.38	5.28	87.6	106	1	28.0-157			18.6	27
p-Isopropyltoluene	5.00	U	5.19	6.21	104	124	1	30.0-154			17.9	29
2-Butanone (MEK)	25.0	U	79.6	81.6	318	326	1	10.0-160	M1	M1	2.48	32
Methyl Cyclohexane	5.00	2.92	7.31	8.48	87.8	111	1	11.0-160			14.8	24
Methylene Chloride	5.00	U	10.3	7.00	206	140	1	23.0-144	M1	R5	38.2	28
4-Methyl-2-pentanone (MIBK)	25.0	U	33.4	35.8	134	143	1	29.0-160			6.94	29
Methyl tert-butyl ether	5.00	U	4.43	4.87	88.6	97.4	1	28.0-150			9.46	29
Naphthalene	5.00	U	4.76	5.11	95.2	102	1	12.0-156			7.09	35
Propene	5.00	5.73	10.0	10.6	85.4	97.4	1	10.0-160			5.83	29
n-Propylbenzene	5.00	U	6.01	7.55	120	151	1	31.0-154			22.7	28
Styrene	5.00	U	4.46	5.40	89.2	108	1	33.0-155			19.1	28
1,1,1,2-Tetrachloroethane	5.00	U	4.27	5.20	85.4	104	1	36.0-151			19.6	29
1,1,2,2-Tetrachloroethane	5.00	U	7.40	7.86	148	157	1	33.0-150		M1	6.03	28
Tetrachloroethene	5.00	U	4.74	5.75	94.8	115	1	10.0-160			19.3	27
Toluene	5.00	1.27	5.93	6.74	93.2	109	1	26.0-154			12.8	28
1,1,2-Trichlorotrifluoroethane	5.00	U	4.36	5.20	87.2	104	1	23.0-160			17.6	30
1,2,3-Trichlorobenzene	5.00	U	4.64	5.43	92.8	109	1	17.0-150			15.7	36
1,2,4-Trichlorobenzene	5.00	U	4.70	5.54	94.0	111	1	24.0-150			16.4	33
1,1,1-Trichloroethane	5.00	U	4.39	5.32	87.8	106	1	23.0-160			19.2	28
1,1,2-Trichloroethane	5.00	U	8.58	9.59	172	192	1	35.0-147	M1	M1	11.1	27
Trichloroethene	5.00	U	9.13	7.38	183	148	1	10.0-160	M1		21.2	25
Trichlorofluoromethane	5.00	U	4.30	5.36	86.0	107	1	17.0-160			21.9	31
1,2,3-Trichloropropane	5.00	U	6.71	7.47	134	149	1	34.0-151			10.7	29
1,2,3-Trimethylbenzene	5.00	U	6.30	7.28	126	146	1	32.0-149			14.4	28
1,2,4-Trimethylbenzene	5.00	U	5.32	6.49	106	130	1	26.0-154			19.8	27
1,3,5-Trimethylbenzene	5.00	0.107	5.59	6.90	112	138	1	28.0-153			21.0	27
Vinyl chloride	5.00	U	4.68	5.93	93.6	119	1	10.0-160			23.6	27
Xylenes, Total	15.0	U	14.3	17.4	95.3	116	1	29.0-154			19.6	28
(S) Toluene-d8					*99.4*	*99.8*		*80.0-120*				
(S) 4-Bromofluorobenzene					*92.6*	*93.0*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*99.6*	*96.0*		*70.0-130*				

L1331949-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1331949-01 04/01/21 21:29 • (MS) R3638682-6 04/02/21 01:56 • (MSD) R3638682-7 04/02/21 02:16

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	30.4	27.5	122	110	1	10.0-160			10.0	35
Acrolein	25.0	U	30.8	30.7	123	123	1	10.0-160			0.325	39
Acrylonitrile	25.0	U	33.2	29.9	133	120	1	21.0-160			10.5	32
Benzene	5.00	1.88	6.90	6.06	100	83.6	1	17.0-158			13.0	27
Bromobenzene	5.00	U	6.92	6.39	138	128	1	30.0-149			7.96	28
Bromodichloromethane	5.00	U	5.36	4.49	107	89.8	1	31.0-150			17.7	27
Bromoform	5.00	U	5.10	4.58	102	91.6	1	29.0-150			10.7	29
Bromomethane	5.00	U	4.78	3.83	95.6	76.6	1	10.0-160			22.1	38
1,3-Butadiene	5.00	U	1.15	1.58	23.0	31.6	1	10.0-160		R5	31.5	22
n-Butylbenzene	5.00	U	15.2	14.8	304	296	1	31.0-150	M1	M1	2.67	30
sec-Butylbenzene	5.00	1.53	6.86	6.20	107	93.4	1	33.0-155			10.1	29
tert-Butylbenzene	5.00	U	16.3	15.3	326	306	1	34.0-153	M1	M1	6.33	28
Carbon disulfide	5.00	U	4.90	3.92	98.0	78.4	1	10.0-156			22.2	28
Carbon tetrachloride	5.00	U	4.77	3.94	95.4	78.8	1	23.0-159			19.1	28
Chlorobenzene	5.00	U	5.65	4.86	113	97.2	1	33.0-152			15.0	27
Chlorodibromomethane	5.00	U	5.09	4.54	102	90.8	1	37.0-149			11.4	27
Chloroethane	5.00	U	5.22	4.04	104	80.8	1	10.0-160			25.5	30
Chloroform	5.00	U	5.21	4.36	104	87.2	1	29.0-154			17.8	28
Chloromethane	5.00	U	5.49	4.61	110	92.2	1	10.0-160			17.4	29
Cyclohexane	5.00	1.30	6.36	5.50	101	84.0	1	19.0-160			14.5	23
2-Chlorotoluene	5.00	U	14.0	13.8	280	276	1	32.0-153	M1	M1	1.44	28
4-Chlorotoluene	5.00	U	15.4	15.1	308	302	1	32.0-150	M1	M1	1.97	28
1,2-Dibromo-3-Chloropropane	5.00	U	5.66	5.23	113	105	1	22.0-151			7.90	34
1,2-Dibromoethane	5.00	U	5.97	5.22	119	104	1	34.0-147			13.4	27
Dibromomethane	5.00	U	5.47	4.69	109	93.8	1	30.0-151			15.4	27
1,2-Dichlorobenzene	5.00	U	5.84	4.93	117	98.6	1	34.0-149			16.9	28
1,3-Dichlorobenzene	5.00	U	5.87	5.22	117	104	1	36.0-146			11.7	27
1,4-Dichlorobenzene	5.00	U	5.40	4.72	108	94.4	1	35.0-142			13.4	27
Dichlorodifluoromethane	5.00	U	5.38	4.43	108	88.6	1	10.0-160			19.4	29
1,1-Dichloroethane	5.00	U	5.08	4.19	102	83.8	1	25.0-158			19.2	27
1,2-Dichloroethane	5.00	U	5.69	4.76	114	95.2	1	29.0-151			17.8	27
1,1-Dichloroethene	5.00	U	5.30	4.29	106	85.8	1	11.0-160			21.1	29
cis-1,2-Dichloroethene	5.00	U	5.02	4.11	100	82.2	1	10.0-160			19.9	27
trans-1,2-Dichloroethene	5.00	U	5.04	4.01	101	80.2	1	17.0-153			22.8	27
1,2-Dichloropropane	5.00	U	5.75	4.77	115	95.4	1	30.0-156			18.6	27
1,1-Dichloropropene	5.00	U	5.61	4.60	112	92.0	1	25.0-158			19.8	27
1,3-Dichloropropane	5.00	U	6.10	5.34	122	107	1	38.0-147			13.3	27
cis-1,3-Dichloropropene	5.00	U	5.09	4.49	102	89.8	1	34.0-149			12.5	28
trans-1,3-Dichloropropene	5.00	U	5.40	4.79	108	95.8	1	32.0-149			12.0	28
2,2-Dichloropropane	5.00	U	4.09	3.68	81.8	73.6	1	24.0-152			10.6	29

L1331949-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1331949-01 04/01/21 21:29 • (MS) R3638682-6 04/02/21 01:56 • (MSD) R3638682-7 04/02/21 02:16

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	5.43	4.72	109	94.4	1	51.0-139			14.0	20
Di-isopropyl ether	5.00	U	5.58	4.87	112	97.4	1	21.0-160			13.6	28
Ethylbenzene	5.00	0.199	5.53	4.75	107	91.0	1	30.0-155			15.2	27
4-Ethyltoluene	5.00	37.1	41.6	43.3	90.0	124	1	10.0-160			4.00	20
Hexachloro-1,3-butadiene	5.00	U	5.31	4.54	106	90.8	1	20.0-154			15.6	34
n-Hexane	5.00	U	8.60	7.66	172	153	1	10.0-153	M1		11.6	28
Isopropylbenzene	5.00	2.09	7.55	6.62	109	90.6	1	28.0-157			13.1	27
p-Isopropyltoluene	5.00	7.84	14.0	13.4	123	111	1	30.0-154			4.38	29
2-Butanone (MEK)	25.0	U	37.2	33.3	149	133	1	10.0-160			11.1	32
Methyl Cyclohexane	5.00	4.74	10.0	9.05	105	86.2	1	11.0-160			9.97	24
Methylene Chloride	5.00	U	6.11	4.83	122	96.6	1	23.0-144			23.4	28
4-Methyl-2-pentanone (MIBK)	25.0	U	33.8	30.4	135	122	1	29.0-160			10.6	29
Methyl tert-butyl ether	5.00	9.75	13.8	13.5	81.0	75.0	1	28.0-150			2.20	29
Naphthalene	5.00	17.2	24.2	23.4	140	124	1	12.0-156			3.36	35
Propene	5.00	U	4.46	3.63	89.2	72.6	1	10.0-160			20.5	29
n-Propylbenzene	5.00	2.41	9.11	8.47	134	121	1	31.0-154			7.28	28
Styrene	5.00	U	5.01	4.35	100	87.0	1	33.0-155			14.1	28
1,1,1,2-Tetrachloroethane	5.00	U	4.91	4.19	98.2	83.8	1	36.0-151			15.8	29
1,1,2,2-Tetrachloroethane	5.00	U	6.93	6.67	139	133	1	33.0-150			3.82	28
Tetrachloroethene	5.00	U	5.28	4.32	106	86.4	1	10.0-160			20.0	27
Toluene	5.00	1.49	6.68	6.02	104	90.6	1	26.0-154			10.4	28
1,1,2-Trichlorotrifluoroethane	5.00	U	5.18	4.24	104	84.8	1	23.0-160			20.0	30
1,2,3-Trichlorobenzene	5.00	U	5.17	4.56	103	91.2	1	17.0-150			12.5	36
1,2,4-Trichlorobenzene	5.00	U	5.39	4.72	108	94.4	1	24.0-150			13.3	33
1,1,1-Trichloroethane	5.00	U	5.07	4.02	101	80.4	1	23.0-160			23.1	28
1,1,2-Trichloroethane	5.00	U	6.52	5.76	130	115	1	35.0-147			12.4	27
Trichloroethene	5.00	U	6.32	4.98	126	99.6	1	10.0-160			23.7	25
Trichlorofluoromethane	5.00	U	5.33	4.26	107	85.2	1	17.0-160			22.3	31
1,2,3-Trichloropropane	5.00	U	6.85	5.92	137	118	1	34.0-151			14.6	29
1,2,3-Trimethylbenzene	5.00	70.8	74.9	76.7	82.0	118	1	32.0-149			2.37	28
1,2,4-Trimethylbenzene	5.00	79.7	88.0	87.1	166	148	1	26.0-154	M3		1.03	27
1,3,5-Trimethylbenzene	5.00	75.8	81.8	85.3	120	190	1	28.0-153		M3	4.19	27
Vinyl chloride	5.00	U	5.62	4.42	112	88.4	1	10.0-160			23.9	27
Xylenes, Total	15.0	108	129	125	140	113	1	29.0-154			3.15	28
(S) Toluene-d8					*99.1*	*101*		*80.0-120*				
(S) 4-Bromofluorobenzene					*97.6*	*96.3*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*96.6*	*95.3*		*70.0-130*				

Method Blank (MB)

(MB) R3638563-3 04/02/21 04:18

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) R3638563-3 04/02/21 04:18

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	0.261	E4	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	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*86.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

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

(LCS) R3638563-1 04/02/21 03:17 • (LCSD) R3638563-2 04/02/21 03:37

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 %
Acetone	25.0	20.3	22.0	81.2	88.0	19.0-160			8.04	27
Acrolein	25.0	22.3	22.0	89.2	88.0	30.0-160			1.35	26
Acrylonitrile	25.0	27.4	29.2	110	117	55.0-149			6.36	20
Benzene	5.00	4.24	4.25	84.8	85.0	70.0-123			0.236	20
Bromobenzene	5.00	5.22	5.76	104	115	73.0-121			9.84	20
Bromodichloromethane	5.00	4.33	4.45	86.6	89.0	75.0-120			2.73	20
Bromoform	5.00	3.93	4.10	78.6	82.0	68.0-132			4.23	20
Bromomethane	5.00	3.50	3.85	70.0	77.0	30.0-160			9.52	25
1,3-Butadiene	5.00	4.06	4.44	81.2	88.8	45.0-147			8.94	20
n-Butylbenzene	5.00	4.36	4.93	87.2	98.6	73.0-125			12.3	20
sec-Butylbenzene	5.00	4.40	4.81	88.0	96.2	75.0-125			8.90	20
tert-Butylbenzene	5.00	4.12	4.57	82.4	91.4	76.0-124			10.4	20
Carbon disulfide	5.00	3.27	3.42	65.4	68.4	61.0-128			4.48	20
Carbon tetrachloride	5.00	3.89	4.03	77.8	80.6	68.0-126			3.54	20
Chlorobenzene	5.00	4.58	4.83	91.6	96.6	80.0-121			5.31	20
Chlorodibromomethane	5.00	4.22	4.33	84.4	86.6	77.0-125			2.57	20
Chloroethane	5.00	3.94	4.48	78.8	89.6	47.0-150			12.8	20
Chloroform	5.00	4.52	4.60	90.4	92.0	73.0-120			1.75	20
Chloromethane	5.00	3.94	4.53	78.8	90.6	41.0-142			13.9	20
Cyclohexane	5.00	3.66	3.81	73.2	76.2	71.0-124			4.02	20
2-Chlorotoluene	5.00	4.73	5.23	94.6	105	76.0-123			10.0	20
4-Chlorotoluene	5.00	4.85	5.15	97.0	103	75.0-122			6.00	20
1,2-Dibromo-3-Chloropropane	5.00	4.27	4.56	85.4	91.2	58.0-134			6.57	20
1,2-Dibromoethane	5.00	4.77	5.03	95.4	101	80.0-122			5.31	20
Dibromomethane	5.00	4.50	4.43	90.0	88.6	80.0-120			1.57	20
1,2-Dichlorobenzene	5.00	4.56	5.12	91.2	102	79.0-121			11.6	20
1,3-Dichlorobenzene	5.00	4.72	5.29	94.4	106	79.0-120			11.4	20
1,4-Dichlorobenzene	5.00	4.65	5.06	93.0	101	79.0-120			8.44	20
Dichlorodifluoromethane	5.00	3.67	4.19	73.4	83.8	51.0-149			13.2	20
1,1-Dichloroethane	5.00	4.32	4.55	86.4	91.0	70.0-126			5.19	20
1,2-Dichloroethane	5.00	4.72	4.78	94.4	95.6	70.0-128			1.26	20
1,1-Dichloroethene	5.00	3.92	4.21	78.4	84.2	71.0-124			7.13	20
cis-1,2-Dichloroethene	5.00	4.30	4.42	86.0	88.4	73.0-120			2.75	20
trans-1,2-Dichloroethene	5.00	3.88	4.22	77.6	84.4	73.0-120			8.40	20
1,2-Dichloropropane	5.00	4.86	4.90	97.2	98.0	77.0-125			0.820	20
1,1-Dichloropropene	5.00	4.42	4.72	88.4	94.4	74.0-126			6.56	20
1,3-Dichloropropane	5.00	4.93	5.17	98.6	103	80.0-120			4.75	20
cis-1,3-Dichloropropene	5.00	4.44	4.56	88.8	91.2	80.0-123			2.67	20
trans-1,3-Dichloropropene	5.00	4.70	4.61	94.0	92.2	78.0-124			1.93	20
2,2-Dichloropropane	5.00	3.80	3.80	76.0	76.0	58.0-130			0.000	20

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

(LCS) R3638563-1 04/02/21 03:17 • (LCSD) R3638563-2 04/02/21 03:37

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 %
Dicyclopentadiene	5.00	3.90	4.36	78.0	87.2	74.0-126			11.1	20
Di-isopropyl ether	5.00	4.87	5.03	97.4	101	58.0-138			3.23	20
Ethylbenzene	5.00	4.12	4.49	82.4	89.8	79.0-123			8.59	20
4-Ethyltoluene	5.00	4.87	5.32	97.4	106	74.0-127			8.83	20
Hexachloro-1,3-butadiene	5.00	3.78	4.59	75.6	91.8	54.0-138			19.4	20
n-Hexane	5.00	4.77	4.75	95.4	95.0	57.0-133			0.420	20
Isopropylbenzene	5.00	3.84	4.06	76.8	81.2	76.0-127			5.57	20
p-Isopropyltoluene	5.00	4.24	4.69	84.8	93.8	76.0-125			10.1	20
2-Butanone (MEK)	25.0	26.4	26.7	106	107	44.0-160			1.13	20
Methyl Cyclohexane	5.00	3.92	3.99	78.4	79.8	68.0-126			1.77	20
Methylene Chloride	5.00	4.67	4.82	93.4	96.4	67.0-120			3.16	20
4-Methyl-2-pentanone (MIBK)	25.0	26.8	28.5	107	114	68.0-142			6.15	20
Methyl tert-butyl ether	5.00	4.17	4.30	83.4	86.0	68.0-125			3.07	20
Naphthalene	5.00	3.69	4.20	73.8	84.0	54.0-135			12.9	20
Propene	5.00	2.81	2.65	56.2	53.0	30.0-160			5.86	20
n-Propylbenzene	5.00	4.94	5.57	98.8	111	77.0-124			12.0	20
Styrene	5.00	4.18	4.33	83.6	86.6	73.0-130			3.53	20
1,1,1,2-Tetrachloroethane	5.00	4.10	4.21	82.0	84.2	75.0-125			2.65	20
1,1,2,2-Tetrachloroethane	5.00	5.59	6.25	112	125	65.0-130			11.1	20
Tetrachloroethene	5.00	4.06	4.43	81.2	88.6	72.0-132			8.72	20
Toluene	5.00	4.30	4.53	86.0	90.6	79.0-120			5.21	20
1,1,2-Trichlorotrifluoroethane	5.00	4.16	4.50	83.2	90.0	69.0-132			7.85	20
1,2,3-Trichlorobenzene	5.00	3.86	4.44	77.2	88.8	50.0-138			14.0	20
1,2,4-Trichlorobenzene	5.00	3.82	4.52	76.4	90.4	57.0-137			16.8	20
1,1,1-Trichloroethane	5.00	4.12	4.27	82.4	85.4	73.0-124			3.58	20
1,1,2-Trichloroethane	5.00	4.75	5.21	95.0	104	80.0-120			9.24	20
Trichloroethene	5.00	4.70	4.73	94.0	94.6	78.0-124			0.636	20
Trichlorofluoromethane	5.00	4.09	4.44	81.8	88.8	59.0-147			8.21	20
1,2,3-Trichloropropane	5.00	5.11	5.27	102	105	73.0-130			3.08	20
1,2,3-Trimethylbenzene	5.00	4.34	4.87	86.8	97.4	77.0-120			11.5	20
1,2,4-Trimethylbenzene	5.00	4.33	4.86	86.6	97.2	76.0-121			11.5	20
1,3,5-Trimethylbenzene	5.00	4.51	5.01	90.2	100	76.0-122			10.5	20
Vinyl chloride	5.00	3.87	4.29	77.4	85.8	67.0-131			10.3	20
Xylenes, Total	15.0	12.3	13.0	82.0	86.7	79.0-123			5.53	20
(S) Toluene-d8				*101*	*103*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.1*	*98.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*104*	*102*	*70.0-130*				

L1332178-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332178-01 04/02/21 10:44 • (MS) R3638563-4 04/02/21 11:25 • (MSD) R3638563-5 04/02/21 11:46

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	250	U	356	302	142	121	10	10.0-160			16.4	35
Acrolein	250	U	392	363	157	145	10	10.0-160			7.68	39
Acrylonitrile	250	U	364	316	146	126	10	21.0-160			14.1	32
Benzene	50.0	199	220	215	42.0	32.0	10	17.0-158			2.30	27
Bromobenzene	50.0	U	74.5	62.4	149	125	10	30.0-149			17.7	28
Bromodichloromethane	50.0	U	48.6	40.8	97.2	81.6	10	31.0-150			17.4	27
Bromoform	50.0	U	50.2	41.9	100	83.8	10	29.0-150			18.0	29
Bromomethane	50.0	U	44.4	32.3	88.8	64.6	10	10.0-160			31.6	38
1,3-Butadiene	50.0	U	49.8	38.4	99.6	76.8	10	10.0-160		R5	25.9	22
n-Butylbenzene	50.0	U	84.0	67.7	168	135	10	31.0-150	M1		21.5	30
sec-Butylbenzene	50.0	U	63.0	40.8	126	81.6	10	33.0-155		R5	42.8	29
tert-Butylbenzene	50.0	U	50.0	38.2	100	76.4	10	34.0-153			26.8	28
Carbon disulfide	50.0	U	43.4	30.7	86.8	61.4	10	10.0-156		R5	34.3	28
Carbon tetrachloride	50.0	U	44.9	32.1	89.8	64.2	10	23.0-159		R5	33.2	28
Chlorobenzene	50.0	U	56.5	41.3	113	82.6	10	33.0-152		R5	31.1	27
Chlorodibromomethane	50.0	U	48.6	39.9	97.2	79.8	10	37.0-149			19.7	27
Chloroethane	50.0	U	47.5	34.9	95.0	69.8	10	10.0-160		R5	30.6	30
Chloroform	50.0	U	51.5	39.8	103	79.6	10	29.0-154			25.6	28
Chloromethane	50.0	U	50.8	38.7	102	77.4	10	10.0-160			27.0	29
Cyclohexane	50.0	86.2	90.4	76.9	8.40	0.000	10	19.0-160	M2	M2	16.1	23
2-Chlorotoluene	50.0	U	74.9	61.8	150	124	10	32.0-153			19.2	28
4-Chlorotoluene	50.0	U	84.0	68.3	168	137	10	32.0-150	M1		20.6	28
1,2-Dibromo-3-Chloropropane	50.0	U	53.2	41.9	106	83.8	10	22.0-151			23.8	34
1,2-Dibromoethane	50.0	U	58.1	48.0	116	96.0	10	34.0-147			19.0	27
Dibromomethane	50.0	U	51.3	43.8	103	87.6	10	30.0-151			15.8	27
1,2-Dichlorobenzene	50.0	U	56.9	44.5	114	89.0	10	34.0-149			24.5	28
1,3-Dichlorobenzene	50.0	U	59.5	44.2	119	88.4	10	36.0-146		R5	29.5	27
1,4-Dichlorobenzene	50.0	U	56.7	43.2	113	86.4	10	35.0-142			27.0	27
Dichlorodifluoromethane	50.0	U	45.1	32.0	90.2	64.0	10	10.0-160		R5	34.0	29
1,1-Dichloroethane	50.0	U	49.6	37.3	99.2	74.6	10	25.0-158		R5	28.3	27
1,2-Dichloroethane	50.0	U	53.9	44.5	108	89.0	10	29.0-151			19.1	27
1,1-Dichloroethene	50.0	U	46.4	34.0	92.8	68.0	10	11.0-160		R5	30.8	29
cis-1,2-Dichloroethene	50.0	U	46.0	36.6	92.0	73.2	10	10.0-160			22.8	27
trans-1,2-Dichloroethene	50.0	U	44.9	33.5	89.8	67.0	10	17.0-153		R5	29.1	27
1,2-Dichloropropane	50.0	U	52.4	42.4	105	84.8	10	30.0-156			21.1	27
1,1-Dichloropropene	50.0	U	53.0	38.0	106	76.0	10	25.0-158		R5	33.0	27
1,3-Dichloropropane	50.0	U	60.6	48.9	121	97.8	10	38.0-147			21.4	27
cis-1,3-Dichloropropene	50.0	U	48.0	39.0	96.0	78.0	10	34.0-149			20.7	28
trans-1,3-Dichloropropene	50.0	U	54.0	43.9	108	87.8	10	32.0-149			20.6	28
2,2-Dichloropropane	50.0	U	35.7	26.2	71.4	52.4	10	24.0-152		R5	30.7	29

L1332178-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332178-01 04/02/21 10:44 • (MS) R3638563-4 04/02/21 11:25 • (MSD) R3638563-5 04/02/21 11:46

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	50.0	U	52.3	37.0	105	74.0	10	51.0-139		R5	34.3	20
Di-isopropyl ether	50.0	U	51.6	42.5	103	85.0	10	21.0-160			19.3	28
Ethylbenzene	50.0	338	373	362	70.0	48.0	10	30.0-155			2.99	27
4-Ethyltoluene	50.0	458	516	492	116	68.0	10	10.0-160			4.76	20
Hexachloro-1,3-butadiene	50.0	U	50.3	38.5	101	77.0	10	20.0-154			26.6	34
n-Hexane	50.0	62.6	87.6	74.0	50.0	22.8	10	10.0-153			16.8	28
Isopropylbenzene	50.0	24.8	71.8	58.3	94.0	67.0	10	28.0-157			20.8	27
p-Isopropyltoluene	50.0	9.92	64.2	48.5	109	77.2	10	30.0-154			27.9	29
2-Butanone (MEK)	250	U	345	309	138	124	10	10.0-160			11.0	32
Methyl Cyclohexane	50.0	36.8	62.3	48.8	51.0	24.0	10	11.0-160		R5	24.3	24
Methylene Chloride	50.0	U	48.9	37.9	97.8	75.8	10	23.0-144			25.3	28
4-Methyl-2-pentanone (MIBK)	250	U	325	286	130	114	10	29.0-160			12.8	29
Methyl tert-butyl ether	50.0	U	45.7	39.3	91.4	78.6	10	28.0-150			15.1	29
Naphthalene	50.0	90.1	148	140	116	99.8	10	12.0-156			5.56	35
Propene	50.0	U	35.6	22.8	71.2	45.6	10	10.0-160		R5	43.8	29
n-Propylbenzene	50.0	74.4	141	121	133	93.2	10	31.0-154			15.3	28
Styrene	50.0	U	52.5	40.1	105	80.2	10	33.0-155			26.8	28
1,1,1,2-Tetrachloroethane	50.0	U	46.3	39.0	92.6	78.0	10	36.0-151			17.1	29
1,1,2,2-Tetrachloroethane	50.0	U	73.4	62.6	147	125	10	33.0-150			15.9	28
Tetrachloroethene	50.0	U	50.7	38.0	101	76.0	10	10.0-160		R5	28.6	27
Toluene	50.0	549	558	552	18.0	6.00	10	26.0-154	M3	M3	1.08	28
1,1,2-Trichlorotrifluoroethane	50.0	U	44.6	31.1	89.2	62.2	10	23.0-160		R5	35.7	30
1,2,3-Trichlorobenzene	50.0	U	50.2	40.7	100	81.4	10	17.0-150			20.9	36
1,2,4-Trichlorobenzene	50.0	U	52.3	40.3	105	80.6	10	24.0-150			25.9	33
1,1,1-Trichloroethane	50.0	U	45.8	33.2	91.6	66.4	10	23.0-160		R5	31.9	28
1,1,2-Trichloroethane	50.0	U	56.5	49.0	113	98.0	10	35.0-147			14.2	27
Trichloroethene	50.0	U	52.7	37.9	105	75.8	10	10.0-160		R5	32.7	25
Trichlorofluoromethane	50.0	U	46.9	34.3	93.8	68.6	10	17.0-160			31.0	31
1,2,3-Trichloropropane	50.0	U	66.6	56.6	133	113	10	34.0-151			16.2	29
1,2,3-Trimethylbenzene	50.0	132	195	180	126	96.0	10	32.0-149			8.00	28
1,2,4-Trimethylbenzene	50.0	462	515	496	106	68.0	10	26.0-154			3.76	27
1,3,5-Trimethylbenzene	50.0	143	204	185	122	84.0	10	28.0-153			9.77	27
Vinyl chloride	50.0	U	50.9	34.9	102	69.8	10	10.0-160		R5	37.3	27
Xylenes, Total	150	2460	2470	2430	6.67	0.000	10	29.0-154	M3	M3	1.63	28
(S) Toluene-d8					*101*	*99.7*		*80.0-120*				
(S) 4-Bromofluorobenzene					*97.6*	*93.8*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*98.6*	*98.2*		*70.0-130*				

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

Method Blank (MB)

(MB) R3639183-3 04/06/21 13:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	*96.4*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*124*			*70.0-130*

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

(LCS) R3639183-1 04/06/21 12:03 • (LCSD) R3639183-2 04/06/21 12:24

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 %
Trichloroethene	5.00	5.02	5.05	100	101	78.0-124			0.596	20
(S) Toluene-d8				*94.5*	*99.1*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.8*	*100*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*121*	*118*	*70.0-130*				

Method Blank (MB)

(MB) R3638958-3 04/06/21 14:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methylene Chloride	U		0.430	5.00
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	*100*			*80.0-120*
(S) 4-Bromofluorobenzene	*103*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*125*			*70.0-130*

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

(LCS) R3638958-1 04/06/21 13:43 • (LCSD) R3638958-2 04/06/21 14:03

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	%	%	%			%	%
Methylene Chloride	5.00	4.81	5.20	96.2	104	67.0-120			7.79	20
Trichloroethene	5.00	4.14	3.99	82.8	79.8	78.0-124			3.69	20
(S) Toluene-d8				*95.4*	*96.6*	*80.0-120*				
(S) 4-Bromofluorobenzene				*103*	*105*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*126*	*125*	*70.0-130*				

Method Blank (MB)

(MB) R3638698-3 03/31/21 21:21

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	*97.3*			*77.0-127*

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

(LCS) R3638698-1 03/31/21 20:22 • (LCSD) R3638698-2 03/31/21 20:42

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	48.4	47.3	96.8	94.6	55.0-138			2.30	24
(S) Toluene-d8				*97.5*	*97.9*	*77.0-127*				

Method Blank (MB)

(MB) R3638787-3 04/01/21 16:03

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	*97.2*			*77.0-127*

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

(LCS) R3638787-1 04/01/21 13:43 • (LCSD) R3638787-2 04/01/21 14:03

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	43.5	33.0	87.0	66.0	55.0-138		R7	27.5	24
(S) Toluene-d8				*96.9*	*97.6*	*77.0-127*				

L1332422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332422-03 04/01/21 22:18 • (MS) R3638787-4 04/02/21 00:57 • (MSD) R3638787-5 04/02/21 01:17

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	18.9	50.8	55.2	63.8	72.6	1	13.0-160			8.30	31
(S) Toluene-d8					*97.6*	*97.5*		*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) R3639200-1 04/07/21 11:27

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	*99.7*			*77.0-127*

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

(LCS) R3639200-2 04/07/21 11:46 • (LCSD) R3639200-3 04/07/21 14:51

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	41.9	42.6	83.8	85.2	55.0-138			1.66	24
(S) Toluene-d8				*100*	*98.8*	*77.0-127*				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS20 • File ID: 0401a_02

04/01/21 16:38

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	0401a_02	150797	58883	57859
Upper Limit		301594	117766	115718
Lower Limit		75399	29442	28930
LCS R3638682-1 WG1644309 1x	0401a_02LCS	150797	58883	57859
LCSD R3638682-2 WG1644309 1x	0401a_03	151744	59647	52155
BLANK R3638682-3 WG1644309 1x	0401a_05	142549	55210	52605
L1332129-01 WG1644309 1x	0401A_17	155329	61902	58072
L1332129-02 WG1644309 1x	0401A_18	139447	55301	54565
L1332129-03 WG1644309 1x	0401A_19	149581	58490	55015
L1332129-04 WG1644309 1x	0401A_20	142129	55335	53014
L1332129-05 WG1644309 1x	0401A_21	146236	57546	53686
L1332129-06 WG1644309 1x	0401A_22	147612	58073	54533
L1332129-07 WG1644309 1x	0401A_23	144133	56790	54643
L1332129-08 WG1644309 20x	0401A_24	165667	61872	53849
L1332129-09 WG1644309 20x	0401A_25	163057	60972	55141
MS R3638682-4 WG1644309 1x	0401A_26	171626	66636	56657
MSD R3638682-5 WG1644309 1x	0401A_27	171336	65682	54936
MS R3638682-6 WG1644309 1x	0401A_28	165144	63684	59052
MSD R3638682-7 WG1644309 1x	0401A_29	177508	68323	59363

Instrument: VOCMS20 • File ID: 0401A_31

04/02/21 02:57

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	0401A_31	157562	65273	59186
Upper Limit		315124	130546	118372
Lower Limit		78781	32637	29593
LCS R3638563-1 WG1644384 1x	0401A_32	162844	65968	61285
LCSD R3638563-2 WG1644384 1x	0401A_33	148857	58067	52580
BLANK R3638563-3 WG1644384 1x	0401A_35	157321	56384	44541
L1332129-13 WG1644384 1x	0401A_36	109796	58997	32653
L1332129-10 WG1644384 1x	0401A_39	165696	62468	54760
L1332129-11 WG1644384 1x	0401A_40	159816	61890	58660
L1332129-12 WG1644384 1x	0401A_41	166103	64721	59756
MS R3638563-4 WG1644384 10x	0401A_56	180454	68568	59182

INTERNAL STANDARD SUMMARY

Instrument: VOCMS20 • File ID: 0401A_31

04/02/21 02:57

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
MSD R3638563-5 WG1644384 10x	0401A_57	181962	70611	60769

Instrument: VOCMS22 • File ID: 0406a_02

04/06/21 13:43

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	0406a_02	120136	68183	74406
Upper Limit		240272	136366	148812
Lower Limit		60068	34092	37203
LCS R3638958-1 WG1646650 1x	0406a_02LCSE	120136	68183	74406
LCSD R3638958-2 WG1646650 1x	0406a_03E	113362	66170	71448
BLANK R3638958-3 WG1646650 1x	0406a_05E	117437	65228	67923
L1332129-08 WG1646650 5000x	0406A_17	102787	58935	64867
L1332129-09 WG1646650 5000x	0406A_18	112265	60268	66052

Instrument: VOCMS35 • File ID: 0406_02

04/06/21 12:03

Sample ID	File ID	8260-FLUOROBENZENE Response	8260-CHLOROBENZENE-D5 Response	8260-1,4-DICHLOROBENZENE-D4 Response
Standard	0406_02	169213	73246	59038
Upper Limit		338426	146492	118076
Lower Limit		84607	36623	29519
LCS R3639183-1 WG1646436 1x	0406_02LCSA	169213	73246	59038
LCSD R3639183-2 WG1646436 1x	0406_03A	164230	69126	54374
BLANK R3639183-3 WG1646436 1x	0406_05A	162989	70442	55786
L1332129-12 WG1646436 1x	0406_06	168366	70113	54569
L1332129-11 WG1646436 5x	0406_07	160463	67966	52780

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 0331_05

03/31/21 20:02

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	0331_05	650754
Upper Limit		1301508
Lower Limit		325377
LCS R3638698-1 WG1643216 1x	0331_06	612120
LCSD R3638698-2 WG1643216 1x	0331_07	622968
BLANK R3638698-3 WG1643216 1x	0331_09	897024
L1332129-01 WG1643216 1x	0331_12	690004
L1332129-02 WG1643216 1x	0331_13	631272

Instrument: VOCMS27 • File ID: 0401_03

04/01/21 12:20

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	0401_03	555319
Upper Limit		1110638
Lower Limit		277660
LCS R3638787-1 WG1644043 1x	0401_04	632654
LCSD R3638787-2 WG1644043 1x	0401_05	823603
BLANK R3638787-3 WG1644043 1x	0401_08	579948
L1332129-03 WG1644043 1x	0401_09	618804
L1332129-04 WG1644043 1x	0401_10	754260
L1332129-05 WG1644043 1x	0401_11	571293
L1332129-06 WG1644043 1x	0401_12	639340
L1332129-07 WG1644043 1x	0401_13	596038
L1332129-11 WG1644043 1x	0401_17	662654
L1332129-12 WG1644043 1x	0401_18	535954
MS R3638787-4 WG1644043 1x	0401_29	806650
MSD R3638787-5 WG1644043 1x	0401_30	678261

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 0407_05

04/07/21 10:47

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	0407_05	631682
Upper Limit		1263364
Lower Limit		315841
BLANK R3639200-1 WG1646819 1x	0407_07	557542
LCS R3639200-2 WG1646819 1x	0407_08	567011
LCSD R3639200-3 WG1646819 1x	0407_10	608363
L1332129-10 WG1646819 1x	0407_12	569893
L1332129-08 WG1646819 200x	0407_13	679073
L1332129-09 WG1646819 200x	0407_14	631579

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
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.
S6	Surrogate recovery was below laboratory and method acceptance limits. Reextraction and/or reanalysis confirms low recovery caused by matrix effect.

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
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Suite P186
Phoenix, AZ 85028

Billing Information:
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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 turn

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-3-108-20210329	Grab	GW	108	3-29-21	1400	5	X	X	X		-01
TTU-4-57-20210329			57		1343	5	X	X	X		-02
TTU-6-143-20210329			143		1143	5	X	X	X		-03
TTU-7-345-20210329			345		1127	5	X	X	X		-04
TTU-8-164-20210329			164		1100	5	X	X	X		-05
TTU-10-147-20210329			147		1315	5	X	X	X		-06
TTU-15-75-20210329			75		~~1456~~ 1435	5	X	X	X		-07
TTU-16-80-20210329			80		1456	5	X	X	X		-08
TTU-16-80-20210329-Dup			80		1456	5	X	X	X		-09
TTU-17-80-20210329			~~80~~		1525	6	X	X	X		-10

* 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 # 488300838496

Chain of Custody Page 1 of 2

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# L332129
J133

Acctnum: **GEOSYNPAZ**
Template:
Prelogin:
TSR: **Chris Ward**
PB:
Shipped Via:

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)
Ryan Ayala	3-29-21	1640	
Relinquished by : (Signature)	Date: 3-29-21	Time: 1800	Received by: (Signature) FedEx
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No HCl / MeoH TBR

Temp: 4.2 °C 0.1+1.2=0.3 Bottles Received: 59

Date: 3/30/21 Time: 0900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

PM/PA?

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 turn

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-EX-1-69-20210329	Grab	GW	69	3-29-21	1545	5	X	X	X		-11
PF-2-400-20210329	1	1	400	3-29-21	1223	4	X	X	X		-12
Trip Blank				3-29-21		1		X			-13

* 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 # 988300838496

Chain of Custody Page 1 of 2

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 # L1332129

Table #

Acctnum: **GEOSYNPAZ**
Template:
Prelogin:
TSR: **Chris Ward**
PB:

Shipped Via:

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

Trip Blank Received: Yes / No
HCl / MeoH
TBR

Temp: 4.8 °C Bottles Received: 5
Corr: 4.8+0=4.8

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	3-29-21	1640	
Relinquished by : (Signature)	Date: 3-29-21	Time: 1800	Received by: (Signature) Fedex
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Date: 3/30/21 Time: 0900

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ANALYTICAL REPORT

April 08, 2021

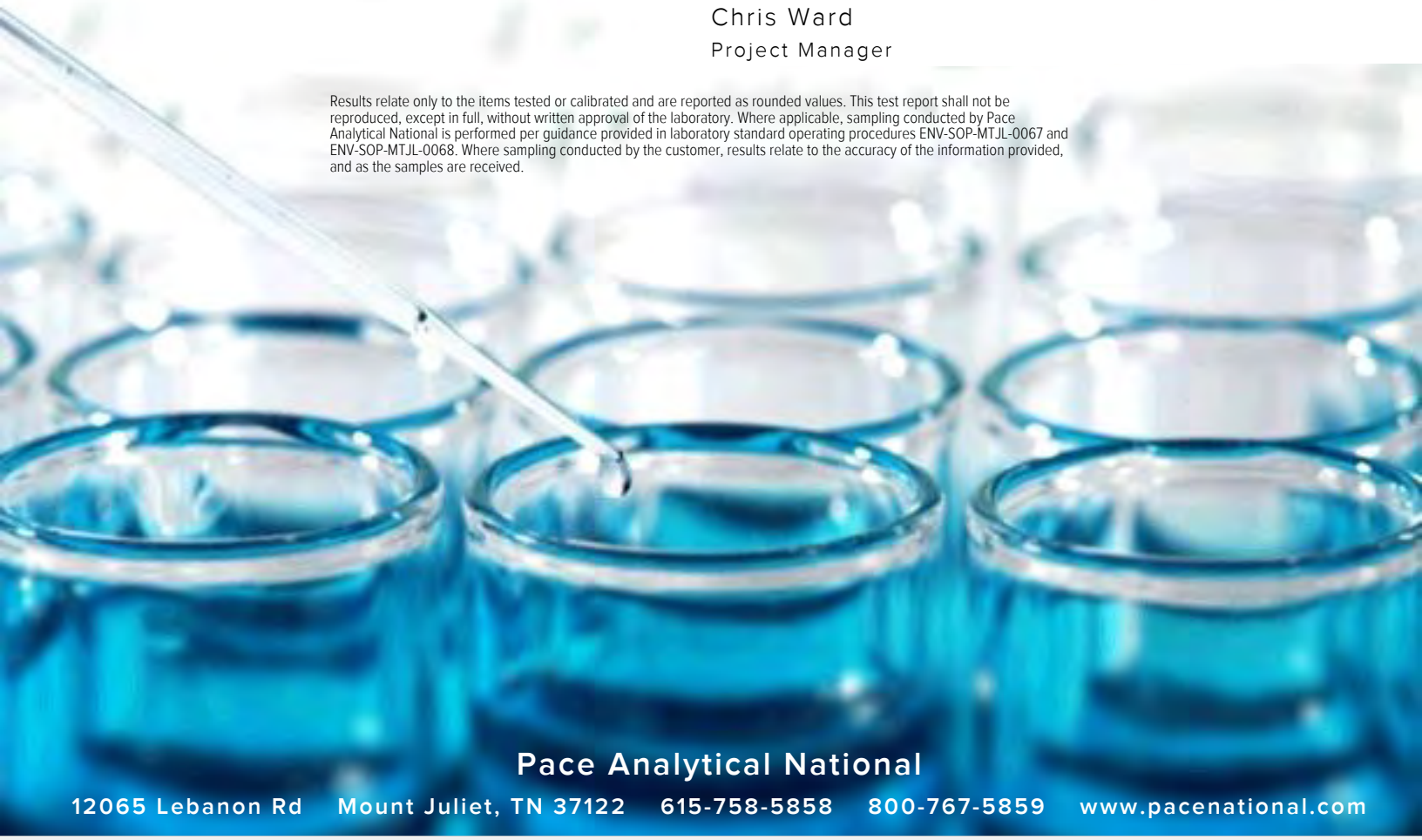
GeoSyntec, Inc. - AZ

Sample Delivery Group:	L1332422
Samples Received:	03/31/2021
Project Number:	SP0101GW21/02
Description:	Nammo Defense Systems,Inc. NDS TTU Samp;ing

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

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager



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

TABLE OF CONTENTS

TTU-2-114-20210330 L1332422-01 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 10:57 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5000	04/05/21 22:32	04/05/21 22:32	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1644384	1	04/02/21 11:04	04/02/21 11:04	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1646436	10	04/06/21 14:24	04/06/21 14:24	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 21:39	04/01/21 21:39	BMB	Mt. Juliet, TN

TTU-2-114-20210330-DUP L1332422-02 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 10:57 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5000	04/05/21 22:58	04/05/21 22:58	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645350	1	04/04/21 00:05	04/04/21 00:05	KMC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645898	10	04/05/21 23:12	04/05/21 23:12	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 21:59	04/01/21 21:59	BMB	Mt. Juliet, TN

TTU-1-50-20210330 L1332422-03 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 11:35 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	500	04/06/21 00:44	04/06/21 00:44	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645350	1	04/03/21 21:20	04/03/21 21:20	KMC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645898	1	04/05/21 23:32	04/05/21 23:32	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 22:18	04/01/21 22:18	BMB	Mt. Juliet, TN

TTU-5-110-20210330 L1332422-04 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 07:35 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	1	04/06/21 02:03	04/06/21 02:03	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645350	1	04/03/21 23:44	04/03/21 23:44	KMC	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645898	1	04/06/21 00:13	04/06/21 00:13	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 22:38	04/01/21 22:38	BMB	Mt. Juliet, TN

TTU-9A-61-20210330 L1332422-05 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 09:25 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1646082	1	04/06/21 02:56	04/06/21 02:56	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 16:42	04/04/21 16:42	JBE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 22:58	04/01/21 22:58	BMB	Mt. Juliet, TN

TTU-12-82-20210330 L1332422-06 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 10:19 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5000	04/05/21 23:24	04/05/21 23:24	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 19:49	04/04/21 19:49	JBE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1647430	10	04/08/21 00:34	04/08/21 00:34	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 23:18	04/01/21 23:18	BMB	Mt. Juliet, TN

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

TTU-13-51-20210330 L1332422-07 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 09:46 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	500	04/06/21 03:48	04/06/21 03:48	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 17:03	04/04/21 17:03	JBE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 23:38	04/01/21 23:38	BMB	Mt. Juliet, TN

TTU-14-69-20210330 L1332422-08 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 10:03 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5000	04/06/21 04:15	04/06/21 04:15	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 20:09	04/04/21 20:09	JBE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1647430	25	04/08/21 00:54	04/08/21 00:54	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/01/21 23:57	04/01/21 23:57	BMB	Mt. Juliet, TN

TTU-EX-2-74-20210330 L1332422-09 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 07:56 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5000	04/06/21 04:41	04/06/21 04:41	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 20:30	04/04/21 20:30	JBE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1647430	20	04/08/21 01:15	04/08/21 01:15	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644043	1	04/02/21 00:17	04/02/21 00:17	BMB	Mt. Juliet, TN

TTU-EX-3-76-20210330 L1332422-10 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 08:13 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5000	04/06/21 06:01	04/06/21 06:01	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 18:47	04/04/21 18:47	JBE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1647430	100	04/08/21 01:36	04/08/21 01:36	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644831	1	04/02/21 17:20	04/02/21 17:20	DWR	Mt. Juliet, TN

TTU-EX-4-72-20210330 L1332422-11 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 08:30 | Received date/time: 03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5000	04/06/21 06:27	04/06/21 06:27	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 19:07	04/04/21 19:07	JBE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1647430	20	04/08/21 01:57	04/08/21 01:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644831	1	04/02/21 17:40	04/02/21 17:40	DWR	Mt. Juliet, TN

TTU-EX-5-80-20210330 L1332422-12 GW

Collected by: Ryan Ayala | Collected date/time: 03/30/21 08:50 | Received date/time: 03/31/21 08:00

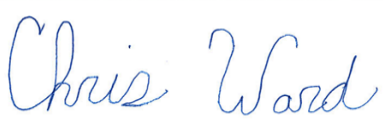
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 314.0 Mod	WG1645914	5	04/06/21 06:53	04/06/21 06:53	MCG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 19:28	04/04/21 19:28	JBE	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1647430	1	04/08/21 02:17	04/08/21 02:17	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B-SIM	WG1644831	1	04/02/21 18:00	04/02/21 18:00	DWR	Mt. Juliet, TN

TRIP BLANK L1332422-13 GW

Collected by	Collected date/time	Received date/time
Ryan Ayala	03/30/21 00:00	03/31/21 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1645560	1	04/04/21 15:20	04/04/21 15:20	JBE	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
L1332422-01	TTU-2-114-20210330	8260B
L1332422-02	TTU-2-114-20210330-DUP	8260B
L1332422-03	TTU-1-50-20210330	8260B
L1332422-04	TTU-5-110-20210330	8260B
L1332422-06	TTU-12-82-20210330	8260B
L1332422-08	TTU-14-69-20210330	8260B
L1332422-09	TTU-EX-2-74-20210330	8260B
L1332422-10	TTU-EX-3-76-20210330	8260B
L1332422-11	TTU-EX-4-72-20210330	8260B
L1332422-12	TTU-EX-5-80-20210330	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	187000		1500	20000	5000	04/05/2021 22:32	WG1645914

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	04/02/2021 11:04	WG1644384
Acrolein	U		2.54	50.0	1	04/02/2021 11:04	WG1644384
Acrylonitrile	U		0.671	10.0	1	04/02/2021 11:04	WG1644384
Benzene	1.26		0.0941	1.00	1	04/02/2021 11:04	WG1644384
Bromobenzene	U		0.118	1.00	1	04/02/2021 11:04	WG1644384
Bromodichloromethane	U		0.136	1.00	1	04/02/2021 11:04	WG1644384
Bromoform	U		0.129	1.00	1	04/02/2021 11:04	WG1644384
Bromomethane	U		0.605	5.00	1	04/02/2021 11:04	WG1644384
1,3-Butadiene	U		0.299	2.00	1	04/02/2021 11:04	WG1644384
n-Butylbenzene	U		0.157	1.00	1	04/02/2021 11:04	WG1644384
sec-Butylbenzene	U		0.125	1.00	1	04/02/2021 11:04	WG1644384
tert-Butylbenzene	U		0.127	1.00	1	04/02/2021 11:04	WG1644384
Carbon tetrachloride	U		0.128	1.00	1	04/02/2021 11:04	WG1644384
Carbon disulfide	U		0.0962	1.00	1	04/02/2021 11:04	WG1644384
Chlorobenzene	U		0.116	1.00	1	04/02/2021 11:04	WG1644384
Chlorodibromomethane	U		0.140	1.00	1	04/02/2021 11:04	WG1644384
Chloroethane	U		0.192	5.00	1	04/02/2021 11:04	WG1644384
Chloroform	1.94	E4	0.111	5.00	1	04/02/2021 11:04	WG1644384
Chloromethane	U		0.960	2.50	1	04/02/2021 11:04	WG1644384
Cyclohexane	U		0.188	1.00	1	04/02/2021 11:04	WG1644384
2-Chlorotoluene	U		0.106	1.00	1	04/02/2021 11:04	WG1644384
4-Chlorotoluene	U		0.114	1.00	1	04/02/2021 11:04	WG1644384
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/02/2021 11:04	WG1644384
1,2-Dibromoethane	U		0.126	1.00	1	04/02/2021 11:04	WG1644384
Dibromomethane	U		0.122	1.00	1	04/02/2021 11:04	WG1644384
1,2-Dichlorobenzene	U		0.107	1.00	1	04/02/2021 11:04	WG1644384
1,3-Dichlorobenzene	U		0.110	1.00	1	04/02/2021 11:04	WG1644384
1,4-Dichlorobenzene	U		0.120	1.00	1	04/02/2021 11:04	WG1644384
Dichlorodifluoromethane	U		0.374	5.00	1	04/02/2021 11:04	WG1644384
1,1-Dichloroethane	1.20		0.100	1.00	1	04/02/2021 11:04	WG1644384
1,2-Dichloroethane	U		0.0819	1.00	1	04/02/2021 11:04	WG1644384
1,1-Dichloroethene	98.3		0.188	1.00	1	04/02/2021 11:04	WG1644384
cis-1,2-Dichloroethene	1.60		0.126	1.00	1	04/02/2021 11:04	WG1644384
trans-1,2-Dichloroethene	0.208	E4	0.149	1.00	1	04/02/2021 11:04	WG1644384
1,2-Dichloropropane	U		0.149	1.00	1	04/02/2021 11:04	WG1644384
1,1-Dichloropropene	U		0.142	1.00	1	04/02/2021 11:04	WG1644384
1,3-Dichloropropane	U		0.110	1.00	1	04/02/2021 11:04	WG1644384
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/02/2021 11:04	WG1644384
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/02/2021 11:04	WG1644384
2,2-Dichloropropane	U		0.161	1.00	1	04/02/2021 11:04	WG1644384
Dicyclopentadiene	U		0.253	1.00	1	04/02/2021 11:04	WG1644384
Di-isopropyl ether	U		0.105	1.00	1	04/02/2021 11:04	WG1644384
Ethylbenzene	U		0.137	1.00	1	04/02/2021 11:04	WG1644384
4-Ethyltoluene	U		0.208	1.00	1	04/02/2021 11:04	WG1644384
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/02/2021 11:04	WG1644384
n-Hexane	U		0.749	10.0	1	04/02/2021 11:04	WG1644384
Isopropylbenzene	U		0.105	1.00	1	04/02/2021 11:04	WG1644384
p-Isopropyltoluene	U		0.120	1.00	1	04/02/2021 11:04	WG1644384
2-Butanone (MEK)	U		1.19	10.0	1	04/02/2021 11:04	WG1644384
Methyl Cyclohexane	U		0.660	1.00	1	04/02/2021 11:04	WG1644384

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	04/02/2021 11:04	WG1644384
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/02/2021 11:04	WG1644384
Methyl tert-butyl ether	U		0.101	1.00	1	04/02/2021 11:04	WG1644384
Naphthalene	U		1.00	5.00	1	04/02/2021 11:04	WG1644384
Propene	U		0.936	2.50	1	04/02/2021 11:04	WG1644384
n-Propylbenzene	U		0.0993	1.00	1	04/02/2021 11:04	WG1644384
Styrene	U		0.118	1.00	1	04/02/2021 11:04	WG1644384
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/02/2021 11:04	WG1644384
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/02/2021 11:04	WG1644384
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/02/2021 11:04	WG1644384
Tetrachloroethene	0.934	E4	0.300	1.00	1	04/02/2021 11:04	WG1644384
Toluene	U		0.278	1.00	1	04/02/2021 11:04	WG1644384
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/02/2021 11:04	WG1644384
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/02/2021 11:04	WG1644384
1,1,1-Trichloroethane	U		0.149	1.00	1	04/02/2021 11:04	WG1644384
1,1,2-Trichloroethane	2.02		0.158	1.00	1	04/02/2021 11:04	WG1644384
Trichloroethene	656		1.90	10.0	10	04/06/2021 14:24	WG1646436
Trichlorofluoromethane	U		0.160	5.00	1	04/02/2021 11:04	WG1644384
1,2,3-Trichloropropane	U		0.237	2.50	1	04/02/2021 11:04	WG1644384
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/02/2021 11:04	WG1644384
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 11:04	WG1644384
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/02/2021 11:04	WG1644384
Vinyl chloride	U		0.234	1.00	1	04/02/2021 11:04	WG1644384
Xylenes, Total	U		0.174	3.00	1	04/02/2021 11:04	WG1644384
(S) Toluene-d8	*105*			*80.0-120*		*04/02/2021 11:04*	WG1644384
(S) Toluene-d8	*99.5*			*80.0-120*		*04/06/2021 14:24*	WG1646436
(S) 4-Bromofluorobenzene	*95.8*			*77.0-126*		*04/02/2021 11:04*	WG1644384
(S) 4-Bromofluorobenzene	*98.1*			*77.0-126*		*04/06/2021 14:24*	WG1646436
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/02/2021 11:04*	WG1644384
(S) 1,2-Dichloroethane-d4	*123*			*70.0-130*		*04/06/2021 14:24*	WG1646436

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	196	R7	0.597	3.00	1	04/01/2021 21:39	WG1644043
(S) Toluene-d8	*83.7*			*77.0-127*		*04/01/2021 21:39*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	188000		1500	20000	5000	04/05/2021 22:58	WG1645914

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	04/04/2021 00:05	WG1645350
Acrolein	U		25.4	500	10	04/05/2021 23:12	WG1645898
Acrylonitrile	U		0.671	10.0	1	04/04/2021 00:05	WG1645350
Benzene	1.59		0.0941	1.00	1	04/04/2021 00:05	WG1645350
Bromobenzene	U		0.118	1.00	1	04/04/2021 00:05	WG1645350
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 00:05	WG1645350
Bromoform	U		0.129	1.00	1	04/04/2021 00:05	WG1645350
Bromomethane	U		6.05	50.0	10	04/05/2021 23:12	WG1645898
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 00:05	WG1645350
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 00:05	WG1645350
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 00:05	WG1645350
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 00:05	WG1645350
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 00:05	WG1645350
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 00:05	WG1645350
Chlorobenzene	U		0.116	1.00	1	04/04/2021 00:05	WG1645350
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 00:05	WG1645350
Chloroethane	U		1.92	50.0	10	04/05/2021 23:12	WG1645898
Chloroform	2.34	E4	0.111	5.00	1	04/04/2021 00:05	WG1645350
Chloromethane	U		9.60	25.0	10	04/05/2021 23:12	WG1645898
Cyclohexane	U		0.188	1.00	1	04/04/2021 00:05	WG1645350
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 00:05	WG1645350
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 00:05	WG1645350
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 00:05	WG1645350
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 00:05	WG1645350
Dibromomethane	U		0.122	1.00	1	04/04/2021 00:05	WG1645350
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 00:05	WG1645350
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 00:05	WG1645350
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 00:05	WG1645350
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 00:05	WG1645350
1,1-Dichloroethane	1.53		0.100	1.00	1	04/04/2021 00:05	WG1645350
1,2-Dichloroethane	0.200	E4	0.0819	1.00	1	04/04/2021 00:05	WG1645350
1,1-Dichloroethene	95.5		1.88	10.0	10	04/05/2021 23:12	WG1645898
cis-1,2-Dichloroethene	2.02		0.126	1.00	1	04/04/2021 00:05	WG1645350
trans-1,2-Dichloroethene	0.258	E4	0.149	1.00	1	04/04/2021 00:05	WG1645350
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 00:05	WG1645350
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 00:05	WG1645350
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 00:05	WG1645350
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 00:05	WG1645350
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 00:05	WG1645350
2,2-Dichloropropane	U	R7	0.161	1.00	1	04/04/2021 00:05	WG1645350
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 00:05	WG1645350
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 00:05	WG1645350
Ethylbenzene	U		0.137	1.00	1	04/04/2021 00:05	WG1645350
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 00:05	WG1645350
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 00:05	WG1645350
n-Hexane	U		0.749	10.0	1	04/04/2021 00:05	WG1645350
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 00:05	WG1645350
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 00:05	WG1645350
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 00:05	WG1645350
Methyl Cyclohexane	8.21		0.660	1.00	1	04/04/2021 00:05	WG1645350

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	04/04/2021 00:05	WG1645350
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 00:05	WG1645350
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 00:05	WG1645350
Naphthalene	U		1.00	5.00	1	04/04/2021 00:05	WG1645350
Propene	U	R5	0.936	2.50	1	04/04/2021 00:05	WG1645350
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 00:05	WG1645350
Styrene	U		0.118	1.00	1	04/04/2021 00:05	WG1645350
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 00:05	WG1645350
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 00:05	WG1645350
1,1,2-Trichlorotrifluoroethane	U		1.80	10.0	10	04/05/2021 23:12	WG1645898
Tetrachloroethene	1.01		0.300	1.00	1	04/04/2021 00:05	WG1645350
Toluene	U		0.278	1.00	1	04/04/2021 00:05	WG1645350
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 00:05	WG1645350
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 00:05	WG1645350
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 00:05	WG1645350
1,1,2-Trichloroethane	2.00		0.158	1.00	1	04/04/2021 00:05	WG1645350
Trichloroethene	720		1.90	10.0	10	04/05/2021 23:12	WG1645898
Trichlorofluoromethane	U		1.60	50.0	10	04/05/2021 23:12	WG1645898
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 00:05	WG1645350
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 00:05	WG1645350
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 00:05	WG1645350
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 00:05	WG1645350
Vinyl chloride	U		0.234	1.00	1	04/04/2021 00:05	WG1645350
Xylenes, Total	U		0.174	3.00	1	04/04/2021 00:05	WG1645350
(S) Toluene-d8	*106*			*80.0-120*		*04/04/2021 00:05*	WG1645350
(S) Toluene-d8	*119*			*80.0-120*		*04/05/2021 23:12*	WG1645898
(S) 4-Bromofluorobenzene	*101*			*77.0-126*		*04/04/2021 00:05*	WG1645350
(S) 4-Bromofluorobenzene	*98.9*			*77.0-126*		*04/05/2021 23:12*	WG1645898
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*04/04/2021 00:05*	WG1645350
(S) 1,2-Dichloroethane-d4	*88.7*			*70.0-130*		*04/05/2021 23:12*	WG1645898

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	244	R7	0.597	3.00	1	04/01/2021 21:59	WG1644043
(S) Toluene-d8	*83.8*			*77.0-127*		*04/01/2021 21:59*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	11700		150	2000	500	04/06/2021 00:44	WG1645914

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	04/03/2021 21:20	WG1645350
Acrolein	U		2.54	50.0	1	04/05/2021 23:32	WG1645898
Acrylonitrile	U		0.671	10.0	1	04/03/2021 21:20	WG1645350
Benzene	U		0.0941	1.00	1	04/03/2021 21:20	WG1645350
Bromobenzene	U		0.118	1.00	1	04/03/2021 21:20	WG1645350
Bromodichloromethane	U		0.136	1.00	1	04/03/2021 21:20	WG1645350
Bromoform	U		0.129	1.00	1	04/03/2021 21:20	WG1645350
Bromomethane	U		0.605	5.00	1	04/05/2021 23:32	WG1645898
1,3-Butadiene	U	M1	0.299	2.00	1	04/03/2021 21:20	WG1645350
n-Butylbenzene	U	M1	0.157	1.00	1	04/03/2021 21:20	WG1645350
sec-Butylbenzene	U	M1	0.125	1.00	1	04/03/2021 21:20	WG1645350
tert-Butylbenzene	U		0.127	1.00	1	04/03/2021 21:20	WG1645350
Carbon tetrachloride	U		0.128	1.00	1	04/03/2021 21:20	WG1645350
Carbon disulfide	U		0.0962	1.00	1	04/03/2021 21:20	WG1645350
Chlorobenzene	U		0.116	1.00	1	04/03/2021 21:20	WG1645350
Chlorodibromomethane	U		0.140	1.00	1	04/03/2021 21:20	WG1645350
Chloroethane	U		0.192	5.00	1	04/05/2021 23:32	WG1645898
Chloroform	U		0.111	5.00	1	04/03/2021 21:20	WG1645350
Chloromethane	U		0.960	2.50	1	04/05/2021 23:32	WG1645898
Cyclohexane	U		0.188	1.00	1	04/03/2021 21:20	WG1645350
2-Chlorotoluene	U	M1	0.106	1.00	1	04/03/2021 21:20	WG1645350
4-Chlorotoluene	U	M1	0.114	1.00	1	04/03/2021 21:20	WG1645350
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/03/2021 21:20	WG1645350
1,2-Dibromoethane	U		0.126	1.00	1	04/03/2021 21:20	WG1645350
Dibromomethane	U		0.122	1.00	1	04/03/2021 21:20	WG1645350
1,2-Dichlorobenzene	U		0.107	1.00	1	04/03/2021 21:20	WG1645350
1,3-Dichlorobenzene	U		0.110	1.00	1	04/03/2021 21:20	WG1645350
1,4-Dichlorobenzene	U		0.120	1.00	1	04/03/2021 21:20	WG1645350
Dichlorodifluoromethane	U	M1	0.374	5.00	1	04/03/2021 21:20	WG1645350
1,1-Dichloroethane	U		0.100	1.00	1	04/03/2021 21:20	WG1645350
1,2-Dichloroethane	U		0.0819	1.00	1	04/03/2021 21:20	WG1645350
1,1-Dichloroethene	1.37		0.188	1.00	1	04/05/2021 23:32	WG1645898
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/03/2021 21:20	WG1645350
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/03/2021 21:20	WG1645350
1,2-Dichloropropane	U		0.149	1.00	1	04/03/2021 21:20	WG1645350
1,1-Dichloropropene	U		0.142	1.00	1	04/03/2021 21:20	WG1645350
1,3-Dichloropropane	U		0.110	1.00	1	04/03/2021 21:20	WG1645350
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/03/2021 21:20	WG1645350
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/03/2021 21:20	WG1645350
2,2-Dichloropropane	U		0.161	1.00	1	04/03/2021 21:20	WG1645350
Dicyclopentadiene	U		0.253	1.00	1	04/03/2021 21:20	WG1645350
Di-isopropyl ether	U	M1	0.105	1.00	1	04/03/2021 21:20	WG1645350
Ethylbenzene	U		0.137	1.00	1	04/03/2021 21:20	WG1645350
4-Ethyltoluene	U		0.208	1.00	1	04/03/2021 21:20	WG1645350
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/03/2021 21:20	WG1645350
n-Hexane	U	M1	0.749	10.0	1	04/03/2021 21:20	WG1645350
Isopropylbenzene	U		0.105	1.00	1	04/03/2021 21:20	WG1645350
p-Isopropyltoluene	U		0.120	1.00	1	04/03/2021 21:20	WG1645350
2-Butanone (MEK)	U		1.19	10.0	1	04/03/2021 21:20	WG1645350
Methyl Cyclohexane	U		0.660	1.00	1	04/03/2021 21:20	WG1645350

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	04/03/2021 21:20	WG1645350
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/03/2021 21:20	WG1645350
Methyl tert-butyl ether	U		0.101	1.00	1	04/03/2021 21:20	WG1645350
Naphthalene	U		1.00	5.00	1	04/03/2021 21:20	WG1645350
Propene	U	M1	0.936	2.50	1	04/03/2021 21:20	WG1645350
n-Propylbenzene	U	M1	0.0993	1.00	1	04/03/2021 21:20	WG1645350
Styrene	U		0.118	1.00	1	04/03/2021 21:20	WG1645350
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/03/2021 21:20	WG1645350
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/03/2021 21:20	WG1645350
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/05/2021 23:32	WG1645898
Tetrachloroethene	U		0.300	1.00	1	04/03/2021 21:20	WG1645350
Toluene	U		0.278	1.00	1	04/03/2021 21:20	WG1645350
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/03/2021 21:20	WG1645350
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/03/2021 21:20	WG1645350
1,1,1-Trichloroethane	U		0.149	1.00	1	04/03/2021 21:20	WG1645350
1,1,2-Trichloroethane	U		0.158	1.00	1	04/03/2021 21:20	WG1645350
Trichloroethene	6.40		0.190	1.00	1	04/03/2021 21:20	WG1645350
Trichlorofluoromethane	U		0.160	5.00	1	04/05/2021 23:32	WG1645898
1,2,3-Trichloropropane	U		0.237	2.50	1	04/03/2021 21:20	WG1645350
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/03/2021 21:20	WG1645350
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/03/2021 21:20	WG1645350
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/03/2021 21:20	WG1645350
Vinyl chloride	U		0.234	1.00	1	04/03/2021 21:20	WG1645350
Xylenes, Total	U		0.174	3.00	1	04/03/2021 21:20	WG1645350
(S) Toluene-d8	*107*			*80.0-120*		*04/03/2021 21:20*	WG1645350
(S) Toluene-d8	*115*			*80.0-120*		*04/05/2021 23:32*	WG1645898
(S) 4-Bromofluorobenzene	*102*			*77.0-126*		*04/03/2021 21:20*	WG1645350
(S) 4-Bromofluorobenzene	*96.8*			*77.0-126*		*04/05/2021 23:32*	WG1645898
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*04/03/2021 21:20*	WG1645350
(S) 1,2-Dichloroethane-d4	*86.7*			*70.0-130*		*04/05/2021 23:32*	WG1645898

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	18.9		0.597	3.00	1	04/01/2021 22:18	WG1644043
(S) Toluene-d8	*98.0*			*77.0-127*		*04/01/2021 22:18*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	41.2		0.300	4.00	1	04/06/2021 02:03	WG1645914

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	04/03/2021 23:44	WG1645350
Acrolein	U		2.54	50.0	1	04/06/2021 00:13	WG1645898
Acrylonitrile	U		0.671	10.0	1	04/03/2021 23:44	WG1645350
Benzene	U		0.0941	1.00	1	04/03/2021 23:44	WG1645350
Bromobenzene	U		0.118	1.00	1	04/03/2021 23:44	WG1645350
Bromodichloromethane	U		0.136	1.00	1	04/03/2021 23:44	WG1645350
Bromoform	U		0.129	1.00	1	04/03/2021 23:44	WG1645350
Bromomethane	U		0.605	5.00	1	04/06/2021 00:13	WG1645898
1,3-Butadiene	U		0.299	2.00	1	04/03/2021 23:44	WG1645350
n-Butylbenzene	U		0.157	1.00	1	04/03/2021 23:44	WG1645350
sec-Butylbenzene	U		0.125	1.00	1	04/03/2021 23:44	WG1645350
tert-Butylbenzene	U		0.127	1.00	1	04/03/2021 23:44	WG1645350
Carbon tetrachloride	U		0.128	1.00	1	04/03/2021 23:44	WG1645350
Carbon disulfide	U		0.0962	1.00	1	04/03/2021 23:44	WG1645350
Chlorobenzene	U		0.116	1.00	1	04/03/2021 23:44	WG1645350
Chlorodibromomethane	U		0.140	1.00	1	04/03/2021 23:44	WG1645350
Chloroethane	U		0.192	5.00	1	04/06/2021 00:13	WG1645898
Chloroform	U		0.111	5.00	1	04/03/2021 23:44	WG1645350
Chloromethane	U		0.960	2.50	1	04/06/2021 00:13	WG1645898
Cyclohexane	U		0.188	1.00	1	04/03/2021 23:44	WG1645350
2-Chlorotoluene	U		0.106	1.00	1	04/03/2021 23:44	WG1645350
4-Chlorotoluene	U		0.114	1.00	1	04/03/2021 23:44	WG1645350
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/03/2021 23:44	WG1645350
1,2-Dibromoethane	U		0.126	1.00	1	04/03/2021 23:44	WG1645350
Dibromomethane	U		0.122	1.00	1	04/03/2021 23:44	WG1645350
1,2-Dichlorobenzene	U		0.107	1.00	1	04/03/2021 23:44	WG1645350
1,3-Dichlorobenzene	U		0.110	1.00	1	04/03/2021 23:44	WG1645350
1,4-Dichlorobenzene	U		0.120	1.00	1	04/03/2021 23:44	WG1645350
Dichlorodifluoromethane	U		0.374	5.00	1	04/03/2021 23:44	WG1645350
1,1-Dichloroethane	U		0.100	1.00	1	04/03/2021 23:44	WG1645350
1,2-Dichloroethane	U		0.0819	1.00	1	04/03/2021 23:44	WG1645350
1,1-Dichloroethene	U		0.188	1.00	1	04/06/2021 00:13	WG1645898
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/03/2021 23:44	WG1645350
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/03/2021 23:44	WG1645350
1,2-Dichloropropane	U		0.149	1.00	1	04/03/2021 23:44	WG1645350
1,1-Dichloropropene	U		0.142	1.00	1	04/03/2021 23:44	WG1645350
1,3-Dichloropropane	U		0.110	1.00	1	04/03/2021 23:44	WG1645350
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/03/2021 23:44	WG1645350
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/03/2021 23:44	WG1645350
2,2-Dichloropropane	U	R7	0.161	1.00	1	04/03/2021 23:44	WG1645350
Dicyclopentadiene	U		0.253	1.00	1	04/03/2021 23:44	WG1645350
Di-isopropyl ether	U		0.105	1.00	1	04/03/2021 23:44	WG1645350
Ethylbenzene	U		0.137	1.00	1	04/03/2021 23:44	WG1645350
4-Ethyltoluene	U		0.208	1.00	1	04/03/2021 23:44	WG1645350
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/03/2021 23:44	WG1645350
n-Hexane	U		0.749	10.0	1	04/03/2021 23:44	WG1645350
Isopropylbenzene	U		0.105	1.00	1	04/03/2021 23:44	WG1645350
p-Isopropyltoluene	U		0.120	1.00	1	04/03/2021 23:44	WG1645350
2-Butanone (MEK)	U		1.19	10.0	1	04/03/2021 23:44	WG1645350
Methyl Cyclohexane	U		0.660	1.00	1	04/03/2021 23:44	WG1645350

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	04/03/2021 23:44	WG1645350
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/03/2021 23:44	WG1645350
Methyl tert-butyl ether	U		0.101	1.00	1	04/03/2021 23:44	WG1645350
Naphthalene	U		1.00	5.00	1	04/03/2021 23:44	WG1645350
Propene	U	R5	0.936	2.50	1	04/03/2021 23:44	WG1645350
n-Propylbenzene	U		0.0993	1.00	1	04/03/2021 23:44	WG1645350
Styrene	U		0.118	1.00	1	04/03/2021 23:44	WG1645350
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/03/2021 23:44	WG1645350
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/03/2021 23:44	WG1645350
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/06/2021 00:13	WG1645898
Tetrachloroethene	U		0.300	1.00	1	04/03/2021 23:44	WG1645350
Toluene	U		0.278	1.00	1	04/03/2021 23:44	WG1645350
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/03/2021 23:44	WG1645350
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/03/2021 23:44	WG1645350
1,1,1-Trichloroethane	U		0.149	1.00	1	04/03/2021 23:44	WG1645350
1,1,2-Trichloroethane	U		0.158	1.00	1	04/03/2021 23:44	WG1645350
Trichloroethene	U		0.190	1.00	1	04/03/2021 23:44	WG1645350
Trichlorofluoromethane	U		0.160	5.00	1	04/06/2021 00:13	WG1645898
1,2,3-Trichloropropane	U		0.237	2.50	1	04/03/2021 23:44	WG1645350
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/03/2021 23:44	WG1645350
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/03/2021 23:44	WG1645350
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/03/2021 23:44	WG1645350
Vinyl chloride	U		0.234	1.00	1	04/03/2021 23:44	WG1645350
Xylenes, Total	U		0.174	3.00	1	04/03/2021 23:44	WG1645350
(S) Toluene-d8	*105*			*80.0-120*		*04/03/2021 23:44*	WG1645350
(S) Toluene-d8	*118*			*80.0-120*		*04/06/2021 00:13*	WG1645898
(S) 4-Bromofluorobenzene	*95.9*			*77.0-126*		*04/03/2021 23:44*	WG1645350
(S) 4-Bromofluorobenzene	*103*			*77.0-126*		*04/06/2021 00:13*	WG1645898
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*04/03/2021 23:44*	WG1645350
(S) 1,2-Dichloroethane-d4	*86.8*			*70.0-130*		*04/06/2021 00:13*	WG1645898

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	R7	0.597	3.00	1	04/01/2021 22:38	WG1644043
(S) Toluene-d8	*97.8*			*77.0-127*		*04/01/2021 22:38*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	8.21		0.300	4.00	1	04/06/2021 02:56	WG1646082

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	04/04/2021 16:42	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 16:42	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 16:42	WG1645560
Benzene	U		0.0941	1.00	1	04/04/2021 16:42	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 16:42	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 16:42	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 16:42	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 16:42	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 16:42	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 16:42	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 16:42	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 16:42	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 16:42	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 16:42	WG1645560
Chlorobenzene	U		0.116	1.00	1	04/04/2021 16:42	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 16:42	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 16:42	WG1645560
Chloroform	U		0.111	5.00	1	04/04/2021 16:42	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 16:42	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 16:42	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 16:42	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 16:42	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 16:42	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 16:42	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 16:42	WG1645560
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 16:42	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 16:42	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 16:42	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 16:42	WG1645560
1,1-Dichloroethane	U		0.100	1.00	1	04/04/2021 16:42	WG1645560
1,2-Dichloroethane	U		0.0819	1.00	1	04/04/2021 16:42	WG1645560
1,1-Dichloroethene	U		0.188	1.00	1	04/04/2021 16:42	WG1645560
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/04/2021 16:42	WG1645560
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/04/2021 16:42	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 16:42	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 16:42	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 16:42	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 16:42	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 16:42	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 16:42	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 16:42	WG1645560
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 16:42	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 16:42	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 16:42	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 16:42	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 16:42	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 16:42	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 16:42	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 16:42	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 16:42	WG1645560

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	04/04/2021 16:42	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 16:42	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 16:42	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 16:42	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 16:42	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 16:42	WG1645560
Styrene	U		0.118	1.00	1	04/04/2021 16:42	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 16:42	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 16:42	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 16:42	WG1645560
Tetrachloroethene	U		0.300	1.00	1	04/04/2021 16:42	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 16:42	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 16:42	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 16:42	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 16:42	WG1645560
1,1,2-Trichloroethane	U		0.158	1.00	1	04/04/2021 16:42	WG1645560
Trichloroethene	7.53		0.190	1.00	1	04/04/2021 16:42	WG1645560
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 16:42	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 16:42	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 16:42	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 16:42	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 16:42	WG1645560
Vinyl chloride	U		0.234	1.00	1	04/04/2021 16:42	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 16:42	WG1645560
(S) Toluene-d8	*103*			*80.0-120*		*04/04/2021 16:42*	WG1645560
(S) 4-Bromofluorobenzene	*92.4*			*77.0-126*		*04/04/2021 16:42*	WG1645560
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*04/04/2021 16:42*	WG1645560

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	R7	0.597	3.00	1	04/01/2021 22:58	WG1644043
(S) Toluene-d8	*97.5*			*77.0-127*		*04/01/2021 22:58*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	143000		1500	20000	5000	04/05/2021 23:24	WG1645914

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	04/04/2021 19:49	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 19:49	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 19:49	WG1645560
Benzene	0.777	E4	0.0941	1.00	1	04/04/2021 19:49	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 19:49	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 19:49	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 19:49	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 19:49	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 19:49	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 19:49	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 19:49	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 19:49	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 19:49	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 19:49	WG1645560
Chlorobenzene	U		0.116	1.00	1	04/04/2021 19:49	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 19:49	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 19:49	WG1645560
Chloroform	1.54	E4	0.111	5.00	1	04/04/2021 19:49	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 19:49	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 19:49	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 19:49	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 19:49	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 19:49	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 19:49	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 19:49	WG1645560
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 19:49	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 19:49	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 19:49	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 19:49	WG1645560
1,1-Dichloroethane	0.825	E4	0.100	1.00	1	04/04/2021 19:49	WG1645560
1,2-Dichloroethane	U		0.0819	1.00	1	04/04/2021 19:49	WG1645560
1,1-Dichloroethene	65.2		0.188	1.00	1	04/04/2021 19:49	WG1645560
cis-1,2-Dichloroethene	1.14		0.126	1.00	1	04/04/2021 19:49	WG1645560
trans-1,2-Dichloroethene	0.156	E4	0.149	1.00	1	04/04/2021 19:49	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 19:49	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 19:49	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 19:49	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 19:49	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 19:49	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 19:49	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 19:49	WG1645560
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 19:49	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 19:49	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 19:49	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 19:49	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 19:49	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 19:49	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 19:49	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 19:49	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 19:49	WG1645560

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	04/04/2021 19:49	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 19:49	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 19:49	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 19:49	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 19:49	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 19:49	WG1645560
Styrene	U		0.118	1.00	1	04/04/2021 19:49	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 19:49	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 19:49	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 19:49	WG1645560
Tetrachloroethene	0.909	E4	0.300	1.00	1	04/04/2021 19:49	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 19:49	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 19:49	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 19:49	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 19:49	WG1645560
1,1,2-Trichloroethane	1.35		0.158	1.00	1	04/04/2021 19:49	WG1645560
Trichloroethene	480		1.90	10.0	10	04/08/2021 00:34	WG1647430
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 19:49	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 19:49	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 19:49	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 19:49	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 19:49	WG1645560
Vinyl chloride	U		0.234	1.00	1	04/04/2021 19:49	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 19:49	WG1645560
(S) Toluene-d8	*103*			*80.0-120*		*04/04/2021 19:49*	WG1645560
(S) Toluene-d8	*112*			*80.0-120*		*04/08/2021 00:34*	WG1647430
(S) 4-Bromofluorobenzene	*94.0*			*77.0-126*		*04/04/2021 19:49*	WG1645560
(S) 4-Bromofluorobenzene	*92.2*			*77.0-126*		*04/08/2021 00:34*	WG1647430
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/04/2021 19:49*	WG1645560
(S) 1,2-Dichloroethane-d4	*93.4*			*70.0-130*		*04/08/2021 00:34*	WG1647430

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	115	R7	0.597	3.00	1	04/01/2021 23:18	WG1644043
(S) Toluene-d8	*88.5*			*77.0-127*		*04/01/2021 23:18*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	29800		150	2000	500	04/06/2021 03:48	WG1645914

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	04/04/2021 17:03	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 17:03	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 17:03	WG1645560
Benzene	U		0.0941	1.00	1	04/04/2021 17:03	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 17:03	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 17:03	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 17:03	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 17:03	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 17:03	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 17:03	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 17:03	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 17:03	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 17:03	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 17:03	WG1645560
Chlorobenzene	U		0.116	1.00	1	04/04/2021 17:03	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 17:03	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 17:03	WG1645560
Chloroform	0.124	E4	0.111	5.00	1	04/04/2021 17:03	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 17:03	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 17:03	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 17:03	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 17:03	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 17:03	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 17:03	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 17:03	WG1645560
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 17:03	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 17:03	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 17:03	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 17:03	WG1645560
1,1-Dichloroethane	U		0.100	1.00	1	04/04/2021 17:03	WG1645560
1,2-Dichloroethane	U		0.0819	1.00	1	04/04/2021 17:03	WG1645560
1,1-Dichloroethene	6.35		0.188	1.00	1	04/04/2021 17:03	WG1645560
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/04/2021 17:03	WG1645560
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/04/2021 17:03	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 17:03	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 17:03	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 17:03	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 17:03	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 17:03	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 17:03	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 17:03	WG1645560
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 17:03	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 17:03	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 17:03	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 17:03	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 17:03	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 17:03	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 17:03	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 17:03	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 17:03	WG1645560

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	04/04/2021 17:03	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 17:03	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 17:03	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 17:03	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 17:03	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 17:03	WG1645560
Styrene	U		0.118	1.00	1	04/04/2021 17:03	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 17:03	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 17:03	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 17:03	WG1645560
Tetrachloroethene	U		0.300	1.00	1	04/04/2021 17:03	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 17:03	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 17:03	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 17:03	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 17:03	WG1645560
1,1,2-Trichloroethane	U		0.158	1.00	1	04/04/2021 17:03	WG1645560
Trichloroethene	17.1		0.190	1.00	1	04/04/2021 17:03	WG1645560
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 17:03	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 17:03	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 17:03	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 17:03	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 17:03	WG1645560
Vinyl chloride	U		0.234	1.00	1	04/04/2021 17:03	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 17:03	WG1645560
(S) Toluene-d8	*109*			*80.0-120*		*04/04/2021 17:03*	WG1645560
(S) 4-Bromofluorobenzene	*99.3*			*77.0-126*		*04/04/2021 17:03*	WG1645560
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*04/04/2021 17:03*	WG1645560

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	37.7	R7	0.597	3.00	1	04/01/2021 23:38	WG1644043
(S) Toluene-d8	*97.3*			*77.0-127*		*04/01/2021 23:38*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	160000		1500	20000	5000	04/06/2021 04:15	WG1645914

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	04/04/2021 20:09	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 20:09	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 20:09	WG1645560
Benzene	2.19		0.0941	1.00	1	04/04/2021 20:09	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 20:09	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 20:09	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 20:09	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 20:09	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 20:09	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 20:09	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 20:09	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 20:09	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 20:09	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 20:09	WG1645560
Chlorobenzene	U		0.116	1.00	1	04/04/2021 20:09	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 20:09	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 20:09	WG1645560
Chloroform	2.50	E4	0.111	5.00	1	04/04/2021 20:09	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 20:09	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 20:09	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 20:09	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 20:09	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 20:09	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 20:09	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 20:09	WG1645560
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 20:09	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 20:09	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 20:09	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 20:09	WG1645560
1,1-Dichloroethane	1.70		0.100	1.00	1	04/04/2021 20:09	WG1645560
1,2-Dichloroethane	U		0.0819	1.00	1	04/04/2021 20:09	WG1645560
1,1-Dichloroethene	133		4.70	25.0	25	04/08/2021 00:54	WG1647430
cis-1,2-Dichloroethene	3.07		0.126	1.00	1	04/04/2021 20:09	WG1645560
trans-1,2-Dichloroethene	0.467	E4	0.149	1.00	1	04/04/2021 20:09	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 20:09	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 20:09	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 20:09	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 20:09	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 20:09	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 20:09	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 20:09	WG1645560
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 20:09	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 20:09	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 20:09	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 20:09	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 20:09	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 20:09	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 20:09	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 20:09	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 20:09	WG1645560

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	04/04/2021 20:09	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 20:09	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 20:09	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 20:09	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 20:09	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 20:09	WG1645560
Styrene	U		0.118	1.00	1	04/04/2021 20:09	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 20:09	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 20:09	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 20:09	WG1645560
Tetrachloroethene	1.97		0.300	1.00	1	04/04/2021 20:09	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 20:09	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 20:09	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 20:09	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 20:09	WG1645560
1,1,2-Trichloroethane	2.58		0.158	1.00	1	04/04/2021 20:09	WG1645560
Trichloroethene	990		4.75	25.0	25	04/08/2021 00:54	WG1647430
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 20:09	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 20:09	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 20:09	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 20:09	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 20:09	WG1645560
Vinyl chloride	U		0.234	1.00	1	04/04/2021 20:09	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 20:09	WG1645560
(S) Toluene-d8	*106*			*80.0-120*		*04/04/2021 20:09*	WG1645560
(S) Toluene-d8	*113*			*80.0-120*		*04/08/2021 00:54*	WG1647430
(S) 4-Bromofluorobenzene	*94.5*			*77.0-126*		*04/04/2021 20:09*	WG1645560
(S) 4-Bromofluorobenzene	*94.8*			*77.0-126*		*04/08/2021 00:54*	WG1647430
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*04/04/2021 20:09*	WG1645560
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*		*04/08/2021 00:54*	WG1647430

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	R7	0.597	3.00	1	04/01/2021 23:57	WG1644043
(S) Toluene-d8	*80.6*			*77.0-127*		*04/01/2021 23:57*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	106000		1500	20000	5000	04/06/2021 04:41	WG1645914

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	04/04/2021 20:30	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 20:30	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 20:30	WG1645560
Benzene	1.16		0.0941	1.00	1	04/04/2021 20:30	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 20:30	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 20:30	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 20:30	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 20:30	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 20:30	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 20:30	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 20:30	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 20:30	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 20:30	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 20:30	WG1645560
Chlorobenzene	U		0.116	1.00	1	04/04/2021 20:30	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 20:30	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 20:30	WG1645560
Chloroform	1.89	E4	0.111	5.00	1	04/04/2021 20:30	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 20:30	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 20:30	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 20:30	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 20:30	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 20:30	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 20:30	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 20:30	WG1645560
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 20:30	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 20:30	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 20:30	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 20:30	WG1645560
1,1-Dichloroethane	1.13		0.100	1.00	1	04/04/2021 20:30	WG1645560
1,2-Dichloroethane	U		0.0819	1.00	1	04/04/2021 20:30	WG1645560
1,1-Dichloroethene	174		3.76	20.0	20	04/08/2021 01:15	WG1647430
cis-1,2-Dichloroethene	2.03		0.126	1.00	1	04/04/2021 20:30	WG1645560
trans-1,2-Dichloroethene	0.266	E4	0.149	1.00	1	04/04/2021 20:30	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 20:30	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 20:30	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 20:30	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 20:30	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 20:30	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 20:30	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 20:30	WG1645560
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 20:30	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 20:30	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 20:30	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 20:30	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 20:30	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 20:30	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 20:30	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 20:30	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 20:30	WG1645560

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	04/04/2021 20:30	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 20:30	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 20:30	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 20:30	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 20:30	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 20:30	WG1645560
Styrene	U		0.118	1.00	1	04/04/2021 20:30	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 20:30	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 20:30	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 20:30	WG1645560
Tetrachloroethene	1.66		0.300	1.00	1	04/04/2021 20:30	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 20:30	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 20:30	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 20:30	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 20:30	WG1645560
1,1,2-Trichloroethane	2.30		0.158	1.00	1	04/04/2021 20:30	WG1645560
Trichloroethene	634		3.80	20.0	20	04/08/2021 01:15	WG1647430
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 20:30	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 20:30	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 20:30	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 20:30	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 20:30	WG1645560
Vinyl chloride	U		0.234	1.00	1	04/04/2021 20:30	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 20:30	WG1645560
(S) Toluene-d8	*106*			*80.0-120*		*04/04/2021 20:30*	WG1645560
(S) Toluene-d8	*113*			*80.0-120*		*04/08/2021 01:15*	WG1647430
(S) 4-Bromofluorobenzene	*93.4*			*77.0-126*		*04/04/2021 20:30*	WG1645560
(S) 4-Bromofluorobenzene	*96.6*			*77.0-126*		*04/08/2021 01:15*	WG1647430
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*04/04/2021 20:30*	WG1645560
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*		*04/08/2021 01:15*	WG1647430

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	334	R7	0.597	3.00	1	04/02/2021 00:17	WG1644043
(S) Toluene-d8	*86.9*			*77.0-127*		*04/02/2021 00:17*	WG1644043

Wet Chemistry by Method 314.0 Mod

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Perchlorate	441000		1500	20000	5000	04/06/2021 06:01	WG1645914

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	04/04/2021 18:47	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 18:47	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 18:47	WG1645560
Benzene	12.3		0.0941	1.00	1	04/04/2021 18:47	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 18:47	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 18:47	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 18:47	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 18:47	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 18:47	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 18:47	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 18:47	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 18:47	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 18:47	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 18:47	WG1645560
Chlorobenzene	0.315	E4	0.116	1.00	1	04/04/2021 18:47	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 18:47	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 18:47	WG1645560
Chloroform	11.6		0.111	5.00	1	04/04/2021 18:47	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 18:47	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 18:47	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 18:47	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 18:47	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 18:47	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 18:47	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 18:47	WG1645560
1,2-Dichlorobenzene	0.455	E4	0.107	1.00	1	04/04/2021 18:47	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 18:47	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 18:47	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 18:47	WG1645560
1,1-Dichloroethane	9.79		0.100	1.00	1	04/04/2021 18:47	WG1645560
1,2-Dichloroethane	1.76		0.0819	1.00	1	04/04/2021 18:47	WG1645560
1,1-Dichloroethene	688		18.8	100	100	04/08/2021 01:36	WG1647430
cis-1,2-Dichloroethene	5.21		0.126	1.00	1	04/04/2021 18:47	WG1645560
trans-1,2-Dichloroethene	1.87		0.149	1.00	1	04/04/2021 18:47	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 18:47	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 18:47	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 18:47	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 18:47	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 18:47	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 18:47	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 18:47	WG1645560
Di-isopropyl ether	0.148	E4	0.105	1.00	1	04/04/2021 18:47	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 18:47	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 18:47	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 18:47	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 18:47	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 18:47	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 18:47	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 18:47	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 18:47	WG1645560

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	0.879	E4	0.430	5.00	1	04/04/2021 18:47	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 18:47	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 18:47	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 18:47	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 18:47	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 18:47	WG1645560
Styrene	U		0.118	1.00	1	04/04/2021 18:47	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 18:47	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 18:47	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 18:47	WG1645560
Tetrachloroethene	10.4		0.300	1.00	1	04/04/2021 18:47	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 18:47	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 18:47	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 18:47	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 18:47	WG1645560
1,1,2-Trichloroethane	10.7		0.158	1.00	1	04/04/2021 18:47	WG1645560
Trichloroethene	5560		19.0	100	100	04/08/2021 01:36	WG1647430
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 18:47	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 18:47	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 18:47	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 18:47	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 18:47	WG1645560
Vinyl chloride	0.423	E4	0.234	1.00	1	04/04/2021 18:47	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 18:47	WG1645560
(S) Toluene-d8	*107*			*80.0-120*		*04/04/2021 18:47*	WG1645560
(S) Toluene-d8	*111*			*80.0-120*		*04/08/2021 01:36*	WG1647430
(S) 4-Bromofluorobenzene	*100*			*77.0-126*		*04/04/2021 18:47*	WG1645560
(S) 4-Bromofluorobenzene	*93.5*			*77.0-126*		*04/08/2021 01:36*	WG1647430
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*04/04/2021 18:47*	WG1645560
(S) 1,2-Dichloroethane-d4	*97.0*			*70.0-130*		*04/08/2021 01:36*	WG1647430

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	697		0.597	3.00	1	04/02/2021 17:20	WG1644831
(S) Toluene-d8	*93.0*			*77.0-127*		*04/02/2021 17:20*	WG1644831

Wet Chemistry by Method 314.0 Mod

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Perchlorate	88400		1500	20000	5000	04/06/2021 06:27	WG1645914

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	04/04/2021 19:07	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 19:07	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 19:07	WG1645560
Benzene	0.813	E4	0.0941	1.00	1	04/04/2021 19:07	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 19:07	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 19:07	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 19:07	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 19:07	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 19:07	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 19:07	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 19:07	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 19:07	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 19:07	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 19:07	WG1645560
Chlorobenzene	U		0.116	1.00	1	04/04/2021 19:07	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 19:07	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 19:07	WG1645560
Chloroform	1.34	E4	0.111	5.00	1	04/04/2021 19:07	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 19:07	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 19:07	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 19:07	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 19:07	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 19:07	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 19:07	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 19:07	WG1645560
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 19:07	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 19:07	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 19:07	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 19:07	WG1645560
1,1-Dichloroethane	1.21		0.100	1.00	1	04/04/2021 19:07	WG1645560
1,2-Dichloroethane	U		0.0819	1.00	1	04/04/2021 19:07	WG1645560
1,1-Dichloroethene	68.2		0.188	1.00	1	04/04/2021 19:07	WG1645560
cis-1,2-Dichloroethene	1.94		0.126	1.00	1	04/04/2021 19:07	WG1645560
trans-1,2-Dichloroethene	0.413	E4	0.149	1.00	1	04/04/2021 19:07	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 19:07	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 19:07	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 19:07	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 19:07	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 19:07	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 19:07	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 19:07	WG1645560
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 19:07	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 19:07	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 19:07	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 19:07	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 19:07	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 19:07	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 19:07	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 19:07	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 19:07	WG1645560

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	04/04/2021 19:07	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 19:07	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 19:07	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 19:07	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 19:07	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 19:07	WG1645560
Styrene	U		0.118	1.00	1	04/04/2021 19:07	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 19:07	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 19:07	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 19:07	WG1645560
Tetrachloroethene	0.644	E4	0.300	1.00	1	04/04/2021 19:07	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 19:07	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 19:07	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 19:07	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 19:07	WG1645560
1,1,2-Trichloroethane	0.706	E4	0.158	1.00	1	04/04/2021 19:07	WG1645560
Trichloroethene	486		3.80	20.0	20	04/08/2021 01:57	WG1647430
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 19:07	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 19:07	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 19:07	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 19:07	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 19:07	WG1645560
Vinyl chloride	U		0.234	1.00	1	04/04/2021 19:07	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 19:07	WG1645560
(S) Toluene-d8	*104*			*80.0-120*		*04/04/2021 19:07*	WG1645560
(S) Toluene-d8	*134*	S10		*80.0-120*		*04/08/2021 01:57*	WG1647430
(S) 4-Bromofluorobenzene	*96.1*			*77.0-126*		*04/04/2021 19:07*	WG1645560
(S) 4-Bromofluorobenzene	*99.6*			*77.0-126*		*04/08/2021 01:57*	WG1647430
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/04/2021 19:07*	WG1645560
(S) 1,2-Dichloroethane-d4	*97.1*			*70.0-130*		*04/08/2021 01:57*	WG1647430

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	16.3		0.597	3.00	1	04/02/2021 17:40	WG1644831
(S) Toluene-d8	*88.9*			*77.0-127*		*04/02/2021 17:40*	WG1644831

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	M2	1.50	20.0	5	04/06/2021 06:53	WG1645914

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	04/04/2021 19:28	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 19:28	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 19:28	WG1645560
Benzene	U		0.0941	1.00	1	04/04/2021 19:28	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 19:28	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 19:28	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 19:28	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 19:28	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 19:28	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 19:28	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 19:28	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 19:28	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 19:28	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 19:28	WG1645560
Chlorobenzene	U		0.116	1.00	1	04/04/2021 19:28	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 19:28	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 19:28	WG1645560
Chloroform	U		0.111	5.00	1	04/04/2021 19:28	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 19:28	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 19:28	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 19:28	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 19:28	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 19:28	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 19:28	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 19:28	WG1645560
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 19:28	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 19:28	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 19:28	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 19:28	WG1645560
1,1-Dichloroethane	U		0.100	1.00	1	04/04/2021 19:28	WG1645560
1,2-Dichloroethane	U		0.0819	1.00	1	04/04/2021 19:28	WG1645560
1,1-Dichloroethene	U		0.188	1.00	1	04/08/2021 02:17	WG1647430
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/04/2021 19:28	WG1645560
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/04/2021 19:28	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 19:28	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 19:28	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 19:28	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 19:28	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 19:28	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 19:28	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 19:28	WG1645560
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 19:28	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 19:28	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 19:28	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 19:28	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 19:28	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 19:28	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 19:28	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 19:28	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 19:28	WG1645560

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	04/04/2021 19:28	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 19:28	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 19:28	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 19:28	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 19:28	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 19:28	WG1645560
Styrene	U		0.118	1.00	1	04/04/2021 19:28	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 19:28	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 19:28	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 19:28	WG1645560
Tetrachloroethene	U		0.300	1.00	1	04/04/2021 19:28	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 19:28	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 19:28	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 19:28	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 19:28	WG1645560
1,1,2-Trichloroethane	U		0.158	1.00	1	04/04/2021 19:28	WG1645560
Trichloroethene	6.53		0.190	1.00	1	04/08/2021 02:17	WG1647430
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 19:28	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 19:28	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 19:28	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 19:28	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 19:28	WG1645560
Vinyl chloride	U		0.234	1.00	1	04/04/2021 19:28	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 19:28	WG1645560
(S) Toluene-d8	*105*			*80.0-120*		*04/04/2021 19:28*	WG1645560
(S) Toluene-d8	*111*			*80.0-120*		*04/08/2021 02:17*	WG1647430
(S) 4-Bromofluorobenzene	*96.9*			*77.0-126*		*04/04/2021 19:28*	WG1645560
(S) 4-Bromofluorobenzene	*95.9*			*77.0-126*		*04/08/2021 02:17*	WG1647430
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*04/04/2021 19:28*	WG1645560
(S) 1,2-Dichloroethane-d4	*97.7*			*70.0-130*		*04/08/2021 02:17*	WG1647430

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	04/02/2021 18:00	WG1644831
(S) Toluene-d8	*97.4*			*77.0-127*		*04/02/2021 18:00*	WG1644831

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	04/04/2021 15:20	WG1645560
Acrolein	U		2.54	50.0	1	04/04/2021 15:20	WG1645560
Acrylonitrile	U		0.671	10.0	1	04/04/2021 15:20	WG1645560
Benzene	U		0.0941	1.00	1	04/04/2021 15:20	WG1645560
Bromobenzene	U		0.118	1.00	1	04/04/2021 15:20	WG1645560
Bromodichloromethane	U		0.136	1.00	1	04/04/2021 15:20	WG1645560
Bromoform	U		0.129	1.00	1	04/04/2021 15:20	WG1645560
Bromomethane	U		0.605	5.00	1	04/04/2021 15:20	WG1645560
1,3-Butadiene	U		0.299	2.00	1	04/04/2021 15:20	WG1645560
n-Butylbenzene	U		0.157	1.00	1	04/04/2021 15:20	WG1645560
sec-Butylbenzene	U		0.125	1.00	1	04/04/2021 15:20	WG1645560
tert-Butylbenzene	U		0.127	1.00	1	04/04/2021 15:20	WG1645560
Carbon tetrachloride	U		0.128	1.00	1	04/04/2021 15:20	WG1645560
Carbon disulfide	U		0.0962	1.00	1	04/04/2021 15:20	WG1645560
Chlorobenzene	U		0.116	1.00	1	04/04/2021 15:20	WG1645560
Chlorodibromomethane	U		0.140	1.00	1	04/04/2021 15:20	WG1645560
Chloroethane	U		0.192	5.00	1	04/04/2021 15:20	WG1645560
Chloroform	U		0.111	5.00	1	04/04/2021 15:20	WG1645560
Chloromethane	U		0.960	2.50	1	04/04/2021 15:20	WG1645560
Cyclohexane	U		0.188	1.00	1	04/04/2021 15:20	WG1645560
2-Chlorotoluene	U		0.106	1.00	1	04/04/2021 15:20	WG1645560
4-Chlorotoluene	U		0.114	1.00	1	04/04/2021 15:20	WG1645560
1,2-Dibromo-3-Chloropropane	U		0.276	5.00	1	04/04/2021 15:20	WG1645560
1,2-Dibromoethane	U		0.126	1.00	1	04/04/2021 15:20	WG1645560
Dibromomethane	U		0.122	1.00	1	04/04/2021 15:20	WG1645560
1,2-Dichlorobenzene	U		0.107	1.00	1	04/04/2021 15:20	WG1645560
1,3-Dichlorobenzene	U		0.110	1.00	1	04/04/2021 15:20	WG1645560
1,4-Dichlorobenzene	U		0.120	1.00	1	04/04/2021 15:20	WG1645560
Dichlorodifluoromethane	U		0.374	5.00	1	04/04/2021 15:20	WG1645560
1,1-Dichloroethane	U		0.100	1.00	1	04/04/2021 15:20	WG1645560
1,2-Dichloroethane	U		0.0819	1.00	1	04/04/2021 15:20	WG1645560
1,1-Dichloroethene	U		0.188	1.00	1	04/04/2021 15:20	WG1645560
cis-1,2-Dichloroethene	U		0.126	1.00	1	04/04/2021 15:20	WG1645560
trans-1,2-Dichloroethene	U		0.149	1.00	1	04/04/2021 15:20	WG1645560
1,2-Dichloropropane	U		0.149	1.00	1	04/04/2021 15:20	WG1645560
1,1-Dichloropropene	U		0.142	1.00	1	04/04/2021 15:20	WG1645560
1,3-Dichloropropane	U		0.110	1.00	1	04/04/2021 15:20	WG1645560
cis-1,3-Dichloropropene	U		0.111	1.00	1	04/04/2021 15:20	WG1645560
trans-1,3-Dichloropropene	U		0.118	1.00	1	04/04/2021 15:20	WG1645560
2,2-Dichloropropane	U		0.161	1.00	1	04/04/2021 15:20	WG1645560
Dicyclopentadiene	U		0.253	1.00	1	04/04/2021 15:20	WG1645560
Di-isopropyl ether	U		0.105	1.00	1	04/04/2021 15:20	WG1645560
Ethylbenzene	U		0.137	1.00	1	04/04/2021 15:20	WG1645560
4-Ethyltoluene	U		0.208	1.00	1	04/04/2021 15:20	WG1645560
Hexachloro-1,3-butadiene	U		0.337	1.00	1	04/04/2021 15:20	WG1645560
n-Hexane	U		0.749	10.0	1	04/04/2021 15:20	WG1645560
Isopropylbenzene	U		0.105	1.00	1	04/04/2021 15:20	WG1645560
p-Isopropyltoluene	U		0.120	1.00	1	04/04/2021 15:20	WG1645560
2-Butanone (MEK)	U		1.19	10.0	1	04/04/2021 15:20	WG1645560
Methyl Cyclohexane	U		0.660	1.00	1	04/04/2021 15:20	WG1645560
Methylene Chloride	U		0.430	5.00	1	04/04/2021 15:20	WG1645560
4-Methyl-2-pentanone (MIBK)	U		0.478	10.0	1	04/04/2021 15:20	WG1645560
Methyl tert-butyl ether	U		0.101	1.00	1	04/04/2021 15:20	WG1645560
Naphthalene	U		1.00	5.00	1	04/04/2021 15:20	WG1645560
Propene	U		0.936	2.50	1	04/04/2021 15:20	WG1645560
n-Propylbenzene	U		0.0993	1.00	1	04/04/2021 15:20	WG1645560

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	04/04/2021 15:20	WG1645560
1,1,1,2-Tetrachloroethane	U		0.147	1.00	1	04/04/2021 15:20	WG1645560
1,1,2,2-Tetrachloroethane	U		0.133	1.00	1	04/04/2021 15:20	WG1645560
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00	1	04/04/2021 15:20	WG1645560
Tetrachloroethene	U		0.300	1.00	1	04/04/2021 15:20	WG1645560
Toluene	U		0.278	1.00	1	04/04/2021 15:20	WG1645560
1,2,3-Trichlorobenzene	U		0.230	1.00	1	04/04/2021 15:20	WG1645560
1,2,4-Trichlorobenzene	U		0.481	1.00	1	04/04/2021 15:20	WG1645560
1,1,1-Trichloroethane	U		0.149	1.00	1	04/04/2021 15:20	WG1645560
1,1,2-Trichloroethane	U		0.158	1.00	1	04/04/2021 15:20	WG1645560
Trichloroethene	U		0.190	1.00	1	04/04/2021 15:20	WG1645560
Trichlorofluoromethane	U		0.160	5.00	1	04/04/2021 15:20	WG1645560
1,2,3-Trichloropropane	U		0.237	2.50	1	04/04/2021 15:20	WG1645560
1,2,4-Trimethylbenzene	U		0.322	1.00	1	04/04/2021 15:20	WG1645560
1,2,3-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 15:20	WG1645560
1,3,5-Trimethylbenzene	U		0.104	1.00	1	04/04/2021 15:20	WG1645560
Vinyl chloride	U		0.234	1.00	1	04/04/2021 15:20	WG1645560
Xylenes, Total	U		0.174	3.00	1	04/04/2021 15:20	WG1645560
(S) Toluene-d8	*102*			*80.0-120*		*04/04/2021 15:20*	WG1645560
(S) 4-Bromofluorobenzene	*95.6*			*77.0-126*		*04/04/2021 15:20*	WG1645560
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*04/04/2021 15:20*	WG1645560

Method Blank (MB)

(MB) R3638474-1 04/05/21 13:38

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

L1333934-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1333934-03 04/05/21 17:15 • (DUP) R3638474-3 04/05/21 17:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	553	583	50	5.33		15

L1332422-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1332422-04 04/06/21 02:03 • (DUP) R3638474-6 04/06/21 02:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Perchlorate	41.2	41.0	1	0.420		15

Laboratory Control Sample (LCS)

(LCS) R3638474-2 04/05/21 14:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Perchlorate	10.0	9.43	94.3	90.0-110	

L1332422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332422-03 04/06/21 00:44 • (MS) R3638474-4 04/06/21 01:10 • (MSD) R3638474-5 04/06/21 01:36

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	11700	17600	17500	118	116	500	80.0-120			0.539	15

L1332422-12 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332422-12 04/06/21 06:53 • (MS) R3638474-7 04/06/21 07:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Perchlorate	10.0	U	39.9	79.9	5	80.0-120	M2

Method Blank (MB)

(MB) R3638475-2 04/05/21 14:57

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

Laboratory Control Sample (LCS)

(LCS) R3638475-1 04/05/21 14:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Perchlorate	10.0	9.43	94.3	90.0-110	

L1333934-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1333934-04 04/05/21 19:27 • (MS) R3638475-3 04/05/21 19:53

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Perchlorate	10.0	11.9	22.6	107	1	80.0-120	

L1333934-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1333934-05 04/05/21 20:20 • (MS) R3638475-4 04/05/21 20:46

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Perchlorate	10.0	U	10.8	108	1	80.0-120	

L1332406-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332406-02 04/05/21 21:39 • (MS) R3638475-5 04/05/21 22:05

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Perchlorate	10.0	8.03	19.5	114	1	80.0-120	

L1332422-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1332422-05 04/06/21 02:56 • (MS) R3638475-6 04/06/21 03:22

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Perchlorate	10.0	8.21	18.6	104	1	80.0-120	

Method Blank (MB)

(MB) R3638563-3 04/02/21 04:18

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) R3638563-3 04/02/21 04:18

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
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	*108*			*80.0-120*
(S) 4-Bromofluorobenzene	*86.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

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

(LCS) R3638563-1 04/02/21 03:17 • (LCSD) R3638563-2 04/02/21 03:37

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 %
Acetone	25.0	20.3	22.0	81.2	88.0	19.0-160			8.04	27
Acrolein	25.0	22.3	22.0	89.2	88.0	30.0-160			1.35	26
Acrylonitrile	25.0	27.4	29.2	110	117	55.0-149			6.36	20
Benzene	5.00	4.24	4.25	84.8	85.0	70.0-123			0.236	20
Bromobenzene	5.00	5.22	5.76	104	115	73.0-121			9.84	20
Bromodichloromethane	5.00	4.33	4.45	86.6	89.0	75.0-120			2.73	20
Bromoform	5.00	3.93	4.10	78.6	82.0	68.0-132			4.23	20
Bromomethane	5.00	3.50	3.85	70.0	77.0	30.0-160			9.52	25
1,3-Butadiene	5.00	4.06	4.44	81.2	88.8	45.0-147			8.94	20
n-Butylbenzene	5.00	4.36	4.93	87.2	98.6	73.0-125			12.3	20
sec-Butylbenzene	5.00	4.40	4.81	88.0	96.2	75.0-125			8.90	20
tert-Butylbenzene	5.00	4.12	4.57	82.4	91.4	76.0-124			10.4	20
Carbon disulfide	5.00	3.27	3.42	65.4	68.4	61.0-128			4.48	20
Carbon tetrachloride	5.00	3.89	4.03	77.8	80.6	68.0-126			3.54	20
Chlorobenzene	5.00	4.58	4.83	91.6	96.6	80.0-121			5.31	20
Chlorodibromomethane	5.00	4.22	4.33	84.4	86.6	77.0-125			2.57	20
Chloroethane	5.00	3.94	4.48	78.8	89.6	47.0-150			12.8	20
Chloroform	5.00	4.52	4.60	90.4	92.0	73.0-120			1.75	20
Chloromethane	5.00	3.94	4.53	78.8	90.6	41.0-142			13.9	20
Cyclohexane	5.00	3.66	3.81	73.2	76.2	71.0-124			4.02	20
2-Chlorotoluene	5.00	4.73	5.23	94.6	105	76.0-123			10.0	20
4-Chlorotoluene	5.00	4.85	5.15	97.0	103	75.0-122			6.00	20
1,2-Dibromo-3-Chloropropane	5.00	4.27	4.56	85.4	91.2	58.0-134			6.57	20
1,2-Dibromoethane	5.00	4.77	5.03	95.4	101	80.0-122			5.31	20
Dibromomethane	5.00	4.50	4.43	90.0	88.6	80.0-120			1.57	20
1,2-Dichlorobenzene	5.00	4.56	5.12	91.2	102	79.0-121			11.6	20
1,3-Dichlorobenzene	5.00	4.72	5.29	94.4	106	79.0-120			11.4	20
1,4-Dichlorobenzene	5.00	4.65	5.06	93.0	101	79.0-120			8.44	20
Dichlorodifluoromethane	5.00	3.67	4.19	73.4	83.8	51.0-149			13.2	20
1,1-Dichloroethane	5.00	4.32	4.55	86.4	91.0	70.0-126			5.19	20
1,2-Dichloroethane	5.00	4.72	4.78	94.4	95.6	70.0-128			1.26	20
1,1-Dichloroethene	5.00	3.92	4.21	78.4	84.2	71.0-124			7.13	20
cis-1,2-Dichloroethene	5.00	4.30	4.42	86.0	88.4	73.0-120			2.75	20
trans-1,2-Dichloroethene	5.00	3.88	4.22	77.6	84.4	73.0-120			8.40	20
1,2-Dichloropropane	5.00	4.86	4.90	97.2	98.0	77.0-125			0.820	20
1,1-Dichloropropene	5.00	4.42	4.72	88.4	94.4	74.0-126			6.56	20
1,3-Dichloropropane	5.00	4.93	5.17	98.6	103	80.0-120			4.75	20
cis-1,3-Dichloropropene	5.00	4.44	4.56	88.8	91.2	80.0-123			2.67	20
trans-1,3-Dichloropropene	5.00	4.70	4.61	94.0	92.2	78.0-124			1.93	20
2,2-Dichloropropane	5.00	3.80	3.80	76.0	76.0	58.0-130			0.000	20

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

(LCS) R3638563-1 04/02/21 03:17 • (LCSD) R3638563-2 04/02/21 03:37

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 %
Dicyclopentadiene	5.00	3.90	4.36	78.0	87.2	74.0-126			11.1	20
Di-isopropyl ether	5.00	4.87	5.03	97.4	101	58.0-138			3.23	20
Ethylbenzene	5.00	4.12	4.49	82.4	89.8	79.0-123			8.59	20
4-Ethyltoluene	5.00	4.87	5.32	97.4	106	74.0-127			8.83	20
Hexachloro-1,3-butadiene	5.00	3.78	4.59	75.6	91.8	54.0-138			19.4	20
n-Hexane	5.00	4.77	4.75	95.4	95.0	57.0-133			0.420	20
Isopropylbenzene	5.00	3.84	4.06	76.8	81.2	76.0-127			5.57	20
p-Isopropyltoluene	5.00	4.24	4.69	84.8	93.8	76.0-125			10.1	20
2-Butanone (MEK)	25.0	26.4	26.7	106	107	44.0-160			1.13	20
Methyl Cyclohexane	5.00	3.92	3.99	78.4	79.8	68.0-126			1.77	20
Methylene Chloride	5.00	4.67	4.82	93.4	96.4	67.0-120			3.16	20
4-Methyl-2-pentanone (MIBK)	25.0	26.8	28.5	107	114	68.0-142			6.15	20
Methyl tert-butyl ether	5.00	4.17	4.30	83.4	86.0	68.0-125			3.07	20
Naphthalene	5.00	3.69	4.20	73.8	84.0	54.0-135			12.9	20
Propene	5.00	2.81	2.65	56.2	53.0	30.0-160			5.86	20
n-Propylbenzene	5.00	4.94	5.57	98.8	111	77.0-124			12.0	20
Styrene	5.00	4.18	4.33	83.6	86.6	73.0-130			3.53	20
1,1,1,2-Tetrachloroethane	5.00	4.10	4.21	82.0	84.2	75.0-125			2.65	20
1,1,2,2-Tetrachloroethane	5.00	5.59	6.25	112	125	65.0-130			11.1	20
Tetrachloroethene	5.00	4.06	4.43	81.2	88.6	72.0-132			8.72	20
Toluene	5.00	4.30	4.53	86.0	90.6	79.0-120			5.21	20
1,1,2-Trichlorotrifluoroethane	5.00	4.16	4.50	83.2	90.0	69.0-132			7.85	20
1,2,3-Trichlorobenzene	5.00	3.86	4.44	77.2	88.8	50.0-138			14.0	20
1,2,4-Trichlorobenzene	5.00	3.82	4.52	76.4	90.4	57.0-137			16.8	20
1,1,1-Trichloroethane	5.00	4.12	4.27	82.4	85.4	73.0-124			3.58	20
1,1,2-Trichloroethane	5.00	4.75	5.21	95.0	104	80.0-120			9.24	20
Trichlorofluoromethane	5.00	4.09	4.44	81.8	88.8	59.0-147			8.21	20
1,2,3-Trichloropropane	5.00	5.11	5.27	102	105	73.0-130			3.08	20
1,2,3-Trimethylbenzene	5.00	4.34	4.87	86.8	97.4	77.0-120			11.5	20
1,2,4-Trimethylbenzene	5.00	4.33	4.86	86.6	97.2	76.0-121			11.5	20
1,3,5-Trimethylbenzene	5.00	4.51	5.01	90.2	100	76.0-122			10.5	20
Vinyl chloride	5.00	3.87	4.29	77.4	85.8	67.0-131			10.3	20
Xylenes, Total	15.0	12.3	13.0	82.0	86.7	79.0-123			5.53	20
(S) Toluene-d8				*101*	*103*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.1*	*98.4*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*104*	*102*	*70.0-130*				

L1332178-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332178-01 04/02/21 10:44 • (MS) R3638563-4 04/02/21 11:25 • (MSD) R3638563-5 04/02/21 11:46

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	250	U	356	302	142	121	10	10.0-160			16.4	35
Acrolein	250	U	392	363	157	145	10	10.0-160			7.68	39
Acrylonitrile	250	U	364	316	146	126	10	21.0-160			14.1	32
Benzene	50.0	199	220	215	42.0	32.0	10	17.0-158			2.30	27
Bromobenzene	50.0	U	74.5	62.4	149	125	10	30.0-149			17.7	28
Bromodichloromethane	50.0	U	48.6	40.8	97.2	81.6	10	31.0-150			17.4	27
Bromoform	50.0	U	50.2	41.9	100	83.8	10	29.0-150			18.0	29
Bromomethane	50.0	U	44.4	32.3	88.8	64.6	10	10.0-160			31.6	38
1,3-Butadiene	50.0	U	49.8	38.4	99.6	76.8	10	10.0-160		R5	25.9	22
n-Butylbenzene	50.0	U	84.0	67.7	168	135	10	31.0-150	M1		21.5	30
sec-Butylbenzene	50.0	U	63.0	40.8	126	81.6	10	33.0-155		R5	42.8	29
tert-Butylbenzene	50.0	U	50.0	38.2	100	76.4	10	34.0-153			26.8	28
Carbon disulfide	50.0	U	43.4	30.7	86.8	61.4	10	10.0-156		R5	34.3	28
Carbon tetrachloride	50.0	U	44.9	32.1	89.8	64.2	10	23.0-159		R5	33.2	28
Chlorobenzene	50.0	U	56.5	41.3	113	82.6	10	33.0-152		R5	31.1	27
Chlorodibromomethane	50.0	U	48.6	39.9	97.2	79.8	10	37.0-149			19.7	27
Chloroethane	50.0	U	47.5	34.9	95.0	69.8	10	10.0-160		R5	30.6	30
Chloroform	50.0	U	51.5	39.8	103	79.6	10	29.0-154			25.6	28
Chloromethane	50.0	U	50.8	38.7	102	77.4	10	10.0-160			27.0	29
Cyclohexane	50.0	86.2	90.4	76.9	8.40	0.000	10	19.0-160	M2	M2	16.1	23
2-Chlorotoluene	50.0	U	74.9	61.8	150	124	10	32.0-153			19.2	28
4-Chlorotoluene	50.0	U	84.0	68.3	168	137	10	32.0-150	M1		20.6	28
1,2-Dibromo-3-Chloropropane	50.0	U	53.2	41.9	106	83.8	10	22.0-151			23.8	34
1,2-Dibromoethane	50.0	U	58.1	48.0	116	96.0	10	34.0-147			19.0	27
Dibromomethane	50.0	U	51.3	43.8	103	87.6	10	30.0-151			15.8	27
1,2-Dichlorobenzene	50.0	U	56.9	44.5	114	89.0	10	34.0-149			24.5	28
1,3-Dichlorobenzene	50.0	U	59.5	44.2	119	88.4	10	36.0-146		R5	29.5	27
1,4-Dichlorobenzene	50.0	U	56.7	43.2	113	86.4	10	35.0-142			27.0	27
Dichlorodifluoromethane	50.0	U	45.1	32.0	90.2	64.0	10	10.0-160		R5	34.0	29
1,1-Dichloroethane	50.0	U	49.6	37.3	99.2	74.6	10	25.0-158		R5	28.3	27
1,2-Dichloroethane	50.0	U	53.9	44.5	108	89.0	10	29.0-151			19.1	27
1,1-Dichloroethene	50.0	U	46.4	34.0	92.8	68.0	10	11.0-160		R5	30.8	29
cis-1,2-Dichloroethene	50.0	U	46.0	36.6	92.0	73.2	10	10.0-160			22.8	27
trans-1,2-Dichloroethene	50.0	U	44.9	33.5	89.8	67.0	10	17.0-153		R5	29.1	27
1,2-Dichloropropane	50.0	U	52.4	42.4	105	84.8	10	30.0-156			21.1	27
1,1-Dichloropropene	50.0	U	53.0	38.0	106	76.0	10	25.0-158		R5	33.0	27
1,3-Dichloropropane	50.0	U	60.6	48.9	121	97.8	10	38.0-147			21.4	27
cis-1,3-Dichloropropene	50.0	U	48.0	39.0	96.0	78.0	10	34.0-149			20.7	28
trans-1,3-Dichloropropene	50.0	U	54.0	43.9	108	87.8	10	32.0-149			20.6	28
2,2-Dichloropropane	50.0	U	35.7	26.2	71.4	52.4	10	24.0-152		R5	30.7	29

L1332178-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332178-01 04/02/21 10:44 • (MS) R3638563-4 04/02/21 11:25 • (MSD) R3638563-5 04/02/21 11:46

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	50.0	U	52.3	37.0	105	74.0	10	51.0-139		R5	34.3	20
Di-isopropyl ether	50.0	U	51.6	42.5	103	85.0	10	21.0-160			19.3	28
Ethylbenzene	50.0	338	373	362	70.0	48.0	10	30.0-155			2.99	27
4-Ethyltoluene	50.0	458	516	492	116	68.0	10	10.0-160			4.76	20
Hexachloro-1,3-butadiene	50.0	U	50.3	38.5	101	77.0	10	20.0-154			26.6	34
n-Hexane	50.0	62.6	87.6	74.0	50.0	22.8	10	10.0-153			16.8	28
Isopropylbenzene	50.0	24.8	71.8	58.3	94.0	67.0	10	28.0-157			20.8	27
p-Isopropyltoluene	50.0	9.92	64.2	48.5	109	77.2	10	30.0-154			27.9	29
2-Butanone (MEK)	250	U	345	309	138	124	10	10.0-160			11.0	32
Methyl Cyclohexane	50.0	36.8	62.3	48.8	51.0	24.0	10	11.0-160		R5	24.3	24
Methylene Chloride	50.0	U	48.9	37.9	97.8	75.8	10	23.0-144			25.3	28
4-Methyl-2-pentanone (MIBK)	250	U	325	286	130	114	10	29.0-160			12.8	29
Methyl tert-butyl ether	50.0	U	45.7	39.3	91.4	78.6	10	28.0-150			15.1	29
Naphthalene	50.0	90.1	148	140	116	99.8	10	12.0-156			5.56	35
Propene	50.0	U	35.6	22.8	71.2	45.6	10	10.0-160		R5	43.8	29
n-Propylbenzene	50.0	74.4	141	121	133	93.2	10	31.0-154			15.3	28
Styrene	50.0	U	52.5	40.1	105	80.2	10	33.0-155			26.8	28
1,1,1,2-Tetrachloroethane	50.0	U	46.3	39.0	92.6	78.0	10	36.0-151			17.1	29
1,1,2,2-Tetrachloroethane	50.0	U	73.4	62.6	147	125	10	33.0-150			15.9	28
Tetrachloroethene	50.0	U	50.7	38.0	101	76.0	10	10.0-160		R5	28.6	27
Toluene	50.0	549	558	552	18.0	6.00	10	26.0-154	M3	M3	1.08	28
1,1,2-Trichlorotrifluoroethane	50.0	U	44.6	31.1	89.2	62.2	10	23.0-160		R5	35.7	30
1,2,3-Trichlorobenzene	50.0	U	50.2	40.7	100	81.4	10	17.0-150			20.9	36
1,2,4-Trichlorobenzene	50.0	U	52.3	40.3	105	80.6	10	24.0-150			25.9	33
1,1,1-Trichloroethane	50.0	U	45.8	33.2	91.6	66.4	10	23.0-160		R5	31.9	28
1,1,2-Trichloroethane	50.0	U	56.5	49.0	113	98.0	10	35.0-147			14.2	27
Trichlorofluoromethane	50.0	U	46.9	34.3	93.8	68.6	10	17.0-160			31.0	31
1,2,3-Trichloropropane	50.0	U	66.6	56.6	133	113	10	34.0-151			16.2	29
1,2,3-Trimethylbenzene	50.0	132	195	180	126	96.0	10	32.0-149			8.00	28
1,2,4-Trimethylbenzene	50.0	462	515	496	106	68.0	10	26.0-154			3.76	27
1,3,5-Trimethylbenzene	50.0	143	204	185	122	84.0	10	28.0-153			9.77	27
Vinyl chloride	50.0	U	50.9	34.9	102	69.8	10	10.0-160		R5	37.3	27
Xylenes, Total	150	2460	2470	2430	6.67	0.000	10	29.0-154	M3	M3	1.63	28
(S) Toluene-d8					*101*	*99.7*		*80.0-120*				
(S) 4-Bromofluorobenzene					*97.6*	*93.8*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*98.6*	*98.2*		*70.0-130*				

Method Blank (MB)

(MB) R3638126-2 04/03/21 13:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		11.3	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
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
Chloroform	U		0.111	5.00
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
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
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

Method Blank (MB)

(MB) R3638126-2 04/03/21 13:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
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
1,2,3-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
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	*98.6*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.6*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*

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

(LCS) R3638126-1 04/03/21 12:14 • (LCSD) R3638126-5 04/04/21 09:56

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	37.9	32.8	152	131	19.0-160			14.4	27
Acrylonitrile	25.0	35.6	33.5	142	134	55.0-149			6.08	20
Benzene	5.00	4.92	5.40	98.4	108	70.0-123			9.30	20

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

(LCS) R3638126-1 04/03/21 12:14 • (LCSD) R3638126-5 04/04/21 09:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	5.00	5.28	5.76	106	115	73.0-121			8.70	20
Bromodichloromethane	5.00	5.19	5.54	104	111	75.0-120			6.52	20
Bromoform	5.00	4.17	4.02	83.4	80.4	68.0-132			3.66	20
1,3-Butadiene	5.00	5.79	6.09	116	122	45.0-147			5.05	20
n-Butylbenzene	5.00	5.14	5.51	103	110	73.0-125			6.95	20
sec-Butylbenzene	5.00	4.96	5.76	99.2	115	75.0-125			14.9	20
tert-Butylbenzene	5.00	4.64	5.51	92.8	110	76.0-124			17.1	20
Carbon disulfide	5.00	4.04	4.26	80.8	85.2	61.0-128			5.30	20
Carbon tetrachloride	5.00	5.55	5.42	111	108	68.0-126			2.37	20
Chlorobenzene	5.00	4.81	5.27	96.2	105	80.0-121			9.13	20
Chlorodibromomethane	5.00	4.93	5.32	98.6	106	77.0-125			7.61	20
Chloroform	5.00	5.48	5.67	110	113	73.0-120			3.41	20
Cyclohexane	5.00	4.49	4.97	89.8	99.4	71.0-124			10.1	20
2-Chlorotoluene	5.00	5.37	5.76	107	115	76.0-123			7.01	20
4-Chlorotoluene	5.00	5.59	5.96	112	119	75.0-122			6.41	20
1,2-Dibromo-3-Chloropropane	5.00	5.17	4.65	103	93.0	58.0-134			10.6	20
1,2-Dibromoethane	5.00	4.77	5.01	95.4	100	80.0-122			4.91	20
Dibromomethane	5.00	5.50	5.57	110	111	80.0-120			1.26	20
1,2-Dichlorobenzene	5.00	5.18	5.58	104	112	79.0-121			7.43	20
1,3-Dichlorobenzene	5.00	4.89	5.32	97.8	106	79.0-120			8.42	20
1,4-Dichlorobenzene	5.00	4.87	5.12	97.4	102	79.0-120			5.01	20
Dichlorodifluoromethane	5.00	5.40	5.52	108	110	51.0-149			2.20	20
1,1-Dichloroethane	5.00	5.60	6.27	112	125	70.0-126			11.3	20
1,2-Dichloroethane	5.00	5.53	5.71	111	114	70.0-128			3.20	20
cis-1,2-Dichloroethene	5.00	5.18	5.52	104	110	73.0-120			6.36	20
trans-1,2-Dichloroethene	5.00	4.73	5.23	94.6	105	73.0-120			10.0	20
1,2-Dichloropropane	5.00	5.54	5.94	111	119	77.0-125			6.97	20
1,1-Dichloropropene	5.00	5.23	5.70	105	114	74.0-126			8.60	20
1,3-Dichloropropane	5.00	5.33	5.75	107	115	80.0-120			7.58	20
cis-1,3-Dichloropropene	5.00	5.12	5.23	102	105	80.0-123			2.13	20
trans-1,3-Dichloropropene	5.00	5.56	5.68	111	114	78.0-124			2.14	20
2,2-Dichloropropane	5.00	5.29	4.19	106	83.8	58.0-130		R7	23.2	20
Dicyclopentadiene	5.00	5.19	5.94	104	119	74.0-126			13.5	20
Di-isopropyl ether	5.00	6.67	6.92	133	138	58.0-138			3.68	20
Ethylbenzene	5.00	4.53	5.28	90.6	106	79.0-123			15.3	20
4-Ethyltoluene	5.00	4.91	5.80	98.2	116	74.0-127			16.6	20
Hexachloro-1,3-butadiene	5.00	5.25	5.78	105	116	54.0-138			9.61	20
n-Hexane	5.00	6.60	6.29	132	126	57.0-133			4.81	20
Isopropylbenzene	5.00	4.48	4.98	89.6	99.6	76.0-127			10.6	20
p-Isopropyltoluene	5.00	4.94	5.62	98.8	112	76.0-125			12.9	20

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

(LCS) R3638126-1 04/03/21 12:14 • (LCSD) R3638126-5 04/04/21 09:56

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 %
2-Butanone (MEK)	25.0	36.2	33.2	145	133	44.0-160			8.65	20
Methyl Cyclohexane	5.00	4.32	4.87	86.4	97.4	68.0-126			12.0	20
Methylene Chloride	5.00	5.66	6.08	113	122	67.0-120		L1	7.16	20
4-Methyl-2-pentanone (MIBK)	25.0	31.9	32.4	128	130	68.0-142			1.56	20
Methyl tert-butyl ether	5.00	5.08	5.24	102	105	68.0-125			3.10	20
Naphthalene	5.00	5.02	4.94	100	98.8	54.0-135			1.61	20
Propene	5.00	5.27	6.78	105	136	30.0-160		R7	25.1	20
n-Propylbenzene	5.00	5.13	5.86	103	117	77.0-124			13.3	20
Styrene	5.00	4.45	5.00	89.0	100	73.0-130			11.6	20
1,1,1,2-Tetrachloroethane	5.00	4.76	5.53	95.2	111	75.0-125			15.0	20
1,1,2,2-Tetrachloroethane	5.00	5.90	5.97	118	119	65.0-130			1.18	20
Tetrachloroethene	5.00	4.64	5.21	92.8	104	72.0-132			11.6	20
Toluene	5.00	4.82	5.48	96.4	110	79.0-120			12.8	20
1,2,3-Trichlorobenzene	5.00	5.07	5.38	101	108	50.0-138			5.93	20
1,2,4-Trichlorobenzene	5.00	5.21	5.08	104	102	57.0-137			2.53	20
1,1,1-Trichloroethane	5.00	5.16	5.18	103	104	73.0-124			0.387	20
1,1,2-Trichloroethane	5.00	4.69	5.67	93.8	113	80.0-120			18.9	20
Trichloroethene	5.00	4.91	4.74	98.2	94.8	78.0-124			3.52	20
1,2,3-Trichloropropane	5.00	5.11	5.52	102	110	73.0-130			7.71	20
1,2,3-Trimethylbenzene	5.00	5.12	5.60	102	112	77.0-120			8.96	20
1,2,4-Trimethylbenzene	5.00	4.98	5.68	99.6	114	76.0-121			13.1	20
1,3,5-Trimethylbenzene	5.00	5.16	5.78	103	116	76.0-122			11.3	20
Vinyl chloride	5.00	4.15	4.83	83.0	96.6	67.0-131			15.1	20
Xylenes, Total	15.0	13.3	14.6	88.7	97.3	79.0-123			9.32	20
(S) Toluene-d8				*101*	*106*	*80.0-120*				
(S) 4-Bromofluorobenzene				*100*	*102*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*117*	*112*	*70.0-130*				

L1332422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332422-03 04/03/21 21:20 • (MS) R3638126-3 04/04/21 00:25 • (MSD) R3638126-4 04/04/21 01:49

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	25.4	29.2	102	117	1	10.0-160			13.9	35
Acrylonitrile	25.0	U	26.6	28.9	106	116	1	21.0-160			8.29	32
Benzene	5.00	U	6.26	6.60	125	132	1	17.0-158			5.29	27
Bromobenzene	5.00	U	6.48	7.08	130	142	1	30.0-149			8.85	28
Bromodichloromethane	5.00	U	6.07	6.04	121	121	1	31.0-150			0.495	27
Bromoform	5.00	U	3.99	4.24	79.8	84.8	1	29.0-150			6.08	29

L1332422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332422-03 04/03/21 21:20 • (MS) R3638126-3 04/04/21 00:25 • (MSD) R3638126-4 04/04/21 01:49

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 %
1,3-Butadiene	5.00	U	7.93	9.27	159	185	1	10.0-160		M1	15.6	22
n-Butylbenzene	5.00	U	7.63	8.02	153	160	1	31.0-150	M1	M1	4.98	30
sec-Butylbenzene	5.00	U	7.73	8.08	155	162	1	33.0-155		M1	4.43	29
tert-Butylbenzene	5.00	U	7.24	7.45	145	149	1	34.0-153			2.86	28
Carbon disulfide	5.00	U	5.12	5.18	102	104	1	10.0-156			1.17	28
Carbon tetrachloride	5.00	U	7.10	7.94	142	159	1	23.0-159			11.2	28
Chlorobenzene	5.00	U	5.81	6.21	116	124	1	33.0-152			6.66	27
Chlorodibromomethane	5.00	U	5.08	5.13	102	103	1	37.0-149			0.979	27
Chloroform	5.00	U	6.63	6.95	133	139	1	29.0-154			4.71	28
Cyclohexane	5.00	U	7.32	7.50	146	150	1	19.0-160			2.43	23
2-Chlorotoluene	5.00	U	7.63	8.08	153	162	1	32.0-153		M1	5.73	28
4-Chlorotoluene	5.00	U	7.53	7.81	151	156	1	32.0-150	M1	M1	3.65	28
1,2-Dibromo-3-Chloropropane	5.00	U	4.00	4.68	80.0	93.6	1	22.0-151			15.7	34
1,2-Dibromoethane	5.00	U	4.67	5.46	93.4	109	1	34.0-147			15.6	27
Dibromomethane	5.00	U	5.45	5.83	109	117	1	30.0-151			6.74	27
1,2-Dichlorobenzene	5.00	U	6.30	6.58	126	132	1	34.0-149			4.35	28
1,3-Dichlorobenzene	5.00	U	6.49	6.77	130	135	1	36.0-146			4.22	27
1,4-Dichlorobenzene	5.00	U	6.17	6.12	123	122	1	35.0-142			0.814	27
Dichlorodifluoromethane	5.00	U	8.11	8.17	162	163	1	10.0-160	M1	M1	0.737	29
1,1-Dichloroethane	5.00	U	7.44	7.50	149	150	1	25.0-158			0.803	27
1,2-Dichloroethane	5.00	U	6.00	6.24	120	125	1	29.0-151			3.92	27
cis-1,2-Dichloroethene	5.00	U	5.93	6.76	119	135	1	10.0-160			13.1	27
trans-1,2-Dichloroethene	5.00	U	6.51	6.80	130	136	1	17.0-153			4.36	27
1,2-Dichloropropane	5.00	U	6.33	7.01	127	140	1	30.0-156			10.2	27
1,1-Dichloropropene	5.00	U	7.73	7.79	155	156	1	25.0-158			0.773	27
1,3-Dichloropropane	5.00	U	5.33	5.93	107	119	1	38.0-147			10.7	27
cis-1,3-Dichloropropene	5.00	U	5.65	6.07	113	121	1	34.0-149			7.17	28
trans-1,3-Dichloropropene	5.00	U	5.78	5.78	116	116	1	32.0-149			0.000	28
2,2-Dichloropropane	5.00	U	6.94	7.09	139	142	1	24.0-152			2.14	29
Dicyclopentadiene	5.00	U	6.16	6.25	123	125	1	51.0-139			1.45	20
Di-isopropyl ether	5.00	U	7.89	8.29	158	166	1	21.0-160		M1	4.94	28
Ethylbenzene	5.00	U	6.25	6.27	125	125	1	30.0-155			0.319	27
4-Ethyltoluene	5.00	U	7.27	7.77	145	155	1	10.0-160			6.65	20
Hexachloro-1,3-butadiene	5.00	U	6.54	7.58	131	152	1	20.0-154			14.7	34
n-Hexane	5.00	U	7.98	8.61	160	172	1	10.0-153	M1	M1	7.59	28
Isopropylbenzene	5.00	U	6.14	6.45	123	129	1	28.0-157			4.92	27
p-Isopropyltoluene	5.00	U	7.37	7.69	147	154	1	30.0-154			4.25	29
2-Butanone (MEK)	25.0	U	23.5	28.3	94.0	113	1	10.0-160			18.5	32
Methyl Cyclohexane	5.00	U	7.33	7.66	147	153	1	11.0-160			4.40	24
Methylene Chloride	5.00	U	6.06	6.34	121	127	1	23.0-144			4.52	28

L1332422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332422-03 04/03/21 21:20 • (MS) R3638126-3 04/04/21 00:25 • (MSD) R3638126-4 04/04/21 01:49

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 %
4-Methyl-2-pentanone (MIBK)	25.0	U	24.8	28.4	99.2	114	1	29.0-160			13.5	29
Methyl tert-butyl ether	5.00	U	5.16	5.37	103	107	1	28.0-150			3.99	29
Naphthalene	5.00	U	4.10	5.15	82.0	103	1	12.0-156			22.7	35
Propene	5.00	U	9.49	8.45	190	169	1	10.0-160	M1	M1	11.6	29
n-Propylbenzene	5.00	U	7.97	8.01	159	160	1	31.0-154	M1	M1	0.501	28
Styrene	5.00	U	5.49	5.70	110	114	1	33.0-155			3.75	28
1,1,1,2-Tetrachloroethane	5.00	U	5.54	5.93	111	119	1	36.0-151			6.80	29
1,1,2,2-Tetrachloroethane	5.00	U	5.85	6.59	117	132	1	33.0-150			11.9	28
Tetrachloroethene	5.00	U	6.68	6.59	134	132	1	10.0-160			1.36	27
Toluene	5.00	U	6.71	6.67	134	133	1	26.0-154			0.598	28
1,2,3-Trichlorobenzene	5.00	U	4.95	5.67	99.0	113	1	17.0-150			13.6	36
1,2,4-Trichlorobenzene	5.00	U	5.87	6.45	117	129	1	24.0-150			9.42	33
1,1,1-Trichloroethane	5.00	U	7.52	7.38	150	148	1	23.0-160			1.88	28
1,1,2-Trichloroethane	5.00	U	4.87	5.26	97.4	105	1	35.0-147			7.70	27
Trichloroethene	5.00	6.40	12.3	11.9	118	110	1	10.0-160			3.31	25
1,2,3-Trichloropropane	5.00	U	5.20	5.87	104	117	1	34.0-151			12.1	29
1,2,3-Trimethylbenzene	5.00	U	6.58	6.81	132	136	1	32.0-149			3.44	28
1,2,4-Trimethylbenzene	5.00	U	6.68	7.14	134	143	1	26.0-154			6.66	27
1,3,5-Trimethylbenzene	5.00	U	7.17	7.62	143	152	1	28.0-153			6.09	27
Vinyl chloride	5.00	U	6.83	6.79	137	136	1	10.0-160			0.587	27
Xylenes, Total	15.0	U	17.1	18.3	114	122	1	29.0-154			6.78	28
(S) Toluene-d8					*105*	*106*		*80.0-120*				
(S) 4-Bromofluorobenzene					*91.9*	*99.5*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*102*	*104*		*70.0-130*				

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

Method Blank (MB)

(MB) R3639160-4 04/04/21 11:34

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) R3639160-4 04/04/21 11:34

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	*104*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

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

(LCS) R3639160-1 04/04/21 10:12 • (LCSD) R3639160-2 04/04/21 10:33

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	29.6	27.4	118	110	19.0-160			7.72	27
Acrolein	25.0	28.4	25.2	114	101	30.0-160			11.9	26
Acrylonitrile	25.0	26.7	26.9	107	108	55.0-149			0.746	20
Benzene	5.00	5.17	4.86	103	97.2	70.0-123			6.18	20
Bromobenzene	5.00	5.54	4.99	111	99.8	73.0-121			10.4	20
Bromodichloromethane	5.00	5.91	5.21	118	104	75.0-120			12.6	20
Bromoform	5.00	4.90	4.61	98.0	92.2	68.0-132			6.10	20
Bromomethane	5.00	3.15	3.22	63.0	64.4	30.0-160			2.20	25
1,3-Butadiene	5.00	4.86	4.41	97.2	88.2	45.0-147			9.71	20
n-Butylbenzene	5.00	4.69	4.16	93.8	83.2	73.0-125			12.0	20
sec-Butylbenzene	5.00	4.72	4.41	94.4	88.2	75.0-125			6.79	20
tert-Butylbenzene	5.00	4.87	4.58	97.4	91.6	76.0-124			6.14	20
Carbon disulfide	5.00	5.37	4.76	107	95.2	61.0-128			12.0	20
Carbon tetrachloride	5.00	5.38	5.16	108	103	68.0-126			4.17	20
Chlorobenzene	5.00	5.71	5.22	114	104	80.0-121			8.97	20
Chlorodibromomethane	5.00	4.93	4.75	98.6	95.0	77.0-125			3.72	20
Chloroethane	5.00	5.40	4.78	108	95.6	47.0-150			12.2	20
Chloroform	5.00	5.85	5.33	117	107	73.0-120			9.30	20
Chloromethane	5.00	3.60	3.58	72.0	71.6	41.0-142			0.557	20
Cyclohexane	5.00	5.21	4.47	104	89.4	71.0-124			15.3	20
2-Chlorotoluene	5.00	5.23	5.05	105	101	76.0-123			3.50	20
4-Chlorotoluene	5.00	5.51	5.05	110	101	75.0-122			8.71	20
1,2-Dibromo-3-Chloropropane	5.00	4.35	4.54	87.0	90.8	58.0-134			4.27	20
1,2-Dibromoethane	5.00	5.33	5.23	107	105	80.0-122			1.89	20
Dibromomethane	5.00	5.94	5.19	119	104	80.0-120			13.5	20
1,2-Dichlorobenzene	5.00	5.33	5.01	107	100	79.0-121			6.19	20
1,3-Dichlorobenzene	5.00	5.56	5.07	111	101	79.0-120			9.22	20
1,4-Dichlorobenzene	5.00	5.71	5.25	114	105	79.0-120			8.39	20
Dichlorodifluoromethane	5.00	4.78	4.35	95.6	87.0	51.0-149			9.42	20
1,1-Dichloroethane	5.00	5.52	5.10	110	102	70.0-126			7.91	20
1,2-Dichloroethane	5.00	5.58	5.25	112	105	70.0-128			6.09	20
1,1-Dichloroethene	5.00	4.85	4.37	97.0	87.4	71.0-124			10.4	20
cis-1,2-Dichloroethene	5.00	6.01	5.19	120	104	73.0-120			14.6	20
trans-1,2-Dichloroethene	5.00	5.41	5.39	108	108	73.0-120			0.370	20
1,2-Dichloropropane	5.00	5.55	4.75	111	95.0	77.0-125			15.5	20
1,1-Dichloropropene	5.00	5.26	4.99	105	99.8	74.0-126			5.27	20
1,3-Dichloropropane	5.00	5.53	5.49	111	110	80.0-120			0.726	20
cis-1,3-Dichloropropene	5.00	5.23	4.97	105	99.4	80.0-123			5.10	20
trans-1,3-Dichloropropene	5.00	5.29	4.85	106	97.0	78.0-124			8.68	20
2,2-Dichloropropane	5.00	5.73	5.20	115	104	58.0-130			9.70	20

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

(LCS) R3639160-1 04/04/21 10:12 • (LCSD) R3639160-2 04/04/21 10:33

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	5.17	4.79	103	95.8	74.0-126			7.63	20
Di-isopropyl ether	5.00	5.48	5.01	110	100	58.0-138			8.96	20
Ethylbenzene	5.00	5.35	4.88	107	97.6	79.0-123			9.19	20
4-Ethyltoluene	5.00	5.24	4.77	105	95.4	74.0-127			9.39	20
Hexachloro-1,3-butadiene	5.00	4.68	4.45	93.6	89.0	54.0-138			5.04	20
n-Hexane	5.00	5.38	5.11	108	102	57.0-133			5.15	20
Isopropylbenzene	5.00	4.66	4.45	93.2	89.0	76.0-127			4.61	20
p-Isopropyltoluene	5.00	4.75	4.45	95.0	89.0	76.0-125			6.52	20
2-Butanone (MEK)	25.0	29.1	28.4	116	114	44.0-160			2.43	20
Methyl Cyclohexane	5.00	4.83	4.35	96.6	87.0	68.0-126			10.5	20
Methylene Chloride	5.00	6.02	5.29	120	106	67.0-120			12.9	20
4-Methyl-2-pentanone (MIBK)	25.0	29.0	28.0	116	112	68.0-142			3.51	20
Methyl tert-butyl ether	5.00	5.64	5.22	113	104	68.0-125			7.73	20
Naphthalene	5.00	3.55	3.90	71.0	78.0	54.0-135			9.40	20
Propene	5.00	4.68	4.06	93.6	81.2	30.0-160			14.2	20
n-Propylbenzene	5.00	5.05	4.75	101	95.0	77.0-124			6.12	20
Styrene	5.00	4.83	4.57	96.6	91.4	73.0-130			5.53	20
1,1,1,2-Tetrachloroethane	5.00	5.48	4.88	110	97.6	75.0-125			11.6	20
1,1,2,2-Tetrachloroethane	5.00	5.82	5.60	116	112	65.0-130			3.85	20
Tetrachloroethene	5.00	5.59	5.08	112	102	72.0-132			9.56	20
Toluene	5.00	5.53	5.02	111	100	79.0-120			9.67	20
1,1,2-Trichlorotrifluoroethane	5.00	5.56	5.03	111	101	69.0-132			10.0	20
1,2,3-Trichlorobenzene	5.00	4.11	4.19	82.2	83.8	50.0-138			1.93	20
1,2,4-Trichlorobenzene	5.00	4.46	4.11	89.2	82.2	57.0-137			8.17	20
1,1,1-Trichloroethane	5.00	5.77	4.97	115	99.4	73.0-124			14.9	20
1,1,2-Trichloroethane	5.00	5.53	5.25	111	105	80.0-120			5.19	20
Trichloroethene	5.00	5.75	5.06	115	101	78.0-124			12.8	20
Trichlorofluoromethane	5.00	4.87	4.39	97.4	87.8	59.0-147			10.4	20
1,2,3-Trichloropropane	5.00	5.96	5.51	119	110	73.0-130			7.85	20
1,2,3-Trimethylbenzene	5.00	5.42	4.95	108	99.0	77.0-120			9.06	20
1,2,4-Trimethylbenzene	5.00	5.10	4.75	102	95.0	76.0-121			7.11	20
1,3,5-Trimethylbenzene	5.00	5.43	5.03	109	101	76.0-122			7.65	20
Vinyl chloride	5.00	5.20	4.68	104	93.6	67.0-131			10.5	20
Xylenes, Total	15.0	15.9	14.6	106	97.3	79.0-123			8.52	20
(S) Toluene-d8				*102*	*105*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.7*	*97.3*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*112*	*108*	*70.0-130*				

Method Blank (MB)

(MB) R3638467-3 04/05/21 18:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acrolein	U		2.54	50.0
Bromomethane	U		0.605	5.00
Chloroethane	U		0.192	5.00
Chloromethane	U		0.960	2.50
1,1-Dichloroethene	U		0.188	1.00
1,1,2-Trichlorotrifluoroethane	U		0.180	1.00
Trichloroethene	U		0.190	1.00
Trichlorofluoromethane	U		0.160	5.00
(S) Toluene-d8	*119*			*80.0-120*
(S) 4-Bromofluorobenzene	*100*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*85.6*			*70.0-130*

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

(LCS) R3638467-1 04/05/21 17:24 • (LCSD) R3638467-2 04/05/21 17:45

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 %
Acrolein	25.0	22.7	26.1	90.8	104	30.0-160			13.9	26
Bromomethane	5.00	5.48	5.73	110	115	30.0-160			4.46	25
Chloroethane	5.00	3.95	4.03	79.0	80.6	47.0-150			2.01	20
Chloromethane	5.00	4.28	4.72	85.6	94.4	41.0-142			9.78	20
1,1-Dichloroethene	5.00	4.92	5.24	98.4	105	71.0-124			6.30	20
1,1,2-Trichlorotrifluoroethane	5.00	4.62	4.69	92.4	93.8	69.0-132			1.50	20
Trichloroethene	5.00	5.30	5.53	106	111	78.0-124			4.25	20
Trichlorofluoromethane	5.00	4.91	5.08	98.2	102	59.0-147			3.40	20
(S) Toluene-d8				*116*	*118*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.8*	*99.7*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*90.1*	*86.2*	*70.0-130*				

Method Blank (MB)

(MB) R3639183-3 04/06/21 13:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	*96.4*			*80.0-120*
(S) 4-Bromofluorobenzene	*98.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*124*			*70.0-130*

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

(LCS) R3639183-1 04/06/21 12:03 • (LCSD) R3639183-2 04/06/21 12:24

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 %
Trichloroethene	5.00	5.02	5.05	100	101	78.0-124			0.596	20
(S) Toluene-d8				*94.5*	*99.1*	*80.0-120*				
(S) 4-Bromofluorobenzene				*97.8*	*100*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*121*	*118*	*70.0-130*				

Method Blank (MB)

(MB) R3639459-3 04/07/21 20:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
1,1-Dichloroethene	U		0.188	1.00
Trichloroethene	U		0.190	1.00
(S) Toluene-d8	*116*			*80.0-120*
(S) 4-Bromofluorobenzene	*96.8*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*

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

(LCS) R3639459-1 04/07/21 19:23 • (LCSD) R3639459-2 04/07/21 19:43

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	%	%	%			%	%
1,1-Dichloroethene	5.00	5.11	5.48	102	110	71.0-124			6.99	20
Trichloroethene	5.00	4.82	4.80	96.4	96.0	78.0-124			0.416	20
(S) Toluene-d8				*111*	*104*	*80.0-120*				
(S) 4-Bromofluorobenzene				*94.3*	*96.7*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*98.3*	*101*	*70.0-130*				

Method Blank (MB)

(MB) R3638787-3 04/01/21 16:03

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	*97.2*			*77.0-127*

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

(LCS) R3638787-1 04/01/21 13:43 • (LCSD) R3638787-2 04/01/21 14:03

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	43.5	33.0	87.0	66.0	55.0-138		R7	27.5	24
(S) Toluene-d8				*96.9*	*97.6*	*77.0-127*				

L1332422-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1332422-03 04/01/21 22:18 • (MS) R3638787-4 04/02/21 00:57 • (MSD) R3638787-5 04/02/21 01:17

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	18.9	50.8	55.2	63.8	72.6	1	13.0-160			8.30	31
(S) Toluene-d8					*97.6*	*97.5*		*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) R3638175-3 04/02/21 11:45

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	*97.8*			*77.0-127*

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

(LCS) R3638175-1 04/02/21 10:46 • (LCSD) R3638175-2 04/02/21 11:06

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	37.2	35.3	74.4	70.6	55.0-138			5.24	24
(S) Toluene-d8				*97.9*	*98.2*	*77.0-127*				

L1333188-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1333188-02 04/02/21 21:18 • (MS) R3638175-4 04/02/21 21:37 • (MSD) R3638175-5 04/02/21 21:57

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	26.2	40.3	52.4	80.6	1	13.0-160		R5	42.4	31
(S) Toluene-d8					*97.4*	*96.9*		*77.0-127*				

INTERNAL STANDARD SUMMARY

Instrument: VOCMS6 • File ID: 0404_02

04/04/21 10:12

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	0404_02	177958	71526	69387
Upper Limit		355916	143052	138774
Lower Limit		88979	35763	34694
LCS R3639160-1 WG1645560 1x	0404_02LCS	177958	71526	69387
LCSD R3639160-2 WG1645560 1x	0404_03	190683	76887	74670
BLANK R3639160-4 WG1645560 1x	0404_06	187792	72757	69940
L1332422-13 WG1645560 1x	0404_08	190680	73825	68997
L1332422-05 WG1645560 1x	0404_12	179215	70948	67704
L1332422-07 WG1645560 1x	0404_13	182863	70078	68672
L1332422-10 WG1645560 1x	0404_18	192211	74831	72397
L1332422-11 WG1645560 1x	0404_19	196391	75936	73241
L1332422-12 WG1645560 1x	0404_20	193004	74388	70405
L1332422-06 WG1645560 1x	0404_21	184111	73031	68140
L1332422-08 WG1645560 1x	0404_22	183415	72939	69069
L1332422-09 WG1645560 1x	0404_23	185715	72822	69967

Instrument: VOCMS20 • File ID: 0401A_31

04/02/21 02:57

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	0401A_31	157562	65273	59186
Upper Limit		315124	130546	118372
Lower Limit		78781	32637	29593
LCS R3638563-1 WG1644384 1x	0401A_32	162844	65968	61285
LCSD R3638563-2 WG1644384 1x	0401A_33	148857	58067	52580
BLANK R3638563-3 WG1644384 1x	0401A_35	157321	56384	44541
L1332422-01 WG1644384 1x	0401A_55	159344	61791	58669
MS R3638563-4 WG1644384 10x	0401A_56	180454	68568	59182
MSD R3638563-5 WG1644384 10x	0401A_57	181962	70611	60769

INTERNAL STANDARD SUMMARY

Instrument: VOCMS22 • File ID: 0403_03

04/03/21 12:14

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	0403_03	105426	57636	61668
Upper Limit		210852	115272	123336
Lower Limit		52713	28818	30834
LCS R3638126-1 WG1645350 1x	0403_03LCS	105426	57636	61668
BLANK R3638126-2 WG1645350 1x	0403_05	97585	55458	58172
L1332422-03 WG1645350 1x	0403_23	101364	54183	54215
L1332422-04 WG1645350 1x	0403_30	107421	57130	55847
L1332422-02 WG1645350 1x	0403_31	104062	52952	53916
MS R3638126-3 WG1645350 1x	0403_32	117885	61588	60518
MSD R3638126-4 WG1645350 1x	0403_33	121894	63931	62889
LCSD R3638126-5 WG1645350 1x	0404_02	104321	54079	56558

Instrument: VOCMS23 • File ID: 0405_31

04/05/21 17:24

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	0405_31	365039	153750	151686
Upper Limit		730078	307500	303372
Lower Limit		182520	76875	75843
LCS R3638467-1 WG1645898 1x	0405_31LCSA	365039	153750	151686
LCSD R3638467-2 WG1645898 1x	0405_32A	337245	139319	138048
BLANK R3638467-3 WG1645898 1x	0405_34A	330513	132405	128617
L1332422-02 WG1645898 10x	0405_46	352053	141143	137563
L1332422-03 WG1645898 1x	0405_47	337504	135842	134217
L1332422-04 WG1645898 1x	0405_49	366903	148609	147684

INTERNAL STANDARD SUMMARY

Instrument: VOCMS33 • File ID: 0407_31

04/07/21 19:23

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	0407_31	123553	38675	28264
Upper Limit		247106	77350	56528
Lower Limit		61777	19338	14132
LCS R3639459-1 WG1647430 1x	0407_31LCS	123553	38675	28264
LCSD R3639459-2 WG1647430 1x	0407_32	108094	42020	34733
BLANK R3639459-3 WG1647430 1x	0407_34	98650	37556	27943
L1332422-06 WG1647430 10x	0407_46	118557	45266	31529
L1332422-08 WG1647430 25x	0407_47	118498	44983	31637
L1332422-09 WG1647430 20x	0407_48	115767	42936	30556
L1332422-10 WG1647430 100x	0407_49	115238	43490	27576
L1332422-11 WG1647430 20x	0407_50	115979	35959	25146
L1332422-12 WG1647430 1x	0407_51	107978	36417	26669

Instrument: VOCMS35 • File ID: 0406_02

04/06/21 12:03

Sample ID	File ID	8260-FLUOROBENZENE	8260-CHLOROBENZENE-D5	8260-1,4-DICHLOROBENZENE-D4
		Response	Response	Response
Standard	0406_02	169213	73246	59038
Upper Limit		338426	146492	118076
Lower Limit		84607	36623	29519
LCS R3639183-1 WG1646436 1x	0406_02LCSA	169213	73246	59038
LCSD R3639183-2 WG1646436 1x	0406_03A	164230	69126	54374
BLANK R3639183-3 WG1646436 1x	0406_05A	162989	70442	55786
L1332422-01 WG1646436 10x	0406_08	163859	68526	52261

INTERNAL STANDARD SUMMARY

Instrument: VOCMS27 • File ID: 0401_03

04/01/21 12:20

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	0401_03	555319
Upper Limit		1110638
Lower Limit		277660
LCS R3638787-1 WG1644043 1x	0401_04	632654
LCSD R3638787-2 WG1644043 1x	0401_05	823603
BLANK R3638787-3 WG1644043 1x	0401_08	579948
L1332422-01 WG1644043 1x	0401_19	730696
L1332422-02 WG1644043 1x	0401_20	626168
L1332422-03 WG1644043 1x	0401_21	560038
L1332422-04 WG1644043 1x	0401_22	603375
L1332422-05 WG1644043 1x	0401_23	541422
L1332422-06 WG1644043 1x	0401_24	676287
L1332422-07 WG1644043 1x	0401_25	528249
L1332422-08 WG1644043 1x	0401_26	751545
L1332422-09 WG1644043 1x	0401_27	647947
MS R3638787-4 WG1644043 1x	0401_29	806650
MSD R3638787-5 WG1644043 1x	0401_30	678261

Instrument: VOCMS27 • File ID: 0402_03

04/02/21 10:26

Sample ID	File ID	8260-1,4-DIFLUOROBENZENE Response
Standard	0402_03	531288
Upper Limit		1062576
Lower Limit		265644
LCS R3638175-1 WG1644831 1x	0402_04	672522
LCSD R3638175-2 WG1644831 1x	0402_05	636026
BLANK R3638175-3 WG1644831 1x	0402_07	506077
L1332422-10 WG1644831 1x	0402_13	696837
L1332422-11 WG1644831 1x	0402_14	770828
L1332422-12 WG1644831 1x	0402_15	630206
MS R3638175-4 WG1644831 1x	0402_26	613793
MSD R3638175-5 WG1644831 1x	0402_27	478232

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.
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.
S10	Surrogate recovery was above laboratory and method acceptance limits.

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: **Nammo Defense Systems, Inc.**
Description: **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 turn

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-2-114-20210330	Grab	GW	114	3-30-21	1057	5	X	X	X								-01
TTU-2-114-20210330-Dup			114		1057	5	X	X	X								-02
TTU-1-50-20210330			50		1135	15	X	X	X							MS/MSD	-03
TTU-5-110-20210330			110		0735	5	X	X	X								-04
TTU-9A-61-20210330			61		0925	5	X	X	X								-05
TTU-12-82-20210330			82		1019	5	X	X	X								-06
TTU-13-51-20210330			51		0946	5	X	X	X								-07
TTU-14-69-20210330			69		1003	5	X	X	X								-08
TTU-EX-2-74-20210330			74		~~0754~~ 0756	5	X	X	X								-09
TTU-EX-3-76-20210330			76		0813	5	X	X	X								-10

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

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 # 133249 22

Table **E007**

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)
	3-30-21	1245	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	3/30/21	1800	SMA
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 24+0.24 °C Bottles Received: 54

Date: 3-31-21 Time: 8.00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

PNPAZ

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 Turn

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-EX-4-76-20210330~~	~~Grab~~	~~GW~~	~~76~~ 77	~~3-30-21~~	~~0830~~ 0830	5	X	X	X									
~~TTU-EX-5-77-20210330~~			~~77~~		~~0830~~	5	X	X	X									
TTU-EX-4-77-20210330	Grab	GW	77	3-30-21	0830	5	X	X	X									-11
TTU-EX-5-80-20210330	"	"	80	"	0850	5	X	X	X									-12
Trip Blank						1		X										-13

Analysis / Container / Preservative

Chain of Custody Page 1 of 2

Pace Analytical® National Center for Testing & Innovation

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Mount Juliet, TN 37122
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Fax: 615-758-5859

L# 1732422

Table #

Acctnum: **GEOSYNPAZ**

Template:

Prelogin:

TSR: **Chris Ward**

PB:

Shipped Via:

* Matrix:
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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
	3-30-21	1245		1
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
	3/30/21	1800		2.4+0.2=2.6 5cg
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				3-31-21 8:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

PNPAZ