2021 ANNUAL MONITORING REPORT

Groundwater Quality Monitoring Program
Multiple Oil & Gas Well Sites
Longmont, Colorado

August 4, 2021
Terracon Project No. 22217000

Prepared for:
City of Longmont
Longmont, Colorado

Prepared by:
Terracon Consultants, Inc.
Longmont, Colorado

August 4, 2021

City of Longmont
1100 South Sherman Street
Longmont, Colorado 80501

Attn: Dr. Jane Turner, P.E., PhD
(303) 774-4545
jane.turner@longmontcolorado.gov

Re: 2021 Annual Monitoring Report
Groundwater Quality Monitoring Program
Oil & Gas Well Sites
Longmont, Colorado
Terracon Project No. 22217000

Dear Dr. Turner:

Terracon Consultants, Inc. (Terracon) is pleased to submit our report of the 2021 Annual Groundwater Quality Monitoring Program activities performed at fifteen plugged and abandoned (PA) O&G well sites, and one associated tank battery site located within the City of Longmont, Colorado. The report presents data from recent field activities that included the collection of groundwater samples for laboratory analysis. Terracon conducted the Investigation in general accordance with our proposal (P22217000), dated January 25, 2021.

Terracon appreciates this opportunity to provide environmental consulting services to The City of Longmont. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

Terracon Consultants, Inc.

Charles Covington

Charles A. Covington
Staff Geologist

John C. Graves, P.G.
Senior Principal/Regional Manager

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APPENDICES

1.0 EXECUTIVE SUMMARY

In 2013, Terracon installed and/or sampled groundwater monitoring wells at the active oil and gas (O&G) wells located within the City of Longmont (the City). The results of these activities are described in the First and Third Quarter 2013 Monitoring Reports (May 31, 2013 and December 31, 2013, respectively). Terracon has continued to execute sampling activities for the City of Longmont Groundwater Quality Monitoring Program and the results of these activities are described in the subsequent 2014 through 2021 monitoring reports.

Since 2013, Terracon has assisted the City with the investigation of additional active and PA well sites within Longmont City limits to add to the annual groundwater quality monitoring program. All of the current program sites were sampled during the 2021 monitoring event, with the exception of the Sherwood #1 and Sherwood #2 sites.

This groundwater quality sampling event was performed in accordance with the scope of services outlined in Terracon Proposal No. P22217000, dated January 25, 2021. A total of 43 of the planned 50 monitoring wells were sampled on June 15th – 17th, June 21st, 23rd, 28th, and July 7th to evaluate potential impacts to groundwater from current or historical oil and gas (O&G) extraction and production (E&P) operations at the sites. Groundwater samples were analyzed in accordance with the procedures outlined in Section 3 of this report.

A summary of our findings, conclusions, and recommendations is provided below. It should be recognized that details were not included or fully developed in this section, and the report must be read in its entirety for a comprehensive understanding of the items contained herein.

Findings and Conclusions

Volatile organic compound (VOC) constituents were not reported at concentrations above laboratory detection limits in groundwater samples collected during this sampling event.

Dissolved methane in groundwater may be an indication of a release at an O&G production well site. Neither the COGCC nor the CDPHE have developed standards for methane in groundwater. The COGCC has developed standards for source water (e.g., water wells) in the Greater Wattenberg Area (GWA). This project is located within the GWA. Water wells that are registered with Colorado Division of Water Resources (DWR), and include:

- household,
- domestic,
- livestock,
- irrigation,
- municipal/public,

- commercial,
- permitted or adjudicated springs, and
- monitoring wells installed for the purpose of complying with groundwater baseline sampling and monitoring requirements.

Section 318A.f.(8) of the COGCC Rules and Regulations for baseline sampling of water wells in the GWA states that concentrations of methane greater than 1.0 mg/L require a gas compositional and stable isotope analysis of the methane to determine the source of the methane (e.g. thermogenic, biogenic or a mixture of the two). Currently, the reported methane concentrations do not require additional investigation of groundwater.

Several inorganic parameters (nitrogen, sulfates, and chloride) were reported above Colorado Department of Public Health and Environment (CDPHE) and Colorado Oil and Gas Conservation Commission (COGCC) Groundwater Standards. However, laboratory analytical results have remained consistent with former sampling events and results may be indicative of background concentrations based on former analytical data and lack of production of produced water at currently active sites.

In general, increased chloride and sulfate concentrations correspond to increases in specific conductance and turbidity due to slow recharge of the monitoring well and the presence of clay in the formation. Clay is a smaller particle and passes through the monitoring well filter pack, and inorganics can attach to the clay particles.

Recommendations

The objective of the investigation was to evaluate the presence of constituents of concern in the groundwater above relevant laboratory detection limits and/or regulatory limits associated with historical O&G operations at the sites.

Terracon recommends the continued monitoring of all sites currently enrolled in the City of Longmont Annual Groundwater Quality Monitoring Event on an annual basis. The continued monitoring of the aforementioned sites will work to augment the existing data set. This information will be used to further assess the extent groundwater impacts present, track trends in the groundwater quality, and to evaluate if sites shall be added to or removed from the annual sampling list.

2.0 SITE DESCRIPTION

This project consists of sampling monitoring wells associated with fifteen PA O&G well sites and one associated tank battery site located in the City of Longmont, Colorado, (the City). The 2021 monitoring event analyzed potential impacts to groundwater, in accordance with Terracon Proposal No. P22217000, at the following sites:

- Domenico #1: three monitoring wells;
- Evans #6 Tank Battery: three monitoring wells;
- Evans #6 Wellhead: two monitoring wells;
- Stamp #1: three monitoring wells;
- City of Longmont #1: two monitoring wells;
- Powell #1: three monitoring wells;
- Sherwood #1: three monitoring wells;
- Sherwood #2: three monitoring wells;
- Tabor #1: two monitoring wells;
- Tabor #7: three monitoring wells;
- Longmont 8-10k: three monitoring wells;
- Maruyama: three monitoring wells;
- George Mayeda #1; three monitoring wells;
- Mary #2: three monitoring wells;
- Wertman #1: three monitoring wells; and
- Serafini Gas Unit: five monitoring wells.

The monitoring wells at the Sherwood #1 and Sherwood #2 sites were not sampled during the 2021 monitoring event due to the on-site monitoring wells not being able to be located under dense crop cover. Terracon plans to sample these sites after crops are harvested, when monitoring wells are more easily located.

The 2021 monitoring event well site locations are shown on Exhibit 1.

3.0 SCOPE OF SERVICES

The 2021 annual groundwater quality monitoring services described below were performed on June 15th – 17th, June 21st, 23rd, 28th, and July 7th, as a modification to the sampling strategy outlined in the Sampling and Analysis Plan (SAP) prepared and issued by Terracon on February 1, 2013. Based on the initial groundwater sampling results reported in 2013, the sampling frequency and laboratory analyte list have been modified.

The monitoring wells at the following well sites were sampled during this annual event:

- Domenico #1: DM1-MW01, DM1-MW02, and DM1-MW03;
- Evans #6 Wellhead: E6W-MW02, and E6W-MW03;
- Evans #6 Tank Battery: E6T-MW01, E6T-MW-02, and E6T-MW03;
- Stamp #1: ST1-MW02, ST1-MW03 and ST1-MW05;
- City of Longmont #1: CL1-MW01, CL1-MW02, and CL1-MW03;
- Powell #1: PL1-MW01, PL1-MW02, and PL1-MW03;
- Sherwood #1: SH1-MW01, SH1-MW02, and SH1-MW03;
- Sherwood #2: SH2-MW01, SH2-MW02, and SH2-MW03[1];
- Tabor #1: TB1-MW01, TB1-MW02, and TB1-MW03R;
- Tabor #7: TB7-MW01, TB7-MW02, and TB7-MW03;
- Longmont 8-10K: LM8-MW01, LM8-MW02, and LM8-MW03;
- Maruyama #1: MY1-MW01, MY1-MW02, and MY1-MW03;
- George Mayeda #1: GM1-MW01, GM1-MW02, and GM1-MW03;
- Mary #2: MR2-MW01, MR2-MW02, and MR2-MW03;
- Wertman #1: WT1-MW01, WT1-MW02, and WT1-MW03; and
- Serafini Gas Unit: SGU-MW01, SGU-MW02, SGU-MW03, SGU-MW-06, and SGU-MW07.

The monitoring wells at the Sherwood #1 and Sherwood #2 sites were not sampled during the 2021 monitoring event due to the on-site monitoring wells not being able to be located under dense crop cover. Terracon plans to sample these sites after crops are harvested, when monitoring wells are more easily located.

Monitoring well TB1-MW01 at the Tabor #1 site was not sampled during this annual groundwater sampling event due to the monitoring well being filled in with sediment.

3.1 Standard of Care

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, express or implied, regarding the findings, conclusions, or recommendations. Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These Investigation services were performed in accordance with the scope of work agreed with you, our client, as reflected in our proposal and were not intended to be in strict conformance with ASTM E1903-19.

3.2 Additional Scope Limitations

Findings, conclusions, and recommendations resulting from these services are based upon information derived from the on-site activities and other services performed under this scope of work; such information is subject to change over time. Certain indicators of the presence of

hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those identified during this sampling event. Subsurface conditions may vary from those encountered at specific wells or during other surveys, tests, assessments, investigations, or exploratory services. The data, interpretations, findings, and our recommendations are based solely upon data obtained at the time and within the scope of these services.

3.3 Reliance

This report has been prepared for the exclusive use of the City of Longmont, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of the City of Longmont and Terracon. Any unauthorized distribution or reuse is at the City of Longmont's sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal, Investigation report, and Terracon's Master Services Agreement (MSA) with the City of Longmont. The limitation of liability defined in the terms and conditions of the MSA is the aggregate limit of Terracon's liability to the City of Longmont and all relying parties unless otherwise agreed in writing.

4.0 FIELD INVESTIGATION

4.1 Safety

Terracon is committed to the safety of all its employees. As such, and in accordance with our Incident and Injury Free® safety goals, Terracon conducted the fieldwork under a site-specific health and safety plan. The plan identified site-specific job hazards and proper pre-task planning procedures. Work was performed using Occupational Safety & Health Administration (OSHA) Level D work attire consisting of hard hats, high-visibility attire, safety glasses, protective gloves, and protective boots.

4.2 Sampling and Analytical Program Summary

Terracon sampled a total of 43 groundwater monitoring wells for the analytical suite listed in the table below.

Groundwater Sample Constituents

Parameters	Analytical Method
Volatile Organic Compounds (VOCs)	EPA Method 8260
Dissolved Gases: Methane, Ethane and Ethylene	RSK 175
Dissolved Gases: Carbon Dioxide	4500CO2 D22011

Parameters	Analytical Method
Chloride	EPA Method 300.0
Sulfate	EPA Method 300.0
Total Dissolved Solids (TDS)	SM 2320B

EPA = Environmental Protection Agency; SW-846 analytical methods

Additionally, temperature, pH, specific conductance, dissolved oxygen and oxygen reducing potential measurements were collected in the field during groundwater sampling. Specific conductance and pH measurements are summarized on Table 2 in Appendix A of this report.

4.3 Groundwater Sampling

Terracon used hand bailing sampling techniques with a disposable bailer to purge and obtain a representative groundwater sample from the monitoring wells. The monitoring wells were sampled in accordance with February 1, 2013 SAP. After groundwater field parameters had stabilized, a groundwater sample was collected from each of the monitoring wells. The groundwater samples were placed in laboratory provided, pre-cleaned containers and stored in a cooler with ice during delivery to the laboratory. The samples were submitted under chain-of-custody protocol and analyzed for the parameters summarized in Section 3.2 on a standard turn-around time and according to the appropriate United States Environmental Protection Agency (USEPA) analytical methods.

The groundwater sample naming convention used is as follows:

- [Site Abbreviation]-[Well Designation].
- Example: SH2-MW01 is the groundwater sample collected from Sherwood #2 well site, monitoring well MW01.

The groundwater samples were submitted to Pace Analytical (Pace) in Mount Juliet, Tennessee. The laboratories performed Quality Analysis/Quality Control (QA/QC) during the analysis process of the groundwater samples. The QA/QC process involved completing a method blank, laboratory control sample, matrix spike, matrix spike duplicate, and a sample duplicate to test the accuracy and calibration of the laboratory equipment and processes.

5.0 FIELD INVESTIGATION RESULTS

5.1 Hydrogeology

Depth to groundwater and groundwater elevation data measured in June and July 2021 were used to generate potentiometric surface maps and estimated groundwater flow direction. The potentiometric surface maps and groundwater elevation data are included in Appendix A as site-specific Exhibits and Table 1, respectively. As depicted on the potentiometric surface maps

groundwater beneath most of the well sites, in general, flows towards the St. Vrain Creek. The well site groundwater flow directions are as follows:

- City of Longmont #1: northeast, towards the St. Vrain Creek;
- Serafini Gas Unit: east-northeast, towards the St. Vrain Creek;
- Powell #1: northeast, towards the St. Vrain Creek;
- Evans #6 Wellhead: south, towards the St. Vrain Creek;
- Evans #6 Tank Battery: southwest towards, the St. Vrain and Boulder Creeks;
- Domenico #1: northwest, towards Boulder Creek;
- Stamp #1: unknown, insufficient survey data available – assumed east-southeast, towards Union Reservoir;
- Tabor #1: unknown, groundwater elevation data available for only two wells – assumed southeast, towards the St. Vrain Creek;
- Tabor #7: unknown, insufficient survey data available – assumed southeast, towards the St. Vrain Creek;
- Longmont 8-10K: south, towards the St. Vrain Creek;
- Maruyama: north, towards the St. Vrain Creek;
- George Mayeda #1: north, towards Spring Gulch;
- Mary #2: southwest, towards the St. Vrain Creek; and
- Wertman #1: west-southwest, towards the St. Vrain Creek.

6.0 ANALYTICAL RESULTS

The laboratory analytical reports and chain-of-custody records are included in Appendix B. The following sections summarize the results of the analytical testing.

Laboratory analytical results for the groundwater samples were compared to the groundwater standard applicable to O&G well sites, COGCC Table 910-1 standards (May 1, 2018). The Colorado Department of Public Health and Environment's (CDPHE) Regulation 41 Groundwater Quality Standards, December 30, 2016 (GWQS). A summary of constituent concentrations exceeding these standards in the groundwater samples is include in Table 2.

The groundwater analytical results for detected concentrations are discussed in the following sections. Groundwater analytical data and corresponding action levels are summarized in Table 2 (Appendix A).

6.1 Organic Compounds

Dissolved methane was reported at the Powell #1 Wellhead in samples PL1-MW02 and PL1-MW03 at concentrations of 0.044 mg/L and 0.049 mg/L, respectively; at the Domenico #1 Wellsite in sample DM1-MW01 at a concentration of 0.015 mg/L; and at the Serafini Gas Unit in sample

SGU-MW07 at a concentration of 0.025 mg/L. Dissolved ethane and ethene were not detected above their respective laboratory reporting limit in the samples collected.

Section 318A.f.(8) of the COGCC Rules and Regulations for baseline sampling of water wells in the GWA states that concentrations of methane greater than 1.0 mg/L require a gas compositional and stable isotope analysis of the methane to determine the source of the methane (e.g. thermogenic, biogenic or a mixture of the two). In accordance with the COGCC Rules and Regulations, the reported methane concentrations do not require additional analyses of groundwater to be performed.

6.2 Inorganics in Groundwater

Inorganic cations and anions present in groundwater can be secondary indicators of well site releases associated with produced water. The COGCC has defined the groundwater standard exceedance concentrations for chloride and sulfate to be a regional background concentration with a multiplier of 1.25. Terracon was able to determine a regional background concentration levels for chloride and sulfate by comparing current concentrations to data from previous years monitoring events. Terracon utilized analytical data from the current and previous annual sampling events (as far back as 2013 in some sites) from each of the sites and has determined that the reported concentrations of chloride and sulfate for the 2021 sampling event are within their respective regional background concentrations. Chloride and sulfate concentrations measured at each site are comparable in magnitude with that of previous values and therefore have been determined to exist at elevated concentrations above COGCC and CDPHE regulatory limits, but within the regional background levels.

Elevated concentrations of sulfates and chlorides above their respective laboratory analytical detection limits were reported in groundwater samples collected from monitoring wells at each site sampled during this monitoring event. Please refer to the groundwater analytical results in Table 2 included in this report for a detailed overview of regulatory exceedances. A brief summary of the analytical results is included below.

Sulfate concentrations were reported in groundwater samples collected from monitoring wells at the Powell #1, Evans #6 Tank Battery, Evans #6 Wellhead, Longmont 8-10K, Domenico #1, City of Longmont #1, Serafini Gas Unit, George Mayeda #1, Maruyama #1, Tabor #1, Tabor #7, Wertman #1, Stamp #1, and Mary #2 well sites above COGCC and CDPHE limits, but within regional background levels. Chloride concentrations were reported in groundwater samples collected from monitoring wells at the Serafini Gas Unit, Powell #1, Evans #6 Tank Battery, Evans #6 Wellhead, Domenico #1, Tabor #1, Tabor #7, Stamp #1, and Mary #2 well sites above COGCC and CDPHE limits, but within regional background levels.

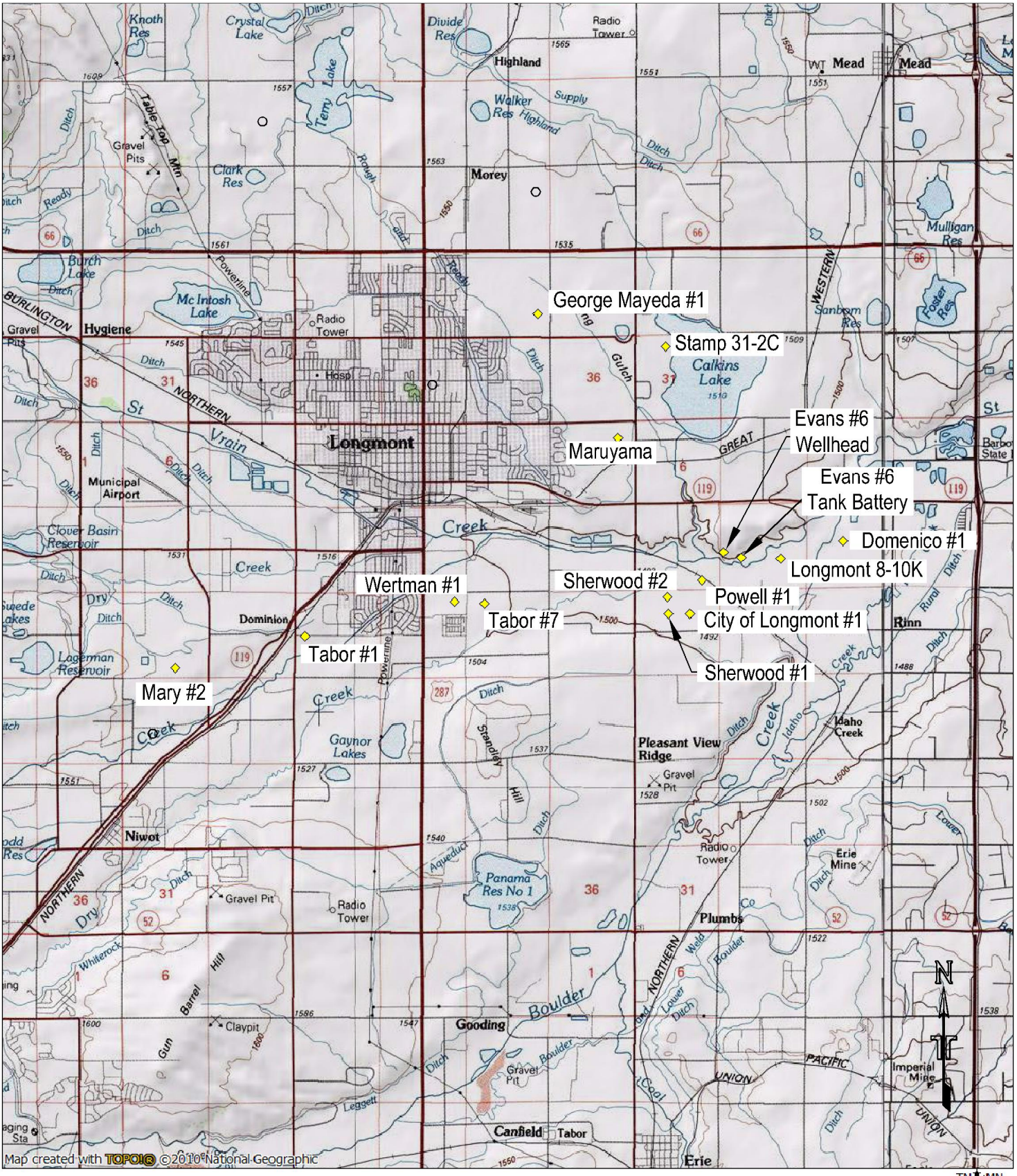
APPENDIX A – EXHIBITS & TABLES

Exhibit 1 – Wellsite Locations Map

Exhibit 2 – Site and Potentiometric Surface Diagrams: Multiple Well Sites (14)

Table 1 – Groundwater Elevation Data

Table 2 – Groundwater Analytical Results



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Topographic and Site Location Map

City of Longmont Oil and Gas Well Sites

Longmont
Colorado

Exhibit 1

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DATE:	7/29/21
JOB NO.	22217000
ACAD NO.	001
SHEET NO.:	1 OF 15

LEGEND

– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (feet above mean sea level) Contours Reported, June 17, 2021

– Approximate Grounwater Flow Direction, June 17, 2021

0' 100'
Approximate Scale

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Site and Piezometric Surface Diagram - Domenico #1

City of Longmont Oil and Gas Well Sites

Longmont
Colorado

Exhibit 2

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ACAD NO.	002
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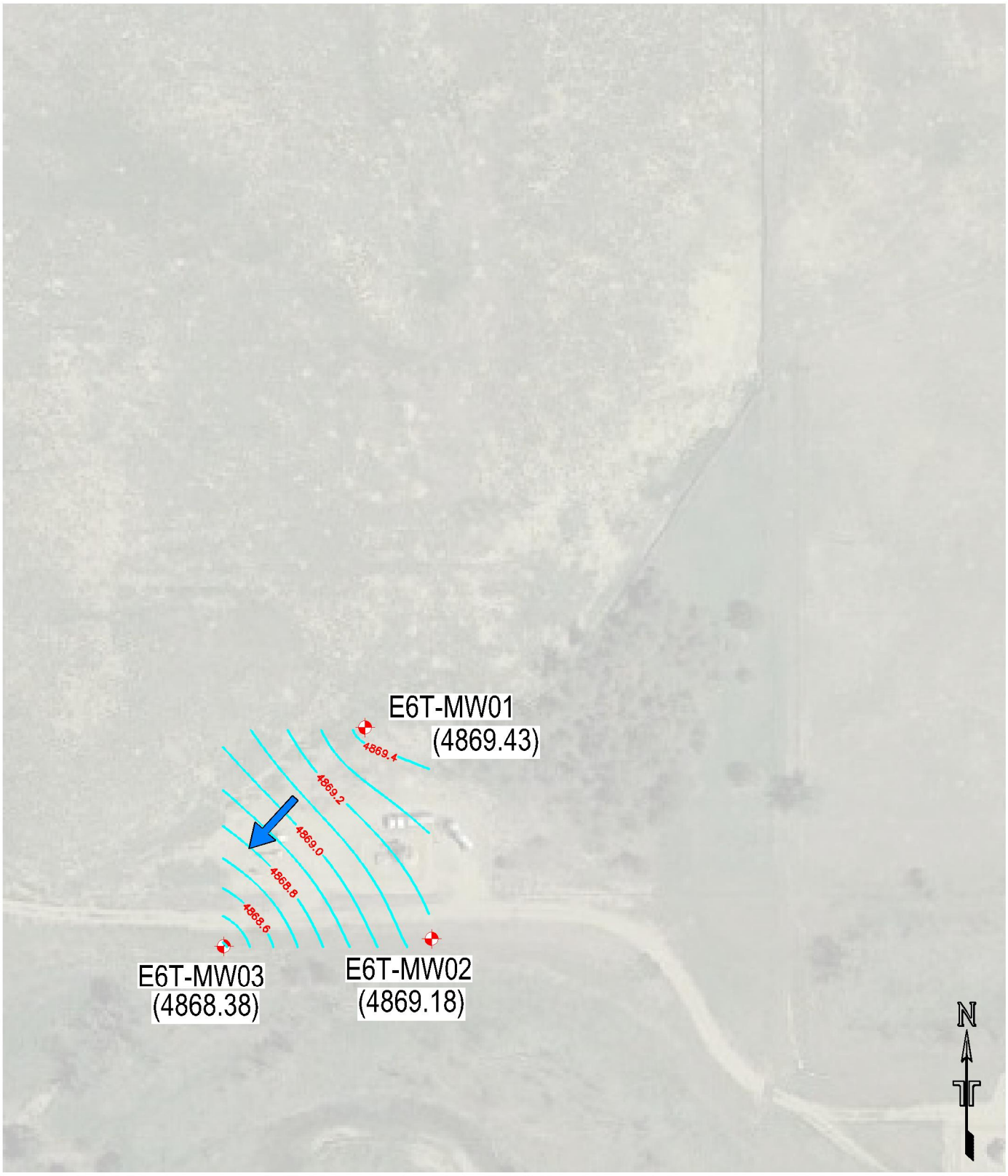

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– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (feet above mean sea level) Contours Reported, June 17, 2021

– Approximate Grounwater Flow Direction, June 17, 2021

0' 100'
Approximate Scale

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Site and Piezometric Surface Diagram - Evans #6 Tank Battery

City of Longmont Oil and Gas Well Sites

Longmont
Colorado

Exhibit 3

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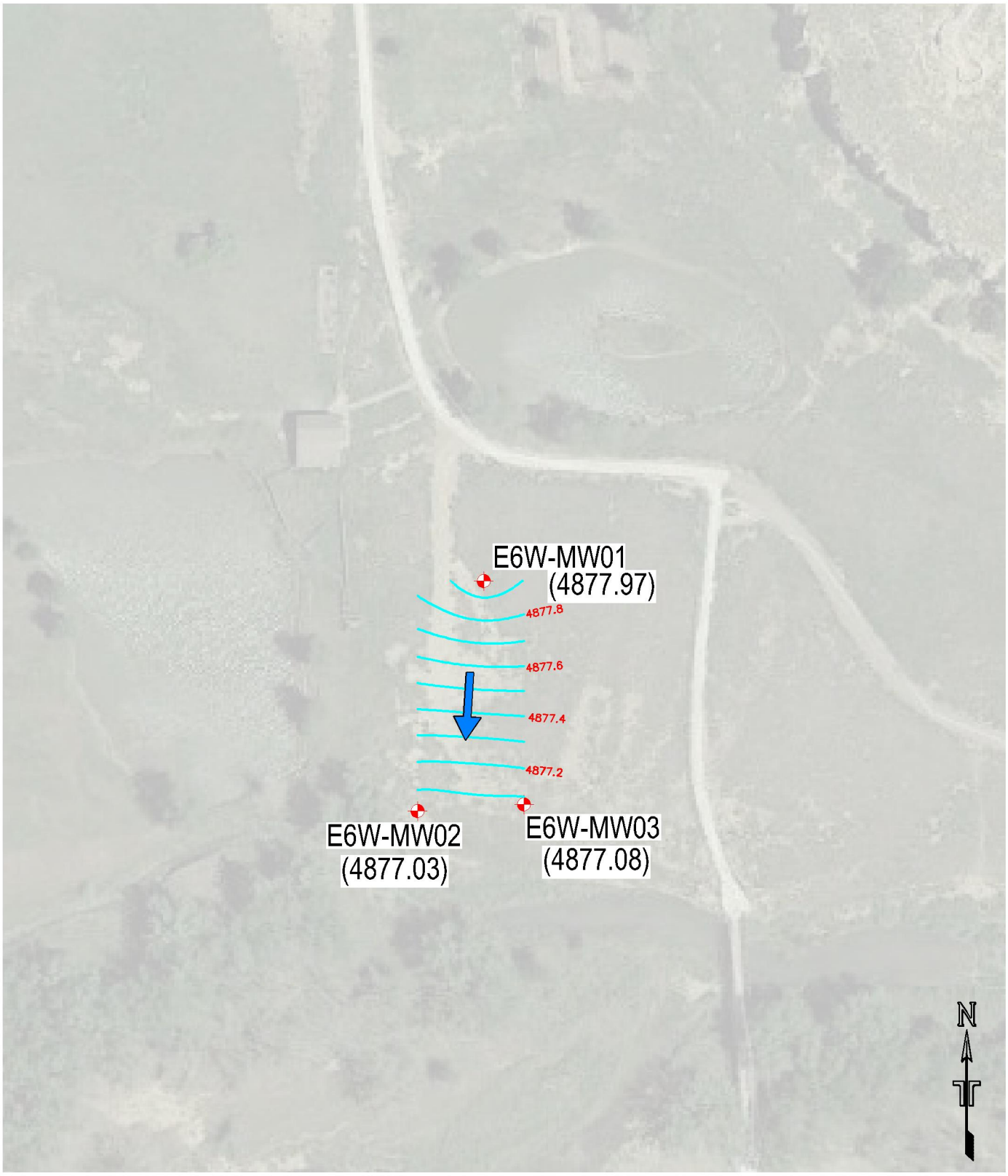

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– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (feet above mean sea level) Contours Reported, June 17, 2021

– Approximate Grounwater Flow Direction, June 17, 2021

0' 100'
Approximate Scale

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Site and Piezometric Surface Diagram - Evans #6 Wellhead

City of Longmont Oil and Gas Well Sites

Longmont
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Exhibit 4

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ACAD NO.	004
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LEGEND

– Approximate Location of Groundwater Monitoring Wells

0' 100'

Approximate Scale

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Site Diagram - Stamp 1

City of Longmont Oil and Gas Well Sites

Longmont

Colorado

Exhibit 5

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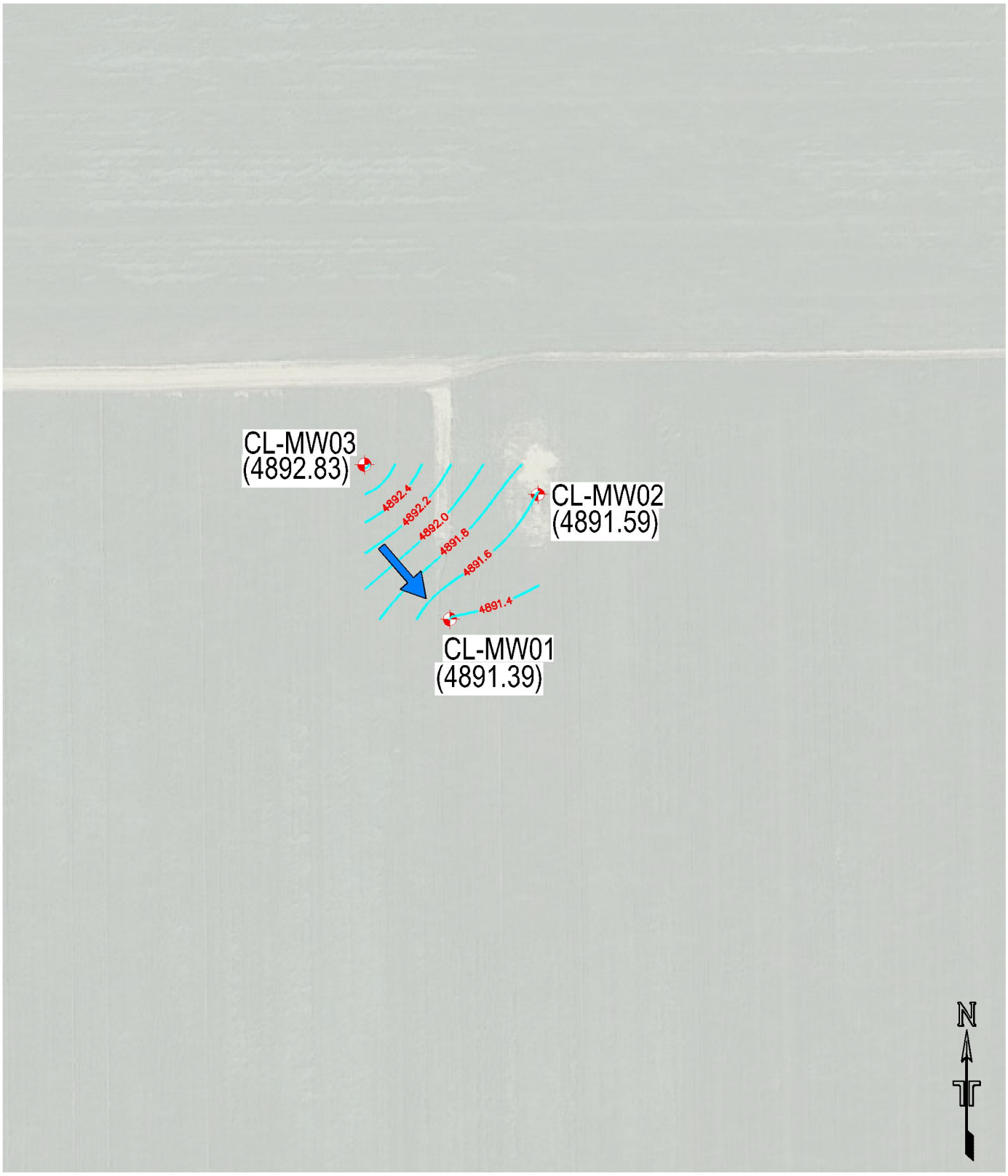

LEGEND

– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (feet above mean sea level) Contours Reported, June 15, 2021

– Approximate Grounwater Flow Direction, June 15, 2021

0' 100'
Approximate Scale

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Site and Piezometric Surface Diagram - City of Longmont #1

City of Longmont Oil and Gas Well Sites

Longmont
Colorado

Exhibit 6

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LEGEND

– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (feet above mean sea level) Contours Reported, June 15, 2021

– Approximate Grounwater Flow Direction, June 15, 2021

0' 100'
Approximate Scale

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Site and Piezometric Surface Diagram - Powell #1
City of Longmont Oil and Gas Well Sites
Longmont
Colorado

Exhibit 7

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LEGEND

– Approximate Location of Groundwater Monitoring Wells

0' 100'

Approximate Scale

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Site Diagram - Tabor #1

City of Longmont Oil and Gas Well Sites

Longmont

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Exhibit 8

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LEGEND

– Approximate Location of Groundwater Monitoring Wells

0' 100'

Approximate Scale

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Site Diagram - Tabor #7

City of Longmont Oil and Gas Well Sites

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Exhibit 9

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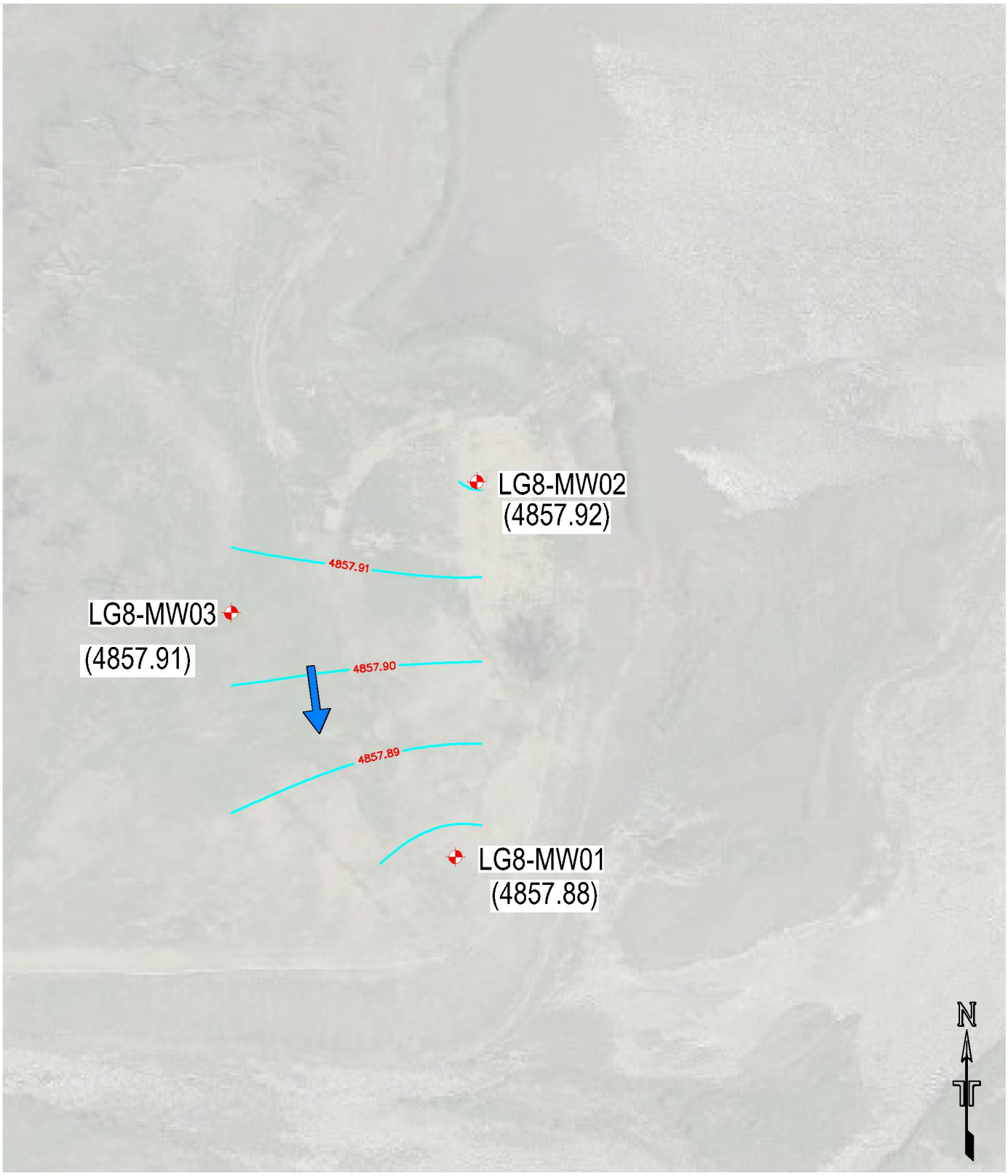

LEGEND

– Approximate Location of Groundwater Monitoring Wells

0' 100'

Approximate Scale

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Site Diagram - Longmont 8-10K

City of Longmont Oil and Gas Well Sites

Longmont

Colorado

Exhibit 10

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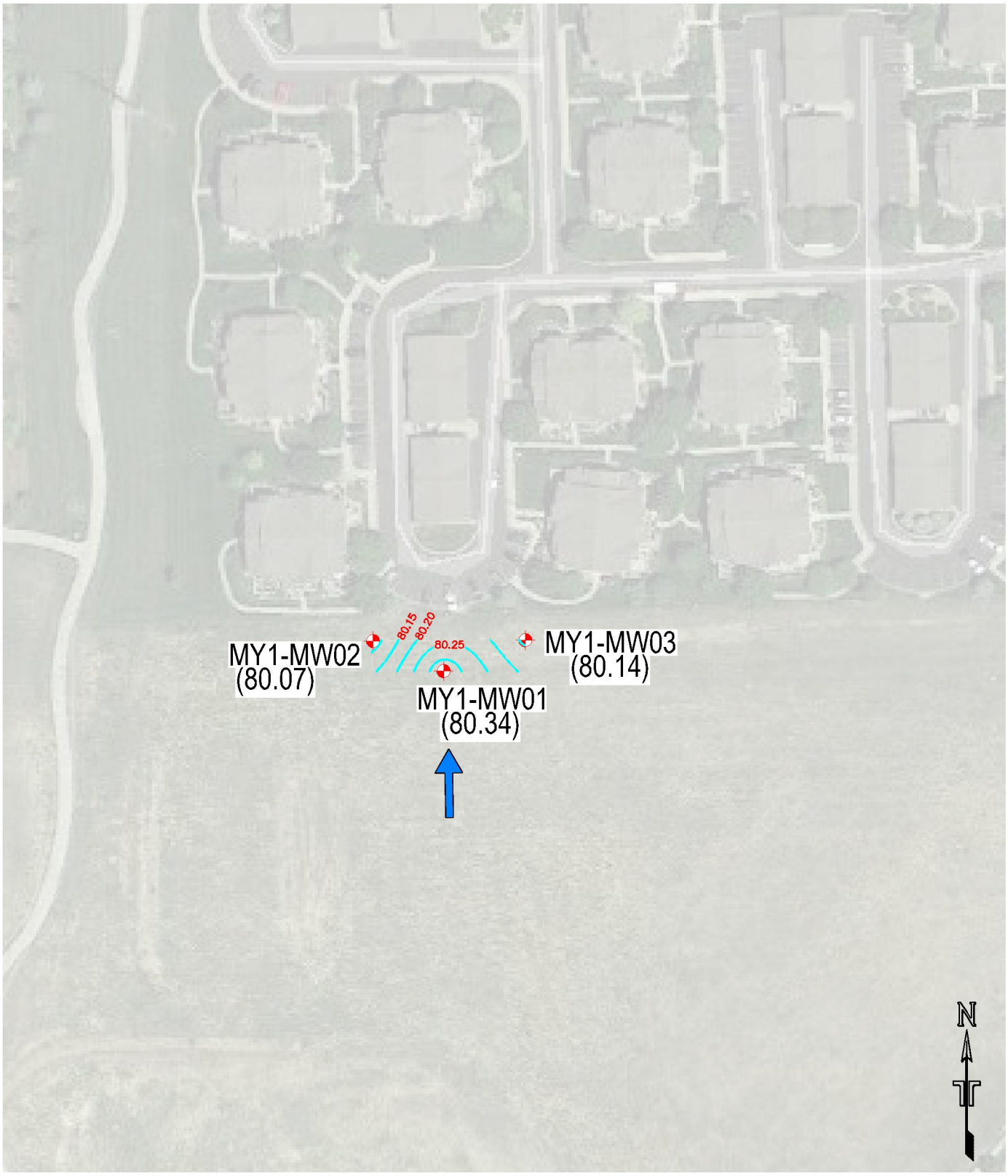

LEGEND

– Approximate Location of Groundwater Monitoring Wells

81.2 – Approximate Groundwater Elevation (relative elevationl) Contours Reported, June 16, 2021

– Approximate Grounwater Flow Direction, June 16, 2021

0' 100'
Approximate Scale

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Site and Piezometric Surface Diagram - Maruyama
City of Longmont Oil and Gas Well Sites
Longmont
Colorado

Exhibit 11

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SCALE:	AS SHOWN
DATE:	7/29/21
JOB NO.	22217000
ACAD NO.	011
SHEET NO.:	11 OF 15

LEGEND

– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (relative elevation) Contours Reported, June 28, 2021

– Approximate Grounwater Flow Direction, June 28, 2021

0' 100'
Approximate Scale

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Site and Piezometric Surface Diagram - George Mayeda #1
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Exhibit 12

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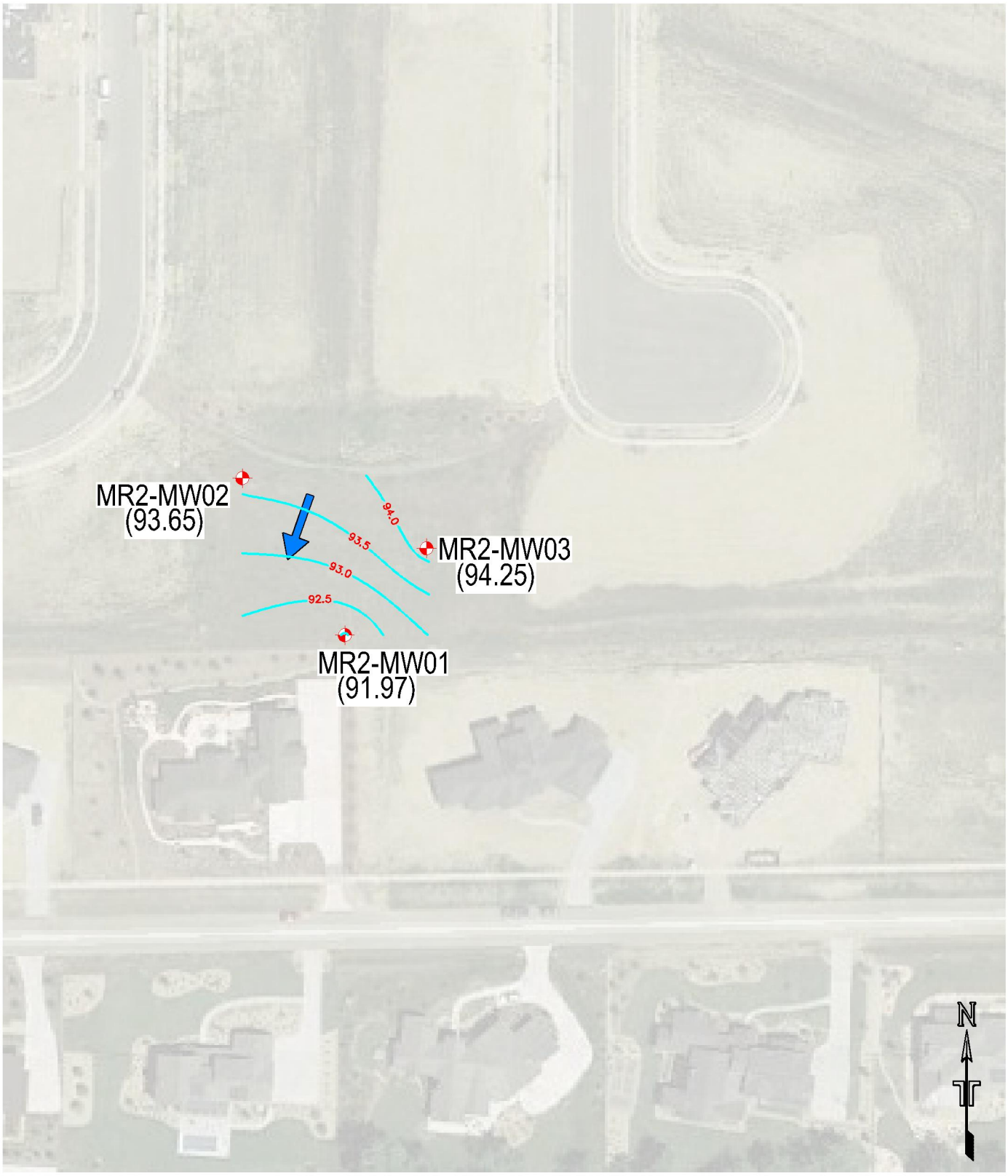
ACAD NO.	012
SHEET NO.:	12 OF 15



LEGEND

– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (relative elevation) Contours Reported, June 15, 2021

– Approximate Grounwater Flow Direction, June 15, 2021

0' 100'
Approximate Scale

Terracon
Consulting Engineers and Scientists
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PH. (970) 484-0359 FAX. (970) 484-0454

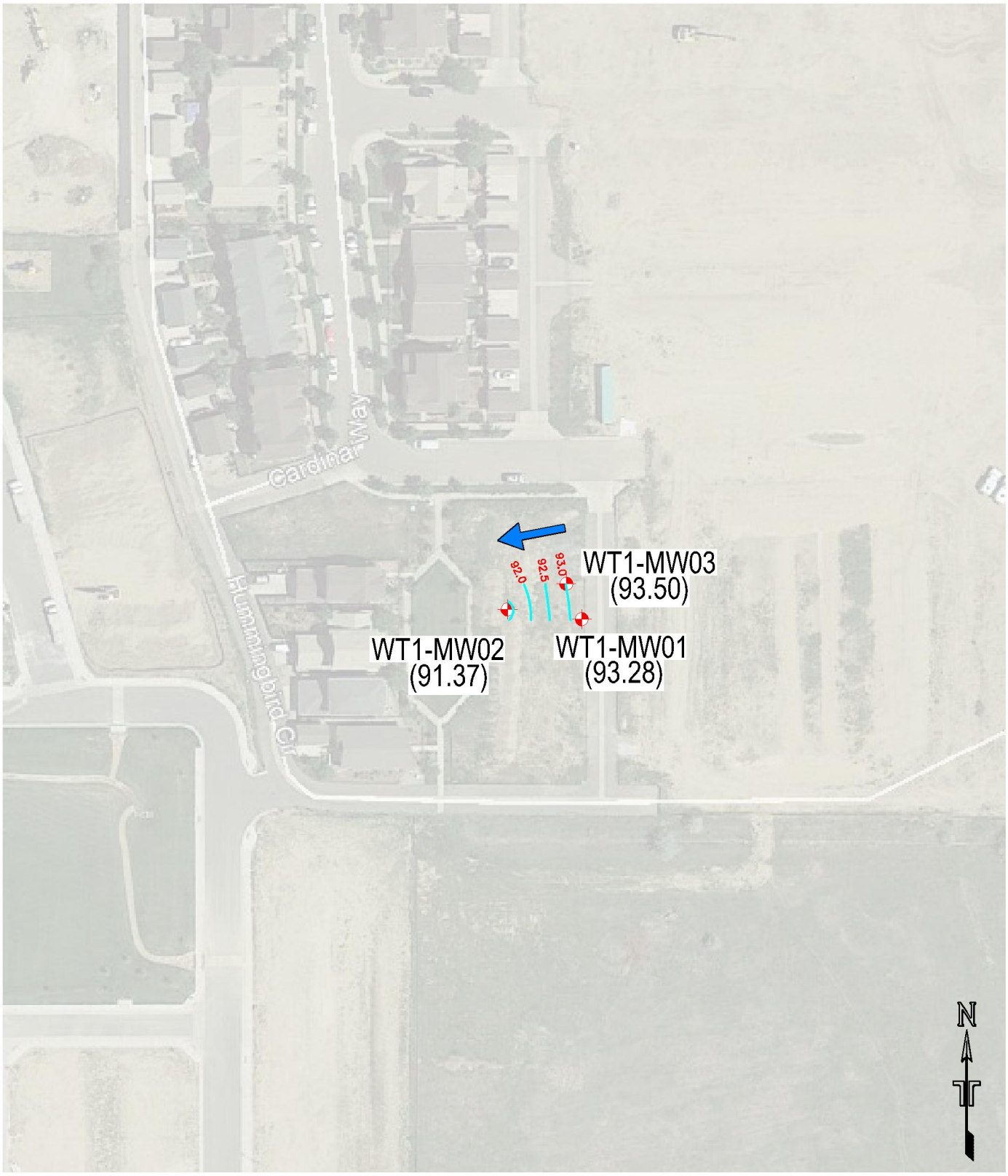
Site and Piezometric Surface Diagram - Mary #2

City of Longmont Oil and Gas Well Sites

Longmont
Colorado

Exhibit 13

DESIGNED BY:	JAS
DRAWN BY:	JAS
APPVD. BY:	MJS
SCALE:	AS SHOWN
DATE:	7/29/21
JOB NO.	22217000
ACAD NO.	013
SHEET NO.:	13 OF 15



LEGEND

– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (relative elevationl) Contours Reported, June 28, 2021

– Approximate Grounwater Flow Direction, June 28, 2021

0' 100'
Approximate Scale

Terracon
Consulting Engineers and Scientists
1901 Sharp Point Drive, Suite C Fort Collins, Colorado 80525
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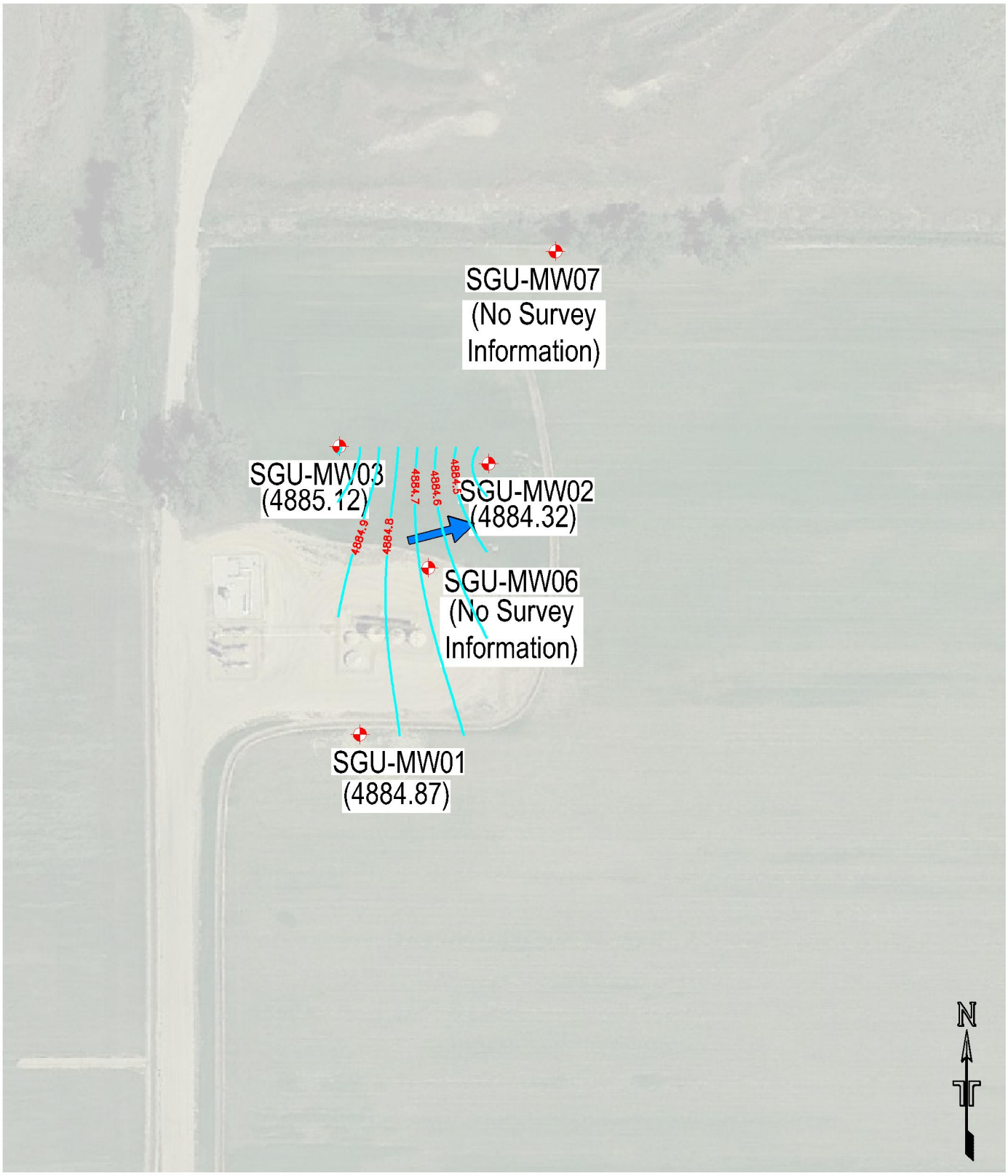
Site and Piezometric Surface Diagram - Wertman #1

City of Longmont Oil and Gas Well Sites

Longmont
Colorado

Exhibit 14

DESIGNED BY:	JAS
DRAWN BY:	JAS
APPVD. BY:	MJS
SCALE:	AS SHOWN
DATE:	7/29/21
JOB NO.	22217000
ACAD NO.	014
SHEET NO.:	14 OF 15



LEGEND

– Approximate Location of Groundwater Monitoring Wells

4851.2 – Approximate Groundwater Elevation (feet above mean sea level) Contours Reported, June 21, 2021

– Approximate Grounwater Flow Direction, June 21, 2021

0' 100'
Approximate Scale

Terracon
Consulting Engineers and Scientists
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Site and Piezometric Surface Diagram - Serafini Gas Unit

City of Longmont Oil and Gas Well Sites

Longmont
Colorado

Exhibit 15

DESIGNED BY:	JAS
DRAWN BY:	JAS
APPVD. BY:	MJS
SCALE:	AS SHOWN
DATE:	7/29/21
JOB NO.	22217000
ACAD NO.	015
SHEET NO.:	15 OF 15

Table 1 - Groundwater Elevation Data
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

Well ID	Top of Casing Elevation[1]	Date Measured	Total Depth[2]	Depth to Groundwater[2]	Groundwater Elevation[3]
Sherwood #1 Wellhead					
SH1-MW01	4902.75	3/18/2013	13.96	8.49	4894.26
		10/23/2013		6.70	4896.05
		7/28/2014		NR	
		3/30/2015		8.11	4894.64
		6/21/2016		NR	
		5/23/2017		NR	
		6/27/2018		7.42	4895.33
		6/10/2019		9.22	4893.53
		5/29/2020		8.62	4894.13
SH1-MW02	4900.99	3/18/2013	14.35	7.41	4893.58
		10/23/2013		6.30	4894.69
		7/28/2014		NR	
		3/30/2015		7.23	4893.76
		6/21/2016		6.87	4894.12
		5/23/2017		6.88	4894.11
		6/27/2018		6.80	4894.19
		6/10/2019		7.95	4893.04
		5/29/2020		7.42	4893.57
SH1-MW03	4901.80	3/18/2013	14.06	7.64	4894.16
		10/23/2013		6.33	4895.47
		7/28/2014		NR	
		3/30/2015		7.35	4894.45
		6/21/2016		NR	
		5/23/2017		NR	
		6/27/2018		7.00	4894.80
		6/10/2019		8.10	4893.70
		5/29/2020		7.66	4894.14
Sherwood #2 Wellhead					
SH2-MW01	4896.76	3/18/2013	10.80	5.20	4891.56
		7/28/2014		NR	
		3/30/2015		4.59	4892.17
		6/21/2016		5.04	4891.72
		5/23/2017		4.33	4892.43
		6/27/2018		4.53	4892.23
		6/17/2019		5.32	4891.44
		6/5/2020		5.12	4891.64
SH2-MW02	4896.15	3/18/2013	12.37	5.71	4890.44
		7/28/2014		NR	
		3/30/2015		4.96	4891.19
		6/21/2016		4.95	4891.20
		5/23/2017		4.34	4891.81
		6/27/2018		4.45	4891.70
		6/17/2018		5.30	4890.85
		6/5/2020		4.95	4891.20
SH2-MW03	4896.32	3/18/2013	9.71	5.11	4891.21
		7/28/2014		NR	
		3/30/2015		4.59	4891.73
		6/21/2016		4.61	4891.71
		5/23/2017		3.80	4892.52
		6/27/2018		3.50	4892.82
		6/17/2019		5.00	4891.32
		6/5/2020		4.60	4891.72
City of Longmont #1 Wellhead					
CL1-MW01	4896.99	3/20/2013	13.34	6.42	4890.57
		7/28/2014		NR	
		3/30/2015		6.41	4890.58
		6/21/2016		3.87	4893.12
		5/23/2017		NR	
		6/27/2018		4.60	4892.39
		6/17/2019		7.75	4889.24
		6/2/2020		4.69	4892.30
		6/15/2021		5.60	4891.39
CL1-MW02	4896.04	3/20/2013	12.86	5.75	4890.29
		7/28/2014		NR	
		3/30/2015		5.79	4890.25
		6/22/2016		1.80	4894.24
		5/23/2017		5.35	4890.69
		6/27/2018		3.49	4892.55
		6/17/2018		7.15	4888.89
		6/2/2020		3.22	4892.82
		6/15/2021		4.45	4891.59
CL1-MW03	4896.33	3/20/2013	13.10	5.86	4890.47
		7/28/2014		NR	
		3/30/2015		5.86	4890.47
		6/21/2016		3.22	4893.11
		5/23/2017		5.34	4890.99
		6/27/2018		4.06	4892.27
		6/17/2019		7.18	4889.15
		6/2/2020		3.55	4892.78
		6/15/2021		3.50	4892.83

Table 1 - Groundwater Elevation Data
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

Well ID	Top of Casing Elevation[1]	Date Measured	Total Depth[2]	Depth to Groundwater[2]	Groundwater Elevation[3]
Serafini Gas Unit					
SGU-MW01	4892.37	3/20/2013	12.90	5.52	4886.85
		10/22/2013		3.49	4888.88
		3/30/2015		5.86	4886.51
		6/21/2016		3.68	4888.69
		5/23/2017		5.70	4886.67
		6/10/2020		6.84	4885.53
		6/28/2018		3.65	4888.72
		6/21/2021		7.5	4884.87
SGU-MW02	4891.42	3/21/2013	8.10	5.17	4886.25
		10/22/2013		3.45	4887.97
		3/30/2015		5.07	4886.35
		6/21/2016		4.24	4887.18
		5/23/2017		5.54	4885.88
		6/28/2018		3.65	4887.77
		6/10/2020		7.5	4883.92
		6/21/2021		7.1	4884.32
SGU-MW03	4891.72	3/21/2013	12.06	5.59	4886.13
		10/22/2013		3.59	4888.13
		3/30/2015		5.85	4885.87
		6/21/2016		3.52	4888.20
		5/23/2017		5.68	4886.04
		6/28/2018		3.60	4888.12
		6/10/2020		6.1	4885.62
		6/21/2021		6.6	4885.12
SGU-MW04	4889.76	6/28/2018	9.41	3.10	4886.66
SGU-MW05	4891.69	6/28/2018	10.50	3.55	4888.14
SGU-MW06	No Survey Information	6/10/2020	14.90	6.45	No Survey Information
		6/21/20210		7.00	
SGU-MW07		6/10/2020	9.60	0.60	
		6/21/2021		2.25	
Powell #1 Wellhead					
PL1-MW01	4885.90	3/20/2013	17.79	11.91	4873.99
		7/28/2014		NR	
		3/31/2015		12.16	4873.74
		6/22/2016		10.64	4875.26
		5/23/2017		11.40	4874.50
		6/27/2018		11.68	4874.22
		6/10/2019		12.06	4873.84
		5/28/2020		12.31	4873.59
		6/15/2021		10.82	4875.08
PL1-MW02	4885.58	3/19/2013	19.65	12.00	4873.58
		7/28/2014		NR	
		3/31/2015		12.52	4873.06
		6/22/2016		11.64	4873.94
		5/23/2017		11.15	4874.43
		6/27/2018		12.36	4873.22
		6/10/2019		12.42	4873.16
		5/28/2020		12.60	4872.98
		6/15/2021		11.66	4873.92
PL1-MW03R	4887.26	3/19/2013	18.06	13.04	4874.22
		7/28/2014		NR	
		3/31/2015		Well Destroyed	
		6/22/2016		Well Destroyed	
		5/23/2017		Well Destroyed	
		6/27/2018		12.97	4874.29
		6/10/2019		12.95	4874.31
		5/28/2020		13.30	4873.96
		6/15/2021		12.15	4875.11
Evans #6 Wellhead					
E6W-MW01	4882.37	3/22/2013	9.33	4.50	4877.87
		10/23/2013		4.80	4877.57
		7/28/2014		4.85	4877.52
		3/31/2015		3.92	4878.45
		6/22/2016		4.24	4878.13
		5/25/2017		4.38	4877.99
		6/28/2018		3.83	4878.54
		6/6/2019		3.90	4878.47
		8/6/2020		3.61	4878.76
		6/17/2021		4.4	4877.97
E6W-MW02	4882.45	3/22/2013	12.46	5.19	4877.26
		10/23/2013		6.50	4875.95
		7/28/2014		5.80	4876.65
		3/31/2015		5.14	4877.31
		6/22/2016		5.55	4876.90
		5/25/2017		5.60	4876.85
		6/28/2018		5.45	4877.00
		6/6/2019		4.85	4877.60
		8/6/2020		4.66	4877.79
		6/17/2021		5.42	4877.03
E6W-MW03	4881.53	3/22/2013	10.89	4.41	4877.12
		10/23/2013		5.15	4876.38
		7/28/2014		4.95	4876.58
		3/31/2015		4.24	4877.29
		6/22/2016		4.74	4876.79
		5/25/2017		4.68	4876.85
		6/6/2019		4.05	4877.48
		8/6/2020		3.78	4877.75
		6/17/2021		4.45	4877.08

Table 1 - Groundwater Elevation Data
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

Well ID	Top of Casing Elevation[1]	Date Measured	Total Depth[2]	Depth to Groundwater[2]	Groundwater Elevation[3]
Evans #6 Tank Battery					
E6T-MW01	4879.08	3/22/2013	16.95	8.01	4871.07
		10/23/2013		8.16	4870.92
		7/28/2014		8.93	4870.15
		3/31/2015		9.75	4869.33
		6/22/2016		9.43	4869.65
		5/25/2017		10.25	4868.83
		6/28/2018		14.67	4864.41
		6/6/2019		10.01	4869.07
		6/4/2020		3.50	4875.58
		6/17/2021		9.65	4869.43
E6T-MW02	4877.68	3/22/2013	12.84	6.40	4871.28
		10/23/2013		7.47	4870.21
		7/28/2014		8.54	4869.14
		3/31/2015		8.84	4868.84
		6/22/2016		8.55	4869.13
		5/25/2017		7.92	4869.76
		6/28/2018		12.87	4864.81
		6/6/2019		7.96	4869.72
		6/4/2020		4.66	4873.02
		6/17/2021		8.5	4869.18
E6T-MW03	4878.03	3/22/2013	12.30	6.61	4871.42
		10/23/2013		7.62	4870.41
		7/28/2014		8.44	4869.59
		3/31/2015		8.62	4869.41
		6/22/2016		8.75	4869.28
		5/25/2017		7.83	4870.20
		6/28/2018		12.25	4865.78
		6/6/2019		7.95	4870.08
		6/4/2020		3.80	4874.23
		6/17/2021		9.65	4868.38
Longmont #8-10K Wellhead					
LM8-MW01	4868.80	3/22/2013	18.60	3.64	4865.16
		7/28/2014		NR	
		3/31/2015		Dry	
		6/22/2016		Dry	
		5/23/2017		NR	
		6/5/2019		11.18	4857.62
		6/4/2020		9.66	4859.14
		6/23/2021		10.92	4857.88
LM8-MW02	4869.03	3/22/2013	18.90	4.32	4864.71
		7/28/2014		NR	
		3/31/2015		Dry	
		6/22/2016		Dry	
		5/23/2017		NR	
		6/5/2019		11.30	4857.73
		6/4/2020		10.75	4858.28
		6/23/2021		11.11	4857.92
LM8-MW03	4869.11	3/22/2013	18.70	3.21	4865.90
		7/28/2014		NR	
		3/31/2015		Dry	
		6/22/2016		Dry	
		5/23/2017		NR	
		6/5/2019		11.38	4857.73
		6/4/2020		10.90	4858.21
		6/23/2021		11.20	4857.91
Domenico #1 Wellsite					
DM1-MW01	4857.64	3/19/2013	11.44	7.41	4850.23
		7/29/2014		6.11	4851.53
		3/31/2015		6.33	4851.31
		6/24/2016		5.48	4852.16
		5/23/2017		5.52	4852.12
		6/29/2018		6.41	4851.23
		6/3/2019		6.82	4850.82
		6/8/2020		6.66	4850.98
		6/17/2021		6.10	4851.54
DM1-MW02	4854.17	3/19/2013	12.70	3.97	4850.20
		7/29/2014		3.18	4850.99
		4/1/2015		3.45	4850.72
		6/24/2016		2.34	4851.83
		5/23/2017		2.35	4851.82
		6/29/2018		3.33	4850.84
		6/3/2019		3.50	4850.67
		6/8/2020		3.40	4850.77
		6/17/2021		3.00	4851.17
DM1-MW03	4855.27	3/19/2013	12.82	5.15	4850.12
		7/29/2014		9.05	4846.22
		4/1/2015		3.99	4851.28
		6/24/2016		3.34	4851.93
		5/23/2017		3.50	4851.77
		6/29/2018		4.06	4851.21
		6/3/2019		3.61	4851.66
		6/8/2020		4.27	4851.00
		6/17/2021		3.78	4851.49

Table 1 - Groundwater Elevation Data
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

Well ID	Top of Casing Elevation[1]	Date Measured	Total Depth[2]	Depth to Groundwater[2]	Groundwater Elevation[3]
Stamp 31-2C Wellsite					
S31-MW01	4957.15	3/22/2013	14.13	6.00	4951.15
		10/24/2013		3.08	4954.07
		7/29/2014		2.92	4954.23
		4/1/2015		4.31	4952.84
		6/23/2016		2.78	4954.37
		5/22/2017		3.43	4953.72
		6/29/2018		2.94	4954.21
		6/10/2019		1.78	4955.37
		5/26/2020		4.25	4952.90
S31-MW02	4958.62	3/22/2013	14.22	8.55	4950.07
		10/24/2013		3.92	4954.70
		7/29/2014		Sediment[6]	
		4/1/2015			
		6/23/2016			
		5/22/2017			
		6/10/2019			
		5/26/2020			
S31-MW03	4958.27	10/24/2013	13.59	4.91	4953.36
		7/29/2014		5.24	4953.03
		4/1/2015		6.30	4951.97
		6/23/2016		4.92	4953.35
		5/22/2017		6.59	4951.68
		6/29/2018		4.45	4953.82
		6/10/2019		5.35	4952.92
		5/26/2020		6.10	4952.17
S31-MW04	4957.11	3/22/2013	14.90	9.22	4947.89
		10/24/2013		4.11	4953.00
		7/29/2014		4.41	4952.70
		4/1/2015		5.28	4951.83
		6/23/2016		4.10	4953.01
		5/22/2017		5.71	4951.40
		6/29/2018		3.68	4953.43
		5/26/2020		5.20	4951.91
S31-MW05	4956.89	10/24/2013	14.97	4.11	4952.78
		7/29/2014		4.61	4952.28
		4/1/2015		5.12	4951.77
		6/23/2016		4.50	4952.39
		5/22/2017		5.69	4951.20
		6/29/2018		3.09	4953.80
		5/26/2020		5.10	4952.05
S31-MW06	4957.57	10/24/2013	11.44	4.20	4953.37
		7/29/2014		4.62	4952.95
		4/1/2015		5.61	4951.96
		6/23/2016		4.37	4953.20
		5/22/2017		5.98	4951.59
		6/29/2018		3.14	4954.43
		5/26/2020		5.54	4951.61
Stamp #1 Wellsite					
ST1-MW02	No Survey Information Available	7/7/2021	15.00	4.12	No Survey Information Available
ST1-MW03		7/7/2021	15.40	3.40	
ST1-MW05		7/7/2021	15.40	4.55	
Tabor #1 Wellsite					
TB1-MW01	No Survey Information Available	5/16/2019	27.85	18.02	No Survey Information Available
		6/3/2020	Not Located / Destroyed		
		6/16/2021	Sediment[6]		
TB1-MW02		5/16/2019	27.22	17.93	
		6/3/2020	Not Located / Destroyed		
		6/16/2021	23.00	15.40	
TB1-MW03		5/16/2019	Not Located / Destroyed		
		6/3/2020			
		6/16/2021	23.60	15.68	
Tabor #7 Wellsite					
TB7-MW01	No Survey Information Available	5/16/2019	17.90	17.00	No Survey Information Available
		6/3/2020		15.90	
		6/16/2021		14.90	
TB7-MW02		5/16/2019	19.70	16.64	
		6/3/2020		15.80	
		6/16/2021		15.35	
TB7-MW03		5/16/2019	19.40	16.00	
		6/3/2020		15.22	
		6/16/2021		15.48	
Maruyama #1 Wellsite					
MY1-MW01	No Survey Information Available	5/16/2019	24.85	20.82	No Survey Information Available
		5/27/2020		20.50	
		6/15/2021		21.60	
MY1-MW02		5/16/2019	24.72	21.20	
		5/27/2020		20.18	
		6/15/2021		21.25	
MY1-MW03		5/16/2019	24.55	21.41	
		5/27/2020		20.90	
		6/15/2021		21.80	
Wertman #1 Wellsite					
WT1-MW01	No Survey Information Available	5/16/2019	16.38	13.65	No Survey Information Available
		5/28/2020		12.92	
		6/28/2021		12.72	
WT1-MW02		5/16/2019	17.18	14.37	
		5/28/2020		13.64	
		6/28/2021		13.45	
WT1-MW03		5/16/2019	17.16	13.48	
		5/28/2020		12.78	
		6/28/2021		12.62	
WT1-MW04		5/16/2019	Not Located / Destroyed		
		5/28/2020			

Table 1 - Groundwater Elevation Data
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

Well ID	Top of Casing Elevation[1]	Date Measured	Total Depth[2]	Depth to Groundwater[2]	Groundwater Elevation[3]
George Mayeda #1 Wellsite					
GM1-MW01	No Survey Information Available	6/3/2019	14.50	11.45	No Survey Information Available
		5/26/2020		9.85	
		6/21/2021		10.62	
GM1-MW02		6/3/2019	13.55	10.82	
		5/28/2020		8.90	
		6/21/2021		9.98	
GM1-MW03		6/3/2019	14.40	11.20	
		5/28/2020		9.58	
		6/21/2021		10.5	
Mary #2 Wellsite					
MR2-MW01	No Survey Information Available	5/15/2019	24.64	14.45	No Survey Information Available
		5/27/2020		12.92	
		6/15/2021		11.80	
MR2-MW02		5/15/2019	24.39	16.75	
		5/27/2020		14.85	
		6/15/2021		12.78	
MR2-MW03		5/15/2019	24.54	17.55	
		5/27/2020		15.64	
		6/15/2021		13.62	

[1]All survey information is in Datum: NAD 83, Colorado North Zone NAVD 88
[2] Depth to groundwater is mesured in feet below top of casing
[3] Elevation in feet above mean sea level
[4/5] Wells were observed to be destroyed. Unable to measure depths to water.
[6] Filled with sediment. No water present.
NR - No Reading. Wells were not part of sampling program.

Table 2 - Groundwater Analytical Results
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

			Volatile Organic Compounds					Other Organic Compounds				Inorganic Parameters																General Parameters		
Parameter			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes (Total)	Methane	Ethane	Carbon Dioxide	Ethene	Calcium, Dissolved	Iron, Dissolved	Magnesium, Dissolved	Potassium, Dissolved	Sodium, Dissolved	Strontium	Alkalinity, Carbonate (CaCO3)	Alkalinity, Bicarbonate (CaCO3)	Alkalinity, Total as CaCO3	Bromide	Chloride	Nitrogen as Nitrate	Nitrogen as Nitrite	Nitrogen as Nitrate and Nitrite	Sulfate	Sulfide, Total	Specific Conductance	Total Dissolved Solids (TDS)	pH
CAS #			71-43-2	100-41-4	91-20-3	108-88-3	1330-20-7	74-82-8	74-84-0		74-85-1	7440-70-2	7439-89-6	7439-95-4	7440-09-7	7440-23-5	7440-24-6				24959-67-9	16887-00-6				14808-79-8	18496-25-8			
COGCC Table 910-1[3]			0.005	0.7	---	0.56	1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	49.38	---	---	---	430.63	--	---	---	--
			---	---	---	1[M]	10[M]	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--
CDPHE Basic Standards for Groundwater			0.005	0.7	0.14	0.56	1.4	---	---	---	---	--	0.3	---	---	---	---	---	---	---	---	250	10	1	10	250	---	---	400-No Limit	6.5 - 8.5
Detection Level			0.001	0.001	0.005	0.001	0.003	0.0066	0.0062	20	0.0062		0.05					20	20	20	1		0.1	0.5	0.1		0.05		200	
Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	umhos/cm	mg/L	Std. Units
Wellsite	Sample ID	Date	Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes (Total)	Methane	Ethane	Carbon Dioxide	Ethene	Calcium, Dissolved	Iron, Dissolved	Magnesium, Dissolved	Potassium, Dissolved	Sodium, Dissolved	Strontium	Alkalinity, Carbonate (CaCO3)	Alkalinity, Bicarbonate (CaCO3)	Alkalinity, Total as CaCO3	Bromide	Chloride	Nitrogen as Nitrate	Nitrogen as Nitrite	Nitrogen as Nitrate and Nitrite	Sulfate	Sulfide, Total	Specific Conductance	Total Dissolved Solids (TDS)	pH
Sherwood #1 Wellhead	SH1-MW01	3/18/2013	ND	ND	--	ND	ND	ND	ND	--	ND	92	ND	110	2.57	118	5.91	ND	345	345	ND	37.5	8.30	ND	8.40	486	ND	1590	--	7.60
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	83	ND	107	1.63	110	4.56	ND	388	388	1.20	35.7	8.60	ND	8.60	415	ND	1450	--	7.00
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	98	ND	137	1.43	152	2.92	ND	422	422	1.80	50.6	11.2	ND	11.2	621	--	1923	--	7.52
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	121	ND*	160	2.11	183	2.83	ND	450	450	1.13	63.9	15.4	ND	15.4	679	--	--	--	--
		6/10/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	116	ND*	147	2.00	152	3.46	ND	408	408	ND	59.9	8.4	ND	15.4	625	--	1738	--	7.71
		5/28/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	65.1	--	--	--	723	--	2053	1310	6.92
	SH1-MW02	3/18/2013	ND	ND	--	ND	ND	0.0091	ND	--	ND	101	ND	99.7	3.06	117	3.47	ND	365	365	ND	37.5	7.90	ND	8.00	431	ND	1570	--	7.50
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	91	ND	96.4	1.85	111	2.74	ND	388	388	1.20	45.2	10.6	ND*	10.6	428	ND	1500	--	7
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	93	ND	122	1.37	139	2.38	ND	393	393	1.50	44.4	10.5	ND	10.5	545	--	1730	--	7.58
		6/21/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	125	ND*	126	2.16	143	3.43	ND	401	401	ND	55.3	9.76	ND*	9.76	592	--	1878	--	7.3
		5/23/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	168	ND*	195	2.57	194	3.80	ND	418	418	ND	72.8	15.00	ND	15.00	930	--	2472	--	7.37
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	133	ND*	145	2.17	169	2.79	ND	436	436	ND	67.1	16.60	ND	16.60	646	--	--	--	--
		6/10/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	136	ND*	151	2.10	158	2.75	ND	413	413	ND	62.5	11.70	ND	11.70	678	--	1791	--	7.40
		5/28/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	66.9	--	--	--	840	--	2145	1510	6.78
	SH1-MW03	3/18/2013	ND	ND	--	ND*	ND	ND	ND	--	ND	93	ND	107	2.26	115	2.83	ND	349	349	ND	36.6	5.70	ND	5.80	452	ND	1600	--	7.60
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	84	ND	106	1.68	107	2.51	ND	370	370	1.10	35.8	7.80	ND	7.80	425	ND	1440	--	7
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	92	ND	126	1.42	136	2.54	ND	376	376	1.40	43.9	9.80	ND	9.80	568	--	1788	--	7.56
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	131	ND*	161	2.20	179	3.01	ND	436	436	ND	68.5	14.60	ND	14.60	725	--	--	--	--
		6/10/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	128	ND*	162	2.02	154	2.88	ND	383	383	ND	62.3	6.32	ND	6.32	712	--	1754	--	7.73
		5/28/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	66.3	--	--	--	893	--	2209	1450	6.54
Sherwood #2 Wellhead	SH2-MW01	3/18/2013	ND	ND	--	ND	ND	ND	ND	--	ND	189	ND	121	3.86	102	3.44	ND	345	345	ND	40.2	11.4	0.63	12.0	799	--	1940	--	7.50
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	169	ND	107	1.21	108	3.72	ND	386	386	ND	33.6	11.0	ND	11.0	712	--	1935	--	7.47
		6/21/2016	ND	ND	--	ND	ND	ND*	ND*	--	ND*	186	ND	107	1.91	108	3.26	ND	371	371	ND	41.5	16.3	ND*	16.3	613	--	1853	--	7.30
		5/23/2017	ND	ND	--	ND	ND	ND*	ND*	--	ND*	250	ND	135	2.56	116	3.65	ND	291	291	ND	52.7	11.3	ND*	11.3	836	--	2195	--	7.40
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	234	ND*	131	2.07	122	3.89	ND	349	349	ND	52.6	6.0	ND*	6.0	899	--	--	--	--
		6/17/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	240	0.10	140	2.04	110	4.42	ND	390	390	1.52	26.4	8.2	ND*	8.2	640	--	2170	--	7.49
		6/5/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	55.9	--	--	--	977	--	2385	1930	--
	SH2-MW02	3/18/2013	ND	ND	--	ND	ND	ND	ND	--	ND	225	ND	121	5.72	111	3.87	ND	315	315	ND	43.8	13.6	ND	13.8	824	ND	2060	--	7.40
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	183	ND	105	3.61	110	4.18	ND	367	367	ND	37.8	11.8	ND	11.8	749	--	2029	--	7.43
		6/21/2016	ND	ND	--	ND	ND	ND*	ND*	--	ND*	208	ND*	108	4.36	107	3.71	ND	377	377	ND	41.8	15.5	ND*	15.5	654	--	1918	--	7.40
		5/23/2017	ND	ND	--	ND	ND	ND*	ND*	--	ND*	233	ND*	129	3.87	115	3.64	ND	210	210	ND	47.1	8.13	ND*	8.13	824	--	2056	--	7.41
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	236	ND*	129	3.76	121	4.02	ND	351	351	ND	51.8	5.98	ND*	5.98	904	--	--	--	--
		6/17/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	247	ND*	129	4.27	113	4.72	ND	410	410	1.48	26.4	8.84	ND*	5.98	682	--	2170	--	7.54
		6/5/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	58.1	--	--	--	983	--	2420	1900	--
	SH2-MW03	3/18/2013	ND	ND	--	ND	ND	ND	ND	--	ND	220	ND	115	4.69	104	4.52	ND	324	324	ND	44.8	13	ND	13.1	847	ND	2080	--	7.40
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	192	ND	93.9	5.74	109	4.46	ND	367	367	ND	37.6	11.4	ND	11.4	802	--	2007	--	7.36
		6/21/2016	ND	ND	--	ND	ND	ND*	ND*	--	ND*	212	ND*	97.2	7.09	105	3.85	ND	371	371	ND	41.5	16.9	ND	16.9	624	--	1905	--	7.30
		5/23/2017	ND	ND	--	ND	ND	ND*	ND*	--	ND*	282	ND*	116	11.7	119	4.3	ND	295	295	ND	56.3	11.5	ND	11.5	833	--	2198	--	7.23
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	258	ND*	123	7.91	128	4.51	ND	349	349	ND	54.8	7.32	ND*	7.32	944	--	--	--	--
		6/17/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	246	0.022	115	7.1	115	4.91	ND	410	410	71.8	0.5	9.88	ND*	7.32	944	--	2165	--	7.45
		6/5/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	62.7	--	--	--	995	--	2400	2000	--
City of Longmont #1 Wellhead	CL1-MW01	3/20/2013	ND	ND	--	ND	ND	ND	ND	--	ND	81	ND	72.2	2.83	61.7	2.38	ND	377	377	ND	34.1	13.9	ND	13.9	182	ND	1160	--	7.90
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	92	ND	85.5	1.45	91.8	2.53	ND	427	427	1.4	43.5	16.7	ND*	16.7	254	--	1390	--	7.51
		6/21/2016	ND	ND	--	ND	ND	ND*	ND*	--	ND*	104	ND	83	1.94	91	2.77	ND	393	393	ND	42.7	12.2	ND	12.2	247	--	1410	--	7.60
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	83	ND	66	1.71	69.1	1.86	ND	355	355	ND	34.9	8.14	ND	8.14	140	--	--	--	--
		6/17/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	83	ND	71.1	1.6	65.7	2.53	ND	450	450	1.52	16.2	10.5	ND	10.5	217	--	1147	--	7.61
		6/2/2010	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	49.3	--	--	--	302	--	1481	983	4.37
		6/15/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	44.2	--	--	--	316	--	1476	976	7.50
	CL1-MW02	3/20/2013	ND	ND	--	ND	ND	ND	ND	--	ND	77	ND	67.4	2.1	60.4	4.26	ND	354	354	ND	32.7	2.6	ND	2.6	171	ND	1090	--	7.90
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	77	ND	67.4	2.1	60.4	4.26	ND	354	354	ND	32.7	2.6	ND	2.6	171	ND	1090	--	7.90
		6/22/2016	ND	ND	--	ND	ND	ND*	ND*	--	ND*	102	ND	85.5	1.98	93.3	3.22	ND	372	372	ND	46.7	13	ND	13	246	--	1402	--	7.30
		5/23/2017	ND	ND	--	ND	ND	ND*	ND*	--	ND*	97	ND	77.2	1.91	89.5	2.24	ND	416	416	ND	44.7	9.75	ND	9.75	209	--	1261	--	7.19
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	80	ND*	62.9	1.76	76.9	1.81	ND	352	352	ND	36.4	9.1	ND	9.1	144	--	--	--	--
		6/17/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	89	0.014	73	1.81	70.1	2.46	ND	450	450	1.51	18.2	10.6	ND	10.6	216	--	1132	--	7.66
		6/2/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	47.4	--	--	--	266	--	1388	935	--
		6/15/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	46.8	--	--	--	345	--	1534	1020	7.60
	CL1-MW03	3/21/2013	ND	ND	--	ND	ND	ND	ND	--	ND	86	ND	75.1	2.83	63.6	3.45	ND	389	389	ND	35.3	14.8	ND	14.9	189	ND	1130	--	7.70
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	86	ND	75.1	2.83	63.6	3.45	ND	389	389	ND	35.3	14.8	ND	14.9	189	ND	1130	--	7.70
		6/21/2016	ND	ND	--	ND	ND	ND*	ND*	--	ND*	105	ND	82.9	1.91	94.7	2.41	ND	380	380	ND	45.7	13.3	ND	13.3	254	--	1394	--	7.40
		5/23/2017	ND	ND	--	ND	ND	ND*	ND*	--	ND*	90	ND	70.2	1.89	86.4	2.01	ND	381	381	ND	44.4	13.1	ND	13.1	163	--	1175	--	7.43
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	80	ND*	67.6	1.73	73.6	1.94	ND	353	353	ND	35.2	7.57	ND	7.57	149	--	--	--	--
		6/17/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	84	0.129	73.4	1.85	74.9	2.32	ND	440	440	1.51	14.4	10.5	ND	10.5	210	--	1125	--	7.65
		6/2/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	46.4	--	--	--	280	--	1672	948	--
		6/28/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	45.9	--	--	--	337	--	1672	986	7.60

Table 2 - Groundwater Analytical Results
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

			Volatile Organic Compounds					Other Organic Compounds				Inorganic Parameters																General Parameters		
Parameter			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes (Total)	Methane	Ethane	Carbon Dioxide	Ethene	Calcium, Dissolved	Iron, Dissolved	Magnesium, Dissolved	Potassium, Dissolved	Sodium, Dissolved	Strontium	Alkalinity, Carbonate (CaCO3)	Alkalinity, Bicarbonate (CaCO3)	Alkalinity, Total as CaCO3	Bromide	Chloride	Nitrogen as Nitrate	Nitrogen as Nitrite	Nitrogen as Nitrate and Nitrite	Sulfate	Sulfide, Total	Specific Conductance	Total Dissolved Solids (TDS)	pH
CAS #			71-43-2	100-41-4	91-20-3	108-88-3	1330-20-7	74-82-8	74-84-0		74-85-1	7440-70-2	7439-89-6	7439-95-4	7440-09-7	7440-23-5	7440-24-6					24959-67-9	16887-00-6				14808-79-8	18496-25-8			
COGCC Table 910-1[3]			0.005	0.7	---	0.56	1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	49.38	---	---	---	430.63	--	---	---	--
			---	---	---	1[M]	10[M]	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	--
CDPHE Basic Standards for Groundwater			0.005	0.7	0.14	0.56	1.4	---	---	---	--	--	0.3	---	---	---	---	---	---	---	---	250	10	1	10	250	---	---	400-No Limit	6.5 - 8.5
Detection Level			0.001	0.001	0.005	0.001	0.003	0.0066	0.0062	20	0.0062		0.05					20	20	20	1		0.1	0.5	0.1		0.05		200	
Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	umhos/cm	mg/L	Std. Units
Serafini Gas Unit	SGU-MW01	3/21/2013	ND	ND	--	ND	ND	ND	ND	--	ND	81	ND	53.7	3.59	67.2	2.96	ND	328	328	ND	29.8	5.9	ND	5.9	191	ND	1060	--	7.80
		10/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	77	0.208	54.7	2.88	62.5	2.32	ND	345	345	ND	30.3	7.4	ND	7.4	292	ND	1190	--	7.30
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	98	ND	63.8	2.46	76.8	2.77	ND	392	392	ND	32.8	8.4	ND	8.4	263	--	1322	--	7.51
		6/21/2016	ND	ND	--	ND	ND	ND*	ND*	--	ND*	109	ND	61.9	2.67	69.9	2.02	ND	364	364	ND	37.8	7.37	ND	7.37	205	--	1170	--	7.50
		5/23/2017	ND	ND	--	ND	ND	ND*	ND*	--	ND*	118	ND	65.2	3.03	72	1.86	ND	400	400	ND	39.3	7.39	ND	7.39	192	--	1201	--	7.33
		6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	108	ND	57.9	2.59	73.8	1.65	ND	348	348	ND	35.3	10	ND	10	186	--	--	--	--
		6/10/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	39.1	--	--	--	176	--	1093	496	7.50
		6/21/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	39.3	--	--	--	182	--	1213	768	7.50
	SGU-MW02	3/21/2013	ND	ND	--	ND	ND	0.0087	ND	--	ND	93	ND	57.8	3.39	78.6	1.72	ND	359	359	ND	34.2	7.2	ND	7.3	228	ND	1100	--	7.90
		10/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	89	0.381	54.5	2.63	53.3	3.12	ND	364	364	ND	33.2	8.4	ND	8.4	243	ND	1150	--	7.30
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	98	ND	63.7	2.23	59.3	2.31	ND	420	420	ND	31.9	8	ND	8	258	--	1135	--	7.59
		6/21/2016	0.0589	ND	--	ND	ND	0.238	0.0159	--	ND*	110	ND	63.5	2.98	158	2.82	ND	401	401	ND	119	6.42	ND	6.42	201	--	1654	--	7.30
		5/23/2017	0.0353	ND	--	ND	ND	0.0884	ND*	--	ND*	142	ND	79.7	10.8	271	4.16	ND	482	482	3.29	438	1.37	ND	1.37	223	--	NS	--	NS
		6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	132	ND	70.1	3.39	105	2.1	ND	369	369	ND	58	12.4	ND	12.4	295	--	--	--	--
		6/10/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	37.5	--	--	--	156	--	1070	649	7.30
		6/21/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	60.2	--	--	--	211	--	1299	835	7.60
	SGU-MW03	3/21/2013	ND	ND	--		ND	ND	ND	--	ND	88	ND	49	3.94	47.7	4.07	ND	632	632	ND	28.3	4.4	ND	4.4	152	ND	917	--	7.60
		10/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	96	0.076	50.5	1.91	50.3	2.47	ND	365	365	ND	34.5	10.1	ND*	10.1	252	ND	1160	--	7.30
		3/30/2015	ND	ND	--	ND	ND	ND	ND	--	ND	112	ND	59.1	1.74	64	2.83	ND	416	416	ND	33.9	8.6	ND*	8.6	259	ND	1139	--	7.57
		6/21/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	142	ND	67.4	2.22	69.2	2.33	ND	375	375	ND	43.7	9.91	ND	9.91	261	--	1346	--	7.40
		5/23/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	137	ND	67	2.54	64.5	2.1	ND	434	434	ND	41.8	9.15	ND	9.15	220	--	1238	--	7.13
		6/28/2018	ND	ND	--	ND	ND	0.0261	ND*	--	ND*	133	ND	82.6	4.22	115	2.32	ND	422	422	ND	60.2	12.80	ND	12.80	298	--	--	--	--
		6/10/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	46.1	--	--	--	222	--	1214	785	7.40
		6/21/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	56.9	--	--	--	272	--	1390	917	7.60
	SGU-MW04	6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	127	ND	58	1.95	67.9	1.84	ND	351	351	ND	36.1	11.10	ND	11.10	234	--	--	--	--
	SGU-MW05	6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	148	ND	60.7	3.87	72.4	2.11	ND	392	392	ND	39.9	7.63	ND	7.63	273	--	--	--	--
	SGU-MW06	6/10/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	41.5	--	--	--	208	--	1232	725	7.30
		6/21/2021	ND	ND	--	ND	ND	ND	ND	29.7	ND	--	--	--	--	--	--	--	--	--	--	50.1	--	--	--	265	--	1466	928	7.40
	SGU-MW07	6/10/2020	ND	ND	--	ND	ND	0.0224	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	41.9	--	--	--	61	--	870	327	7.30
		6/21/2021	ND	ND	--	ND	ND	0.0247	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	37.9	--	--	--	80	--	1027	474	7.40
Powell #1 Wellhead	PL1-MW01	3/20/2013	ND	ND	--	ND	ND	ND	ND	--	ND	95	ND	73.2	2.28	65.3	1.82	ND	295	295	ND	31.8	5.9	ND	5.9	369	ND	1280	--	7.90
		3/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	92	ND	71.8	1.25	63.5	1.78	ND	259	259	ND	38.9	10	ND	10	427	--	1315	--	7.10
		6/22/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	284	ND	195	2.25	114	4.88	ND	198	198	ND	86.0	11.2	ND	11.2	1,270	--	2583	--	6.98
		5/23/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	104	ND	75.1	1.64	89.9	1.64	ND	235	235	ND	33.8	9.36	ND	9.36	370	--	1261	--	7.28
		6/27/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	101	ND*	74.9	1.66	97.2	1.74	ND	215	215	ND	35.4	5.94	ND	5.94	457	--	--	--	--
		6/10/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	107	ND	75.6	1.53	68.6	1.79	ND	273	273	ND	34.4	5.88	ND	5.88	337	--	1123	--	7.61
		5/28/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	36.6	--	--	--	375	--	1272	866	6.95
		6/15/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	38.6	--	--	--	491	--	1550	1090	6.90
	PL1-MW02	3/20/2013	ND	ND	--	ND	ND	ND	ND	--	ND	106	ND	75.9	2.33	115	1.83	ND	311	311	ND	32.8	ND	ND	ND	484	ND	1480	--	7.40
		3/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	129	0.393	95.9	2.25	119	2.12	ND	318	318	1.1	39.6	ND	ND	ND	633	--	1707	--	7.19
		6/22/2016	ND	ND	--	ND*	ND	0.012	ND*	--	ND*	131	ND	91.1	2.53	134	2.12	ND	304	304	ND	36.7	ND	ND	ND	616	--	1638	--	7.20
		5/23/2017	ND	ND	--	ND*	ND	0.0231	ND*	--	ND*	143	ND	97.9	2.63	165	1.92	ND	321	321	ND	39.7	ND	ND	ND	688	--	2021	--	7.19
		6/27/2018	ND	ND	--	ND	ND	0.036	ND*	--	ND*	128	ND*	88.9	2.54	170	1.89	ND	321	321	ND	36.7	ND	ND	ND	670	--	--	--	--
		6/10/2019	ND	ND	--	ND	ND	0.036	ND*	--	ND*	119	ND*	82.1	2.23	149	1.8	ND	302	302	ND	36.1	ND	ND	ND	555	--	1511	--	7.46
		5/28/2020	ND	ND	--	ND	ND	0.0204	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	38.2	--	--	--	563	--	1659	1110	6.74
		6/15/2021	ND	ND	--	ND	ND	0.0441	ND	21.8	ND	--	--	--	--	--	--	--	--	--	--	36.8	--	--	--	584	--	1579	1110	6.80
	PL1-MW03	3/19/2013	ND	ND	--	ND	ND	ND	ND	--	ND	86	ND	63	3.02	58.6	1.9	ND	296	296	ND	32.3	0.58	ND	0.57	265	ND	1090	--	7.40
		6/27/2018	ND	ND	--	ND	ND	0.1	ND*	--	ND*	66	ND	47.9	3.4	77	1.07	ND	256	256	ND	35.0	0.503	ND	0.503	212	--	--	--	--
		6/10/2019	ND	ND	--	ND	ND	0.404	ND	--	ND	93	ND	60.4	2.63	71.9	1.56	ND	250	250	ND	39.6	ND	ND	ND	295	--	1022	--	7.56
		5/28/2020	ND	ND	--	ND	ND	0.0169	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	34.3	--	--	--	292	--	1158	670	6.99
		6/15/2021	ND	ND	--	ND	ND	0.0489	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	66.8	--	--	--	383	--	1322	889	7.00

Table 2 - Groundwater Analytical Results
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

			Volatile Organic Compounds					Other Organic Compounds				Inorganic Parameters																General Parameters		
Parameter			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes (Total)	Methane	Ethane	Carbon Dioxide	Ethene	Calcium, Dissolved	Iron, Dissolved	Magnesium, Dissolved	Potassium, Dissolved	Sodium, Dissolved	Strontium	Alkalinity, Carbonate (CaCO3)	Alkalinity, Bicarbonate (CaCO3)	Alkalinity, Total as CaCO3	Bromide	Chloride	Nitrogen as Nitrate	Nitrogen as Nitrite	Nitrogen as Nitrate and Nitrite	Sulfate	Sulfide, Total	Specific Conductance	Total Dissolved Solids (TDS)	pH
CAS #			71-43-2	100-41-4	91-20-3	108-88-3	1330-20-7	74-82-8	74-84-0		74-85-1	7440-70-2	7439-89-6	7439-95-4	7440-09-7	7440-23-5	7440-24-6				24959-67-9	16887-00-6				14808-79-8	18496-25-8			
COGCC Table 910-1[3]			0.005	0.7	---	0.56	1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	49.38	---	---	---	430.63	--	---	---	--
			---	---	---	1[M]	10[M]	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
CDPHE Basic Standards for Groundwater			0.005	0.7	0.14	0.56	1.4	---	---	---	---	--	0.3	---	---	---	---	---	---	---	---	250	10	1	10	250	---	---	400-No Limit	6.5 - 8.5
Detection Level			0.001	0.001	0.005	0.001	0.003	0.0066	0.0062	20	0.0062		0.05					20	20	20	1		0.1	0.5	0.1		0.05		200	
Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	umhos/cm	mg/L	Std. Units
Evans #6 Wellhead	E6W-MW01	3/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	183	ND	126	6.52	157	4.04	ND	307	307	ND	32.7	0.44	ND	0.44	987	ND	2070	--	7.60
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	281	ND	182	7.58	236	5.52	ND	381	381	ND	72.2	5.0	ND	5.0	1,710	ND	4960	--	6
		7/28/2014	ND	ND	--	ND	ND	ND	ND	--	ND	206	ND	133	6.41	181	4.19	ND	326	326	ND	50.0	0.84	ND	0.84	1,130	--	2074	--	7.2
		03/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	207	ND	136	4.36	172	4.29	ND	351	351	ND	42.9	0.83	ND	0.83	1,090	--	2397	--	7.27
		6/22/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	187	ND	115	4.59	164	4.06	ND	268	268	ND	42.6	0.351	ND	0.351	915	--	2090	--	7.2
		5/25/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	332	ND	187	5.64	222	5.25	ND	305	305	ND	39.9	3.55	ND	3.55	1,580	--	2944	--	6.74
		6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	188	ND	108	4.25	171	3.39	ND	269	269	ND	35.9	ND	ND	ND	875	--	--	--	--
		6/6/2019	ND	ND	--	ND	ND	ND	ND	ND	ND	207	ND	119	4.25	172	3.5	ND	312	312	ND	31.8	1.65	ND	1.65	955	--	2026	2570	7.53
		6/3/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	38.6	--	--	--	735	--	3404	1290	7.50
	E6W-MW02	3/22/2013	ND	ND	--	ND	ND	**0.0278**	ND	--	ND	207	ND	175	10.6	212	5.94	ND	312	321	1.5	34.4	ND	ND	ND	1,380	ND	2200	--	7.80
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	329	ND	279	42.4	419	7.28	ND	426	426	1	110	14.5	ND*	14.5	2,630	ND	7000	--	6
		7/28/2014	ND	ND	--	ND	ND	ND	ND	--	ND	187	ND	139	22.7	189	4.48	ND	309	309	ND	38.4	2.6	ND	2.6	1,350	--	2358	--	7.27
		3/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	181	ND	150	15.3	188	4.02	ND	307	307	ND	35.4	0.58	ND	0.58	1,160	--	2472	--	7.47
		6/22/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	226	ND	182	19.8	235	7.6	ND	304	304	ND	50.3	2.94	ND	2.94	1,430	--	2821	--	7.3
		5/25/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	167	ND	130	7.94	179	4.03	ND	280	280	ND	38.7	0.685	ND	0.685	863	--	2076	--	7.27
		6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	188	ND	142	9.41	192	3.61	ND	294	294	ND	35.0	0.312	ND	0.312	996	--	--	--	--
		6/6/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	194	ND	150	10.4	188	3.44	ND	277	277	ND	30.8	1.12	ND	1.12	1,120	--	2133	--	7.57
		6/3/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	93.0	--	--	--	2,820	--	4660	4500	--
		6/17/2021	ND	ND	--	ND	ND	ND	ND	**20.9**	ND	--	--	--	--	--	--	--	--	--	--	51.9	--	--	--	3,610	--	2729	2070	7.50
	E6W-MW03	3/22/2013	ND	ND	--	ND	ND	**0.0141**	ND	--	ND	192	ND	150	9.22	184	5.73	ND	312	312	ND	31.1	0.11	ND	0.12	1,130	ND	2280	--	7.60
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	363	ND	255	31.1	333	7.09	ND	367	367	ND	96.2	6.2	ND	6.2	2,420	ND	6320	--	6
		07/28/2014	ND	ND	--	ND	ND	ND	ND	--	ND	264	ND	167	13.1	217	5.34	ND	315	315	ND	52.4	1.9	ND	1.9	1,550	--	2635	--	7.15
		3/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	200	ND	133	8.49	178	4.02	ND	327	327	ND	40.8	1.4	ND	1.4	1,180	--	2481	--	7.34
		6/22/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	262	ND	156	9.13	196	6.61	ND	325	325	ND	49.0	3.38	ND	3.38	1,280	--	2678	--	7.2
		5/25/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	273	ND	166	9.72	210	4.37	ND	299	299	ND	36.9	1.98	ND	1.98	1,430	--	2696	--	7.09
		6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	302	ND	165	6.94	217	4.98	ND	319	319	ND	37.8	0.725	ND	0.725	1,390	--	--	--	--
		6/6/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	250	ND	146	7.26	192	3.89	ND	298	298	ND	30.1	1.16	ND	1.16	1,200	--	2331	--	7.61
		6/3/2020	ND	ND	--	ND	ND	ND	ND	**117**	ND	--	--	--	--	--	--	--	--	--	--	188.0	--	--	--	7,080	--	9455	10400	--
		6/17/2021	ND	ND	--	ND	ND	ND	ND	**21.3**	ND	--	--	--	--	--	--	--	--	--	--	36.8	--	--	--	1,020	--	2427	1900	7.40
Evans #6 Tank Battery	E6T-MW01	3/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	326	ND	285	12.1	593	6.14	ND	334	334	1.2	112	0.93	ND	0.93	3,060	ND	5030	--	7.80
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	306	ND	256	6.61	666	4.03	ND	401	401	ND	111	ND	ND	ND	3,190	ND	8280	--	7
		7/28/2014	ND	ND	--	ND	ND	ND	ND	--	ND	280	ND	215	5.8	446	4.54	ND	340	340	ND	104	ND	ND	ND	2,810	--	4100	--	7.47
		3/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	258	ND	205	4.81	608	4.05	ND	324	324	ND	96.5	ND	ND	ND	2,590	--	4706	--	7.42
		6/22/2016	ND	ND	--	ND*	ND	**0.0122**	ND*	--	ND*	251	ND	168	5.15	587	4.85	ND	291	291	ND	86.1	ND	ND	ND	2,190	--	4225	--	7.46
		5/25/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	217	ND	140	4.4	616	2.93	ND	277	277	ND	90.6	ND	ND	ND	1,930	--	3850	--	7.38
		6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	193	ND*	121	3.91	595	2.65	ND	257	257	ND	84.9	ND	ND	ND	1,970	--	--	--	--
		6/6/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	174	ND	110	3.64	560	2.38	ND	309	309	ND	76.3	ND	ND	ND	1,550	--	3140	--	7.21
		6/4/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	38.1	--	--	--	826	--	1956	1580	--
		6/17/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	82.6	--	--	--	1,480	--	3462	2460	7.70
	E6T-MW02	3/22/2013	ND	ND	--	ND	ND	**0.0076**	ND	--	ND	238	ND	181	7.41	247	4.52	ND	346	346	1.2	63.9	ND	ND	ND	1,560	ND	2960	--	7.60
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	271	ND	210	6.58	334	4.45	ND	391	391	ND	68.6	16.6	ND*	17	1,770	ND	5640	--	6
		7/28/2014	ND	ND	--	ND	ND	ND	ND	--	ND	393	ND	297	7.56	356	7.04	ND	346	346	ND	113	ND	ND	ND	3,080	--	3968	--	7.44
		3/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	430	ND	392.00	7.24	563.00	8.27	ND	277.00	277.00	ND	129.0	ND	ND	ND	3,610	--	5745	--	7.28
		6/22/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	551	ND	810	8.74	1,060	29.3	ND	141	141	ND	218	ND	ND	ND	7,560	--	9390	--	7.04
		5/25/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	399	ND	331	7.58	462	7.78	ND	250	250	ND	83.9	0.575	ND	0.575	2,960	--	--	--	--
		6/28/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	400	ND*	318	7.4	436	5.86	ND	166	166	ND	88.2	ND	ND	ND	2,600	--	--	--	--
		6/6/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	462	ND	371	7.82	490	6.01	ND	184	184	ND	92.7	1.39	ND	1.39	3,170	--	4610	--	6.93
		6/4/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	40.5	--	--	--	1,210	--	2520	2070	--
		6/17/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	83.3	--	--	--	2,540	--	4502	3830	7.20
	E6T-MW03	3/22/2013	ND	ND	--	ND	ND	**0.0068**	ND	--	ND	354	ND	350	11	500	7.86	ND	524	524	1.3	103	ND	ND	ND	2,650	ND	4830	--	7.40
		10/23/2013	ND	ND	--	ND	ND	ND	ND	--	ND	516	0.212	644	8.43	992	10.1	ND	732	732	1.2	249	ND	ND	ND	5,200	ND	13200	--	6.00
		7/28/2014	ND	ND	--	ND	ND	ND	ND	--	ND	530	ND	680	7.48	1,010	2.51	ND	468	468	1.1	254	ND	ND	ND	6,240	--	7162	--	7.35
		3/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	432	9.73	543	6.25	840	9.29	ND	301	301	ND	165.0	ND	ND	ND	4,970	--	7557	--	7.16
		6/22/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	392	ND	295	6.65	490	7.44	ND	245	245	ND	88.1	4.41	ND	4.41	2,930	--	4748	--	7.38
		5/25/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	432	0.282	616	6.34	824	7.73	ND	ND	ND	ND	166.0	ND	ND	ND	5,610	--	7601	--	5.08
		6/28/2018	ND	ND	--	ND	ND	**0.013**	ND*	--	ND*	436	ND*	646	7.02	894	7.82	ND	ND	ND	ND	179.0	ND	ND	ND	5,850	--	--	--	--
		6/6/2019	ND	ND	--	ND	ND	ND	ND	--	ND	392	ND	764	7.61	1180	9.71	ND	ND	ND	ND	162.0	3	ND	3	6,290	--	8180	--	5.77
		6/4/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	32.3	--	--	--	968	--	2270	1790	--
		6/17/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	126.0	--	--	--	4,890	--	7239	7100	5.90

Table 2 - Groundwater Analytical Results
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

			Volatile Organic Compounds					Other Organic Compounds				Inorganic Parameters															General Parameters		
Parameter			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes (Total)	Methane	Ethane	Carbon Dioxide	Ethene	Calcium, Dissolved	Iron, Dissolved	Magnesium, Dissolved	Potassium, Dissolved	Sodium, Dissolved	Strontium	Alkalinity, Carbonate (CaCO3)	Alkalinity, Bicarbonate (CaCO3)	Alkalinity, Total as CaCO3	Bromide	Chloride	Nitrogen as Nitrate	Nitrogen as Nitrite	Nitrogen as Nitrate and Nitrite	Sulfate	Sulfide, Total	Specific Conductance	Total Dissolved Solids (TDS)	pH
CAS #			71-43-2	100-41-4	91-20-3	108-88-3	1330-20-7	74-82-8	74-84-0		74-85-1	7440-70-2	7439-89-6	7439-95-4	7440-09-7	7440-23-5	7440-24-6				24959-67-9	16887-00-6				14808-79-8	18496-25-8			
COGCC Table 910-1[3]			0.005	0.7	---	0.56	1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	49.38	---	---	---	430.63	--	---	---	--
			---	---	---	1[M]	10[M]	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	--
CDPHE Basic Standards for Groundwater			0.005	0.7	0.14	0.56	1.4	---	---	---	--	--	0.3	---	---	---	---	---	---	---	---	250	10	1	10	250	---	---	400-No Limit	6.5 - 8.5
Detection Level			0.001	0.001	0.005	0.001	0.003	0.0066	0.0062	20	0.0062		0.05					20	20	20	1		0.1	0.5	0.1		0.05		200	
Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	umhos/cm	mg/L	Std. Units
Longmont 8-10K Wellhead	LM8-MW01	3/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	**75**	**ND**	**79.1**	**5.87**	**106**	**3.03**	**ND**	**204**	**204**	**ND**	**40.1**	**0.23**	**ND**	**0.24**	**496**	**ND**	**1350**	--	**7.50**
		12/20/2017	--	--	--	--	--	ND	--	--	--	**339**	**--**	**120**	**22.7**	**203**	**2.68**	**--**	**--**	**244**	**--**	**90.2**	**0.875**	**--**	**0.875**	**1410**	**--**	**2742**	--	**7.66**
		6/5/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**492**	**ND**	**326**	**12.1**	**223**	**6.26**	**ND**	**129**	**129**	**ND**	**35.9**	**ND**	**ND**	**ND**	**2820**	**--**	**3478**	--	**6.74**
		6/4/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**38.6**	**--**	**--**	**--**	**2600**	**--**	**4011**	**4040**	--
		6/23/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**42.5**	**--**	**--**	**--**	**2960**	**--**	**4402**	**4140**	--
	LM8-MW02	3/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	**85**	**ND**	**88.6**	**5.39**	**131**	**1.97**	**ND**	**234**	**234**	**ND**	**42.9**	**0.28**	**ND**	**0.29**	**548**	**ND**	**1540**	--	**7.60**
		12/20/2017	--	--	--	--	--	ND	--	--	--	**182**	**--**	**152**	**9.38**	**244**	**2.32**	**--**	**--**	**246**	**--**	**79.9**	**0.423**	**--**	**0.423**	**1190**	**--**	**2546**	--	**7.37**
		6/5/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**522**	**ND**	**432**	**16.5**	**200**	**7.32**	**ND**	**ND**	**ND**	**ND**	**45.5**	**ND**	**ND**	**ND**	**4600**	**--**	**4366**	--	**5.91**
		6/4/2020	ND	ND	--	ND	ND	ND	ND	**79.6**	ND	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**41**	**--**	**--**	**--**	**2950**	**--**	**4012**	**4090**	--
		6/23/2021	ND	ND	--	ND	ND	ND	ND	**141**	ND	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**36.2**	**--**	**--**	**--**	**2730**	**--**	**3703**	**3580**	--
	LM8-MW03	3/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	**87**	**ND**	**94.1**	**5.65**	**122**	**2.87**	**ND**	**244**	**244**	**ND**	**42.1**	**ND**	**ND**	**ND**	**530**	**ND**	**1530**	--	**7.40**
		12/20/2017	--	--	--	--	--	**0.0263**	--	--	--	**209**	**--**	**173**	**11.5**	**255**	**2.76**	**--**	**--**	**211**	**--**	**95.9**	**5.12**	**--**	**5.12**	**1370**	**--**	**2685**	--	**7.43**
		6/5/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**437**	**ND**	**326**	**13.4**	**177**	**5.88**	**ND**	**ND**	**ND**	**ND**	**35.1**	**ND**	**ND**	**ND**	**3570**	**--**	**3486**	--	**5.34**
		6/4/2020	ND	ND	--	ND	ND	ND	ND	**65.6**	ND	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**43.8**	**--**	**--**	**--**	**2840**	**--**	**4064**	**4040**	--
		6/23/2021	ND	ND	--	ND	ND	ND	ND	**56.9**	ND	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**38.6**	**--**	**--**	**--**	**2740**	**--**	**3966**	**3510**	--
Domenico #1 Wellsite	DM1-MW01	3/19/2013	ND	ND	--	ND	ND	**0.0253**	ND	--	ND	**86**	ND	**93.1**	**3.4**	**254**	**1.83**	ND	**484**	**484**	**4.8**	**136**	ND	ND	ND	**494**	ND	**1970**	--	**7.50**
		7/29/2014	ND	ND	--	ND	ND	ND	ND	--	ND	**53**	ND	**56.9**	**1.64**	**175**	**0.853**	ND	**305**	**305**	**3**	**92.0**	ND	ND	ND	**373**	--	**1023**	--	**7.36**
		3/31/2015	ND	ND	--	ND	ND	**0.0625**	ND	--	ND	**34**	ND	**53**	**1.72**	**145**	**0.71**	ND	**351**	**351**	**2.1**	**72.2**	ND	ND	ND	**183**	--	**1189**	--	**7.52**
		6/24/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**33**	ND	**41.1**	**1.9**	**78.7**	**0.713**	ND	**209**	**209**	ND	**48.1**	ND	ND	ND	**122**	--	**801**	--	**7.27**
		5/23/2017	ND	ND	--	ND*	ND	**0.213**	ND*	--	ND*	**55**	ND	**69.3**	**2.54**	**143**	**1.07**	ND	**410**	**410**	**1.66**	**76.9**	ND	ND	ND	**180**	--	**1271**	--	**7.53**
		6/29/2018	ND	ND	--	ND	ND	**0.0505**	ND*	--	ND*	**40**	ND	**52.6**	**2.47**	**115**	**0.719**	ND	**241**	**241**	ND	**74.3**	ND	ND	ND	**193**	--	--	--	--
		6/3/2019	ND	ND	--	ND	ND	**0.0529**	ND	--	ND	**52**	ND	**74.2**	**3.04**	**144**	**1.12**	ND	**407**	**407**	ND	**78.4**	ND	ND	ND	**181**	--	**1163**	--	**7.46**
		6/8/2020	ND	ND	--	ND	ND	**0.0438**	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**96.3**	--	--	--	**219**	--	**1445**	**793**	**7.30**
		6/17/2021	ND	ND	--	ND	ND	**0.0149**	ND	**21.6**	ND	--	--	--	--	--	--	--	--	--	--	**100.0**	--	--	--	**221**	--	**1723**	**958**	**7.50**
	DM1-MW02	3/19/2013	ND	ND	--	ND	ND	**0.0071**	ND	--	ND	**58**	ND	**84.8**	**6.21**	**214**	**0.965**	ND	**307**	**307**	**3.4**	**123**	ND	ND	ND	**492**	ND	**1720**	--	**7.50**
		7/29/2014	ND	ND	--	ND	ND	**0.0291**	ND	--	ND	**114**	ND	**93.2**	**6.46**	**276**	**1.59**	ND	**525**	**525**	**4.6**	**157**	**1.4**	**0.13**	**1.6**	**685**	--	**2215**	--	**7.13**
		3/31/2015	ND	ND	--	ND	ND	ND	ND	--	ND	**83**	ND	**68.6**	**4.67**	**215**	**0.986**	ND	**529**	**529**	**4.1**	**112**	ND	ND	--	**339**	--	**1750**	--	**7.32**
		6/24/2016	ND	ND	--	ND*	ND	**0.0433**	ND*	--	ND*	**68**	ND	**58**	**5.67**	**119**	**1.12**	ND	**330**	**330**	**1.25**	**61.1**	ND	ND	ND	**185**	--	**1176**	--	**7.01**
		5/23/2017	ND	ND	--	ND*	ND	**0.0152**	ND*	--	ND*	**66**	ND	**55.8**	**5.55**	**127**	**0.729**	ND	**330**	**330**	**1.15**	**80.4**	**0.44**	ND	**0.44**	**185**	--	**1217**	--	**7.32**
		6/29/2018	ND	ND	--	ND	ND	**0.0675**	ND*	--	ND*	**71**	ND	**52.9**	**4.93**	**159**	**0.837**	ND	**386**	**386**	**1.33**	**76.9**	ND	ND	ND	**196**	--	--	--	--
		6/3/2019	ND	ND	--	ND	ND	**0.173**	ND	--	ND	**85**	ND	**65.6**	**3.2**	**164**	**0.945**	ND	**367**	**367**	ND	**89.5**	ND	ND	ND	**286**	--	**1278**	--	**7.50**
		6/8/2020	ND	ND	--	ND	ND	ND	ND	**29.9**	ND	--	--	--	--	--	--	--	--	--	--	**106.0**	--	--	--	**271**	--	**1565**	**858**	**7.20**
		6/17/2021	ND	ND	--	ND	ND	ND	ND	**28.2**	ND	--	--	--	--	--	--	--	--	--	--	**137.0**	--	--	--	**333**	--	**1800**	**1080**	**7.30**
	DM1-MW03	3/19/2013	ND	ND	--	ND	ND	ND	ND	--	ND	**99**	ND	**55.1**	**3.18**	**161**	**2.14**	ND	**284**	**284**	**2.2**	**91.5**	**0.27**	ND	**0.3**	**448**	ND	**1640**	--	**7.40**
		7/29/2014	ND	ND	--	ND	ND	**0.0119**	ND	--	ND	**89**	ND	**51.5**	**1.76**	**145**	**1.11**	ND	**275**	**275**	**2.7**	**91.1**	**2.8**	ND	**2.8**	**423**	--	**1293**	--	**7.09**
		4/1/2015	ND	ND	--	ND	ND	ND	ND	--	ND	**116**	ND	**70.3**	**1.96**	**167**	**1.12**	ND	**287**	**287**	**2.8**	**108.0**	**3.5**	ND	**3.5**	**577**	--	**1722**	--	**7.11**
		6/24/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**160**	ND	**86**	**2.4**	**203**	**1.8**	ND	**288**	**288**	**2.06**	**110**	**4.38**	ND	**4.38**	**604**	--	**2031**	--	**7.21**
		5/23/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**145**	ND	**77.5**	**2.25**	**193**	**1.28**	ND	**258**	**258**	**1.31**	**121**	**5.83**	ND	**5.83**	**589**	--	**1862**	--	**7.02**
		6/29/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	**70**	ND	**37.5**	**1.61**	**129**	**0.628**	ND	**195**	**195**	ND	**72**	**1.1**	ND	**1.1**	**265**	--	--	--	--
		6/3/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	**84**	ND	**46.4**	**2.08**	**122**	**0.79**	ND	**216**	**216**	ND	**90**	**0.432**	ND	**0.432**	**282**	--	**1092**	--	**7.52**
		6/8/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**98.7**	--	--	--	**248**	--	**1212**	**637**	**7.30**
		6/17/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**121.0**	--	--	--	**367**	--	**1577**	**996**	**7.20**
Stamp 31-2C Wellsite	S31-MW01	3/22/2013	ND	ND	--	ND	ND	**0.0137**	ND	--	ND	**365**	ND	**1,400**	**26.5**	**2,850**	**9.7**	ND	**606**	**606**	**1.8**	**381**	**2.8**	**0.32**	**3.1**	**13,200**	ND	**17200**	--	**7.50**
		10/24/2013	ND	ND	--	**0.0022**	ND	**0.101**	ND	--	ND	**340**	**0.196**	**814**	**14.5**	**2,060**	**8.01**	ND	**642**	**642**	**3.6**	**369**	**1.5**	**0.16**	**1.6**	**8,340**	ND	**5670**	--	**7.20**
		7/29/2014	ND	**0.011**	--	ND	ND	**0.142**	ND	--	ND	**356**	**0.192**	**986**	**16.2**	**2,680**	**8.99**	ND	**829**	**829**	**3.1**	**725**	ND	ND	ND	**8,930**	--	**11866**	--	**7.13**
		4/1/2015	**0.0014**	**0.186**	--	ND	ND	**0.372**	**0.0094**	--	ND	**318**	ND	**687**	**10.4**	**2,260**	**11.9**	ND*	**1,120**	**1,120**	**8**	**762**	ND	ND	ND	**7,340**	--	**12985**	--	**7.21**
		6/23/2016	ND	ND	--	ND*	ND	**0.262**	**0.0245**	--	ND*	**434**	ND	**1,270**	**13.8**	**2,900**	**16.4**	ND	**762**	**762**	ND	**699**	ND	ND	ND	**11,200**	--	**15456**	--	**7.04**
		5/22/2017	ND	**0.0065**	--	ND*	ND	**0.318**	**0.0145**	--	ND*	**416**	ND	**1,200**	**13.3**	**2,880**	**10**	ND	**753**	**753**	ND	**637**	ND	ND	ND	**9,930**	--	**15430**	--	**7.26**
		6/29/2018	ND	ND	--	ND	ND	**0.134**	ND*	--	ND*	**407**	ND	**1,270**	**13.4**	**3,060**	**8.76**	ND	**648**	**648**	ND	**351**	ND	ND	ND	**11,300**	--	--	--	--
		6/10/2019	ND	ND	--	ND	ND	**0.266**	ND	--	ND	**415**	ND	**1,300**	**12.8**	**3,000**	**8.71**	ND	**724**	**724**	ND	**455**	ND	ND	ND	**11,800**	--	**13540**	--	**7.23**
		5/26/2020	ND	ND	--	ND	ND	**0.31**	**0.0192**	**35.3**	ND	--	--	--	--	--	--	--	--	--	--	**333**	--	--	--	**11,200**	--	**15410**	**15300**	**7.90**
	S31-MW02[4]	3/22/2013	**0.0946**	**0.0232**	--	ND	ND	**0.0323**	**0.0119**	--	ND	**377**	ND	**872**	**18.4**	**1,940**	**7.99**	ND	**860**	**860**	**1.5**	**150**	ND	ND	ND	**9,110**	ND	**12500**	--	**7.20**
		10/24/2013	**0.0549**	ND	--	**0.0102**	ND	**0.0506**	**0.0169**	--	ND	**352**	ND	**655**	**12.3**	**1,600**	**6.28**	ND	**771**	**771**	**2.4**	**181**	ND	ND	ND	**6,330**	ND	**4060**	--	**7.00**
	S31-MW03	10/24/2013	**0.0062**	ND	--	**0.0013**	ND	**0.0485**	**0.0076**	--	ND	**362**	**0.204**	**814**	**7.83**	**1,860**	**11.5**	ND*	**1,340**	**1,340**	**2.3**	**253**	ND	ND	ND	**7,050**	ND	**4760**	--	**7.10**
		7/29/2014	**0.0018**	ND	--	ND	ND	**0.111**	**0.0236**	--	ND	**383**	ND	**750**	**8.72**	**1,520**	**9.85**	ND*	**1,410**	**1,410**	**1.8**	**176**	ND	ND	ND	**6,480**	--	**8796**	--	**7.09**
		4/1/2015	ND	**0.0012**	--	ND	ND	**0.104**	**0.0228**	--	ND	**405**	ND	**711**	**9.83**	**1,490**	**9.15**	ND*	**1,790**	**1,790**	**1.7**	**162**	ND	ND	ND	**5,860**	--	**10227**	--	**7.01**
		6/23/2016	**0.0012**	ND	--	ND*	ND	**0.171**	**0.016**	--	ND*	**466**	ND	**858**	**8.44**	**1,720**	**12.1**	ND	**1,360**	**1,360**	ND	**147**	ND	ND	ND	**6,870**	--	**10812**	--	**7.15**
		5/22/2017	ND	ND	--	ND*	ND	**0.319**	**0.19**	--	ND*	**438**	ND	**743**	**8.65**	**1,510**	**9.34**	ND	**1,280**	**1,280**	ND	**118**	ND	ND	ND	**5,770**	--	**9593**	--	**7.18**
		6/29/2018	**0.0021**	ND	--	ND	ND	**0.319**	**0.19**	--	ND*	**438**	ND	**743**	**8.65**	**1,510**	**9.34**	ND	**1,280**	**1,280**	ND	**118**	ND	ND	ND	**5,770**	--	**9593**	--	**7.18**
		6/10/2019	ND	ND	--	ND	ND	**0.36**	ND	--	ND	**463**	ND	**753**	**9.42**	**1,860**	**8.33**	ND	**1,090**	**1,090**	ND	**107**	ND	ND	ND	**6,520**	--	**8440**	--	**7.11**
		5/26/2020	ND	ND	--	ND	ND	**0.805**	**0.0202**	**130**	ND	--	--	--	--	--	--	--	--	--	--	**105**	--	--		**3,920**	--	**7639**	**6750**	**7.52**
	S31-MW04	3/22/2013	ND	ND	--	ND	ND	ND	ND	--	ND	**383**	ND	**759**	**19.6**	**1,380**	**9.55**	ND	**480**	**480**	**4.4**	**85.2**	**1.9**	**0.21**	**2.1**	**7,180**	ND	**9980**	--	**7.50**
		10/24/2013	ND	ND	--	ND	ND	ND	ND	--	ND	**345**	**0.216**	**710**	**13.4**	**1,660**	**7.7**	ND	**497**	**497**	**1.5**	**75.1**	**0.46**	ND	**0.46**	**6,710**	ND	**4250**	--	**7.30**
		7/29/2014	ND	ND	--	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	ND	**480**	**480**	**2.4**	**105**	**0.75**	ND	**0.75**	**6,960**	--	**8258**	--	**7.42**
		7/31/2014	--	--	--	--	--	--	--	--	--	**382**	ND	**796**	**10.6**	**1,560**	**8.43**	--	--	--	--	--	--	--	--	--	--	**10164**	--	**7.49**
		4/1/2015	ND	ND	--	ND	ND	ND	ND	--	ND	**382**	ND	**776**	**12.2**	**1,530**	**9.03**	ND	**528**	**528**	**2.8**	**119.0**	**1.3**	ND	**1.3**	**7,100**	--	**10363**	--	**7.36**
		6/23/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**437**	ND	**888**	**10.3**	**1,660**	**10.7**	ND	**485**	**485**	ND	**127**	**3.12**	ND	**3.12**	**8,050**	--	**10789**	--	**7.28**
		5/22/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**410**	ND	**765**	**10.3**	**1,560**	**8.45**	ND	**554**	**554**	ND	**185**	ND	ND	ND	**6,870**	--	**10020**	--	**7.43**
		6/29/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	**426**	ND	**841**	**11**	**1,630**	**9.12**	ND	**539**	**539**	ND	**107**	ND	ND	ND	**7,210**	--	--	--	--
		5/26/2020	ND	ND	--	ND	ND	ND	ND	**30.3**	ND	--	--	--	--	--	--	--	--	--	--	**71**	--	--	--	**6,400**	--	**8706**	**6300**	**7.78**
	S31-MW05	10/24/2013	ND	ND	--	ND	ND	ND	ND	--	ND	**361**	**0.079**	**627**	**12**	**1,250**	**6.94**	ND	**464**	**464**	**1.1**	**60.4**	**0.17**	ND	**0.17**	**6,060**	ND	**3770**	--	**7.20**
		7/29/2014	ND	ND	--	ND	ND	ND	ND	--	ND	--	--	--	--	--	--	ND	**434**	**434**	**1.4**	**59.4**	**0.23**	ND	**0.23**	**5,740**	--	**6148**	--	**7.37**
		7/30/2014	--	--	--	--	--	--	--	--	--	**362**	ND	**554**	**9.36**	**1,030**	**7.14**	--	--	--	--	--	--	--	--	--	--	NS	--	NS
		4/1/2015	ND	ND	--	ND	ND	ND	ND	--	ND	**381**	ND	**570**	**10.7**	**1,020**	**7.12**	ND	**468**	**468**	**1.4**	**64.8**	**0.43**	ND	**0.44**	**5,250**	--	**7915**	--	**7.29**
		6/23/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**422**	ND	**922**	**8.95**	**1,670**	**9.55**	ND	**535**	**535**	ND	**106**	**0.177**	ND	**0.177**	**9,090**	--	**11864**	--	**7.26**
		5/22/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**411**	ND	**548**	**9.09**	**996**	**6.93**	ND	**523**	**523**	ND	**76.5**	ND	ND	ND	**4,690**	--	**7564**	--	**7.37**
		6/29/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	**439**	ND	**548**	**9.32**	**971**	**7.03**	ND	**484**	**484**	ND	**71.1**	ND	ND	ND	**4,590**	--	--	--	--
		5/26/2020	ND	ND	--	ND	ND	ND	ND	**26.4**	ND	--	--	--	--	--	--	--	--	--	--	**66.0**	--	--	--	**5,200**	--	**7031**	**6150**	**7.69**
	S31-MW06	10/24/2013	ND	ND	--	ND	ND	ND	ND	--	ND	**366**	ND	**497**	**11.1**	**1,120**	**6.74**	ND	**485**	**485**	**1**	**56.5**	ND	ND	ND	**5,380**	ND	**3440**	--	**7.20**
		7/29/2014	ND	ND	--	ND	ND	ND	ND	--	ND	**386**	ND	**554**	**9.16**	**1,010**	**7.13**	ND	**465**	**465**	**1.5**	**66.7**	ND	ND	ND	**5,540**	--	**6147**	--	**7.33**
		4/1/2015	ND	ND	--	ND	ND	ND	ND	--	ND	**372**	ND	**605**	**11**	**1,110**	**8.28**	ND	**494**	**494**	**1.5**	**77.6**	**0.6**	ND	**0.6**	**5,690**	--	**8375**	--	**7.26**
		6/23/2016	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**454**	ND	**870**	**9.61**	**1,430**	**11.8**	ND	**527**	**527**	ND	**131**	**0.621**	ND	**0.621**	**6,980**	--	**9450**	--	**7.08**
		5/22/2017	ND	ND	--	ND*	ND	ND*	ND*	--	ND*	**421**	ND	**589**	**9.49**	**1,150**	**8.2**	ND	**531**	**531**	ND	**81.4**	ND	ND	ND	**5,400**	--	**8013**	--	**7.08**
		6/29/2018	ND	ND	--	ND	ND	ND*	ND*	--	ND*	**442**	ND	**565**	**9.24**	**999**	**7.61**	ND	**514**	**514**	ND	**74.6**	ND	ND	ND	**4,850**	--	--	--	--
		5/26/2020	ND	ND	--	ND	ND	ND	ND	**28.3**	ND	--	--	--	--	--	--	--	--	--	--	**63.0**	--	--	--	**5,090**	--	**7055**	**5320**	**7.73**

Table 2 - Groundwater Analytical Results
City of Longmont - Groundwater Quality Monitoring
Project Number 22217000

			Volatile Organic Compounds					Other Organic Compounds				Inorganic Parameters																General Parameters		
Parameter			Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes (Total)	Methane	Ethane	Carbon Dioxide	Ethene	Calcium, Dissolved	Iron, Dissolved	Magnesium, Dissolved	Potassium, Dissolved	Sodium, Dissolved	Strontium	Alkalinity, Carbonate (CaCO3)	Alkalinity, Bicarbonate (CaCO3)	Alkalinity, Total as CaCO3	Bromide	Chloride	Nitrogen as Nitrate	Nitrogen as Nitrite	Nitrogen as Nitrate and Nitrite	Sulfate	Sulfide, Total	Specific Conductance	Total Dissolved Solids (TDS)	pH
CAS #			71-43-2	100-41-4	91-20-3	108-88-3	1330-20-7	74-82-8	74-84-0		74-85-1	7440-70-2	7439-89-6	7439-95-4	7440-09-7	7440-23-5	7440-24-6					16887-00-6				14808-79-8	18496-25-8			
COGCC Table 910-1[3]			0.005	0.7	---	0.56	1.4	---	---	---	---	---	---	---	---	---	---	---	---	---	---	49.38	---	---	---	430.63	--	---	---	--
			---	---	---	1[M]	10[M]	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--	---	---	---
CDPHE Basic Standards for Groundwater			0.005	0.7	0.14	0.56	1.4	---	---	---	---	--	0.3	---	---	---	---	---	---	---	---	250	10	1	10	250	---	---	400-No Limit	6.5 - 8.5
Detection Level			0.001	0.001	0.005	0.001	0.003	0.0066	0.0062	20	0.0062		0.05					20	20	20	1		0.1	0.5	0.1		0.05		200	
Units			mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	umhos/cm	mg/L	Std. Units
Stamp #1	ST1-MW02	7/7/2021	ND	ND	--	ND	ND	ND	ND	**26.2**	ND	--	--	--	--	--	--	--	--	--	--	**662.0**	--	--	--	**12,500**	--	**18667**	**20300**	**7.70**
	ST1-MW03	7/7/2021	ND	ND	--	ND	ND	ND	ND	**26.4**	ND	--	--	--	--	--	--	--	--	--	--	**131.0**	--	--	--	**6,490**	--	**10236**	**9760**	**7.60**
	ST1-MW05	7/7/2021	ND	ND	--	ND	ND	ND	ND	**29.8**	ND	--	--	--	--	--	--	--	--	--	--	**917.0**	--	--	--	**15,600**	--	**21596**	**24400**	**7.70**
George Mayeda #1	GM1-MW01	6/4/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	**96**	ND	**80.9**	**3.84**	**146**	**2.08**	ND	**376**	**376**	ND	**24.8**	**7.26**	ND	**7.26**	**410**	--	**1560**	--	**7.65**
		5/26/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**32.1**	--	--	--	**411**	--	**816**	**941**	**7.04**
		6/21/2021	ND	ND	--	ND	ND	ND	ND	**23.5**	ND	--	--	--	--	--	--	--	--	--	--	**19**	--	--	--	**307**	--	**1212**	**796**	**7.70**
	GM1-MW02	6/4/2019	ND	ND	--	ND	ND	ND*	ND*	--	ND*	**88.9**	ND	**82.8**	**3.54**	**141**	**3.08**	ND	**401**	**401**	ND	**32.3**	**8.15**	ND	**8.15**	**550**	--	**1325**	--	**7.88**
		5/26/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**27.8**	--	--	--	**429**	--	**1722**	**875**	**7.22**
		6/21/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**24.1**	--	--	--	**396**	--	**1347**	**924**	**7.90**
	GM1-MW03	6/3/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**191**	ND	**178**	**4.47**	**306**	**6.08**	ND	**311**	**311**	ND	**34.5**	**9.23**	ND	**9.23**	**989**	--	**1330**	--	**7.92**
		5/26/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**29.6**	--	--	--	**493**	--	**1479**	**1040**	**7.39**
		6/21/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**22.9**	--	--	--	**499**	--	**1250**	**1010**	**7.80**
Maruyama #1	MY1-MW01	5/16/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**119**	ND	**80.1**	**3.33**	**98.4**	**4.8**	ND	**371**	**371**	ND	**31.1**	**4.28**	ND	**4.28**	**344**	**344**	**1260**	--	**7.50**
		5/27/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**31.4**	--	--	--	**321**	--	**1298**	**904**	**7.19**
		6/15/2021	ND	ND	--	ND	ND	ND	ND	**22.7**	ND	--	--	--	--	--	--	--	--	--	--	**41.3**	--	--	--	**398**	--	**1478**	**1000**	**7.20**
	MY1-MW02	5/16/2019	ND	ND	ND	ND	ND	ND	ND		ND	**115**	ND	**77.7**	**3.28**	**95.1**	**4.74**	ND	**371**	**371**	ND	**31.2**	**4.3**	ND	**4.3**	**350**	**350**	**1310**	--	**7.49**
		5/27/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**31.4**	--	--	--	**324**	--	**1398**	**893**	**7.12**
		6/15/2021	ND	ND	--	ND	ND	ND	ND	**21.3**	ND	--	--	--	--	--	--	--	--	--	--	**41.7**	--	--	--	**389**	--	**1514**	**1040**	**7.10**
	MY1-MW03	5/16/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**115**	ND	**76.9**	**3.21**	**97.2**	**5.57**	ND	**389**	**389**	ND	**31**	**4.53**	ND	**4.53**	**355**	**355**	**1270**	--	**7.43**
		5/27/2020	ND	ND	--	ND	ND	ND	ND	**20.1**	ND	--	--	--	--	--	--	--	--	--	--	**33.3**	--	--	--	**336**	--	**1346**	**934**	**7.12**
		6/15/2021	ND	ND	--	ND	ND	ND	ND	**23.5**	ND	--	--	--	--	--	--	--	--	--	--	**42.1**	--	--	--	**389**	--	**1492**	**978**	**7.10**
Tabor #1	TB1-MW01	5/16/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**477**	ND	**482**	**15.3**	**734**	**6.54**	ND	**441**	**441**	ND	**124**	ND	ND	ND	**4030**	**4030**	**5586**	--	**7.25**
	TB1-MW02	5/16/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**349**	ND	**318**	**2.79**	**657**	**6.51**	ND	**385**	**385**	ND	**298**	**7.43**	ND	**7.43**	**2560**	**2560**	**4692**	--	**7.17**
		6/16/2021	ND	ND	--	ND	ND	ND	ND	**39.7**	ND	--	--	--	--	--	--	--	--	--	--	**400**	--	--	--	**2620**	--	**5476**	**4900**	**7.10**
	TB1-MW03R	6/16/2021	ND	ND	--	ND	ND	ND	ND	**33.3**	ND	--	--	--	--	--	--	--	--	--	--	**181**	--	--	--	**5480**	--	**8417**	**8830**	**7.40**
Tabor #7	TB7-MW01	5/17/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**127**	ND	**91.5**	**2.98**	**96.3**	**2.78**	ND	**313**	**313**	ND	**41.5**	**6.47**	ND	**6.47**	**448**	**448**	**1334**	--	**7.48**
		6/3/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**38.3**	--	--	--	**445**	--	**1566**	**1140**	--
		6/16/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**44**	--	--	--	**431**	--	**1562**	**1050**	**7.60**
	TB7-MW02	5/17/2019	ND	ND	ND	ND	ND	ND	ND		ND	**132**	ND	**97.6**	**2.5**	**96.1**	**3.39**	ND	**348**	**348**	ND	**44.9**	**5.61**	ND	**5.61**	**460**	**460**	**1442**	--	**7.50**
		6/3/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**40.5**	--	--	--	**422**	--	**1550**	**1080**	--
		6/16/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**47.2**	--	--	--	**442**	--	**1529**	**1060**	**7.50**
	TB7-MW03	5/17/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**134**	ND	**99.3**	**2.3**	**96.3**	**2.5**	ND	**348**	**348**	ND	**46.1**	**5.5**	ND	**5.5**	**466**	**466**	**1387**	--	**7.53**
		6/3/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**42.3**	--	--	--	**425**	--	**1770**	**1140**	--
		6/16/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**49.5**	--	--	--	**437**	--	**1551**	**1050**	**7.50**
Wetman #1	WT1-MW01	5/16/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**58.3**	ND	**36.6**	**4.21**	**63**	**1.8**	ND	**256**	**256**	ND	**19.5**	**0.678**	ND	**0.678**	**139**	**139**	**633**	--	**7.63**
		5/28/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**59.2**	--	--	--	**291**	--	**1509**	**824**	**6.97**
		6/28/2021	ND	ND	--	ND	ND	ND	ND	**28.2**	ND	--	--	--	--	--	--	--	--	--	--	**41.8**	--	--	--	**272**	--	**1326**	**676**	**7.30**
	WT1-MW02	5/16/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**60.8**	ND	**44.9**	**3.04**	**65.2**	**1.44**	ND	**281**	**281**	ND	**28.1**	**0.385**	ND	**0.385**	**185**	**185**	**633**	--	**7.39**
		5/28/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**37.8**	--	--	--	**335**	--	**1263**	**798**	**6.81**
		6/28/2021	ND	ND	--	ND	ND	ND	ND	**40**	ND	--	--	--	--	--	--	--	--	--	--	**40.3**	--	--	--	**377**	--	**1523**	**888**	**7.30**
	WT1-MW03	5/16/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**53**	ND	**42.5**	**1.14**	**68.2**	**1.34**	ND	**231**	**231**	ND	**23.8**	**0.885**	ND	**0.885**	**158**	**158**	**1082**	--	**7.44**
		5/28/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**27.2**	--	--	--	**171**	--	**818**	**496**	**7.20**
		6/28/2021	ND	ND	--	ND	ND	ND	ND	**21.5**	ND	--	--	--	--	--	--	--	--	--	--	**31.1**	--	--	--	**256**	--	**1150**	**628**	**7.40**
Mary #2	MR2-MW01	5/15/2019	ND	ND	ND	ND	ND	ND	ND	--	ND	**362**	ND	**273**	**8.35**	**500**	**8.06**	ND	**481**	**481**	ND	**130**	**65**	ND	**65**	**1950**	**1950**	**1983**	--	**7.02**
		5/27/2020	ND	ND	--	ND	ND	ND	ND	**20.3**	ND	--	--	--	--	--	--	--	--	--	--	**129**	--	--	--	**1990**	--	**4492**	**3900**	**6.86**
		6/15/2021	ND	ND	--	ND	ND	ND	ND	**37.7**	ND	--	--	--	--	--	--	--	--	--	--	**138**	--	--	--	**1970**	--	**4350**	**3710**	**7.30**
	MR2-MW02	5/15/2019	ND	ND	ND	ND	ND	**0.0559**	ND	--	ND	**35.1**	ND	**26.1**	**4.73**	**162**	**2.67**	ND	**419**	**419**	ND	**5.78**	**1.11**	ND	**1.11**	**90.7**	**90.7**	**3290**	--	**6.91**
		5/27/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**5.63**	--	--	--	**100**	--	**1002**	**600**	**7.30**
		6/15/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**5.35**	--	--	--	**94.6**	--	**987**	**569**	**7.80**
	MR2-MW03	5/15/2019	ND	ND	ND	ND	ND	**0.0292**	ND	--	ND	**107**	ND	**82.3**	**10.1**	**243**	**4.48**	ND	**468**	**468**	ND	**33.1**	**4**	ND	**4**	**522**	**522**	**1184**	--	**7.49**
		5/27/2020	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**36.3**	--	--	--	**602**	--	**1766**	**1340**	**7.24**
		6/15/2021	ND	ND	--	ND	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--	**32.8**	--	--	--	**527**	--	**1764**	**1130**	**7.70**

**Elevated detection level due to sample dilution above regulatory limits

[1] Wells were observed to be destroyed. Unable to measure depths to water.
[2] The aluminum collar around the well casing was bent and the concrete surface completion was found separated, the well was not sampled.
The bentonite seal may be compromised; however, the analytical data does not indicate that the well is compromised.
[3] The COGCC cleanup standard for chloride and sulfate is 1.25 x background. Background concentrations from unimpacted wells were used to average and calculate an appropriate background concentration for this area.
[4] Filled with sediment. No water present.
RD1 samples collected on 6/23/2016 had to be recollected for nitrite and nitrate analysis due to a shipping delay resulting in the original samples being past the hold time of 48 hours.
COGCC - Colorado Oil and Gas Conservation Commission
CDPHE - Colorado Department of Public Health and Environment
mg/L - milligrams per liter
ND - Parameter not detected above the laboratory detection limit (Detection Limit)
Bold indicates detected constituents
Yellow shading indicates constituents above COGCC Table 910-1 standards.
Red shading indicates constituents detected above CDPHE standards
Grey shading indicates analytical results from the past calendar year
umhos/cm - microsiemens per centimeter
M - Drinking water maximum contaminant level
-- Not Sampled
Bkg - Background
--- indicates no regulatory standard

APPENDIX B – ANALYTICAL REPORTS & CHAINS OF CUSTODY

ANALYTICAL REPORT

June 28, 2021

Terracon Consultants, Inc - Longmont, CO

Sample Delivery Group:	L1368304
Samples Received:	06/18/2021
Project Number:	22217000
Description:	City of Longmont Annual GW Quality Monitoring

Report To: Mike Skridulis
1242 Bramwood Place
Longmont, CO 80501

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager

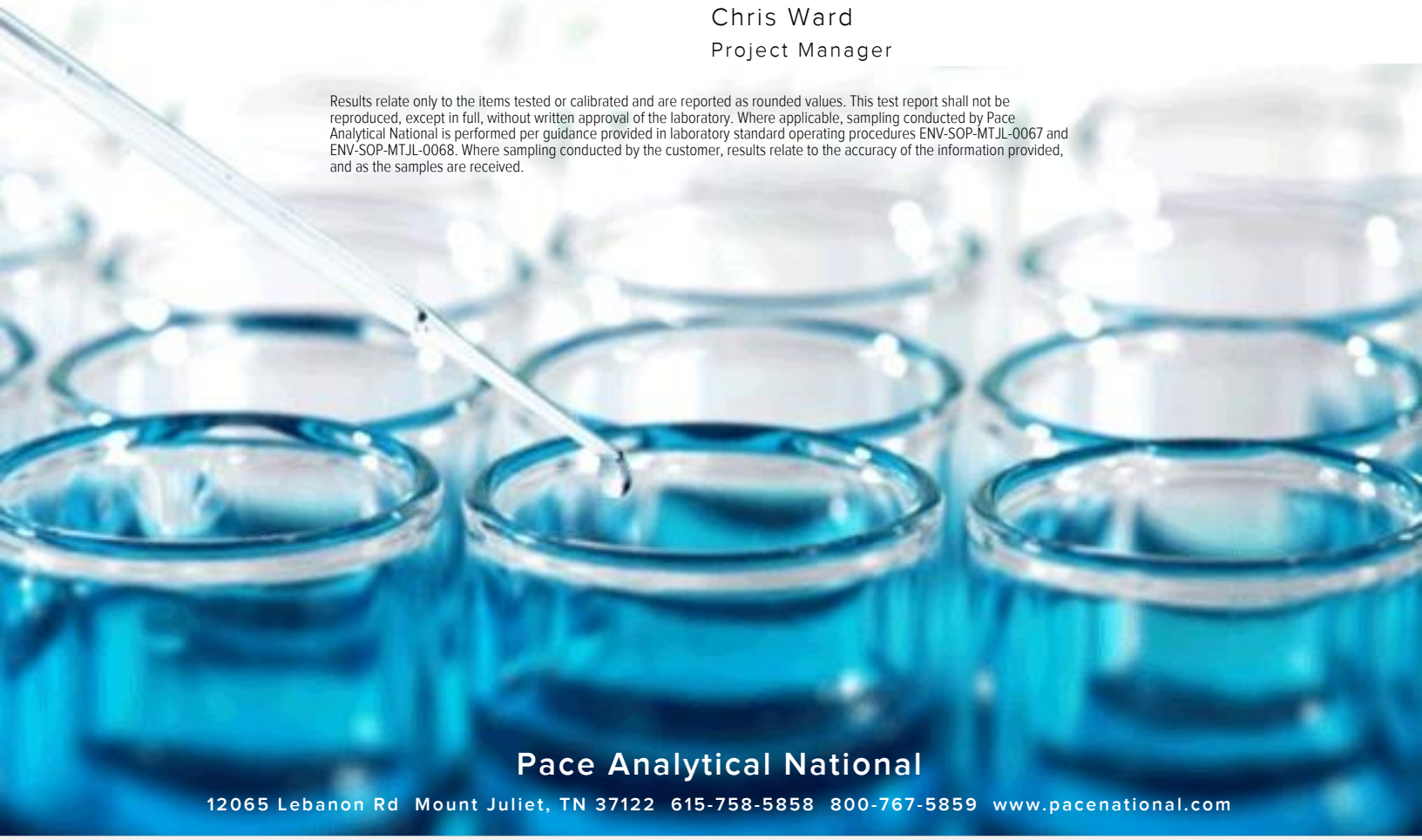


TABLE OF CONTENTS

PL1-MW01 L1368304-01 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/15/21 08:00	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691687	1	06/19/21 14:55	06/19/21 15:58	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694167	1	06/24/21 04:47	06/24/21 04:47	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 00:59	06/25/21 00:59	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	5	06/25/21 01:12	06/25/21 01:12	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 11:35	06/22/21 11:35	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 01:20	06/23/21 01:20	ACG	Mt. Juliet, TN

PL1-MW02 L1368304-02 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/15/21 07:00	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691689	1	06/19/21 16:14	06/20/21 10:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694167	1	06/24/21 05:01	06/24/21 05:01	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 01:25	06/25/21 01:25	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	10	06/25/21 01:38	06/25/21 01:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 11:39	06/22/21 11:39	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 01:41	06/23/21 01:41	ACG	Mt. Juliet, TN

PL1-MW03 L1368304-03 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/15/21 07:30	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691687	1	06/19/21 14:55	06/19/21 15:58	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694167	1	06/24/21 05:05	06/24/21 05:05	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 01:52	06/25/21 01:52	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	5	06/25/21 02:05	06/25/21 02:05	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 11:43	06/22/21 11:43	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 02:01	06/23/21 02:01	ACG	Mt. Juliet, TN

CL1-MW01 L1368304-04 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/15/21 09:30	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691689	1	06/19/21 16:14	06/20/21 10:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694167	1	06/24/21 05:10	06/24/21 05:10	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 02:18	06/25/21 02:18	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	5	06/25/21 02:58	06/25/21 02:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 11:48	06/22/21 11:48	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 02:22	06/23/21 02:22	ACG	Mt. Juliet, TN

CL1-MW02 L1368304-05 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/15/21 10:10	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691689	1	06/19/21 16:14	06/20/21 10:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 05:01	06/24/21 05:01	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 03:11	06/25/21 03:11	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	5	06/25/21 03:24	06/25/21 03:24	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 11:51	06/22/21 11:51	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 02:42	06/23/21 02:42	ACG	Mt. Juliet, TN

MY1-MW01 L1368304-06 GW

Collected by: Charles A. Covington | Collected date/time: 06/15/21 11:00 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691689	1	06/19/21 16:14	06/20/21 10:00	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 05:10	06/24/21 05:10	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 03:38	06/25/21 03:38	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	5	06/25/21 03:51	06/25/21 03:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 11:55	06/22/21 11:55	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 03:02	06/23/21 03:02	ACG	Mt. Juliet, TN

MY1-MW02 L1368304-07 GW

Collected by: Charles A. Covington | Collected date/time: 06/15/21 11:30 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691687	1	06/19/21 14:55	06/19/21 15:58	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 05:17	06/24/21 05:17	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 04:04	06/25/21 04:04	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	5	06/25/21 04:17	06/25/21 04:17	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 11:59	06/22/21 11:59	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 03:22	06/23/21 03:22	ACG	Mt. Juliet, TN

MY1-MW03 L1368304-08 GW

Collected by: Charles A. Covington | Collected date/time: 06/15/21 12:00 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691687	1	06/19/21 14:55	06/19/21 15:58	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 05:25	06/24/21 05:25	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 04:30	06/25/21 04:30	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	5	06/25/21 04:44	06/25/21 04:44	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 12:07	06/22/21 12:07	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 03:43	06/23/21 03:43	ACG	Mt. Juliet, TN

MR2-MW01 L1368304-09 GW

Collected by: Charles A. Covington | Collected date/time: 06/15/21 07:20 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691687	1	06/19/21 14:55	06/19/21 15:58	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 05:33	06/24/21 05:33	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	100	06/25/21 04:57	06/25/21 04:57	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 12:36	06/22/21 12:36	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 04:03	06/23/21 04:03	ACG	Mt. Juliet, TN

MR2-MW02 L1368304-10 GW

Collected by: Charles A. Covington | Collected date/time: 06/15/21 08:10 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691687	1	06/19/21 14:55	06/19/21 15:58	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 05:40	06/24/21 05:40	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 05:37	06/25/21 05:37	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 12:40	06/22/21 12:40	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 04:24	06/23/21 04:24	ACG	Mt. Juliet, TN

SAMPLE SUMMARY

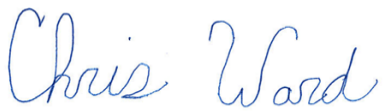
MR2-MW03 L1368304-11 GW

Collected by: Charles A. Covington
Collected date/time: 06/15/21 08:50
Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1691687	1	06/19/21 14:55	06/19/21 15:58	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 05:48	06/24/21 05:48	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	1	06/25/21 06:03	06/25/21 06:03	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694369	10	06/25/21 06:16	06/25/21 06:16	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692272	1	06/22/21 12:45	06/22/21 12:45	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 04:45	06/23/21 04:45	ACG	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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1090		20.0	1	06/19/2021 15:58	WG1691687

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 04:47	WG1694167

Sample Narrative:

L1368304-01 WG1694167: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	38.6		1.00	1	06/25/2021 00:59	WG1694369
Sulfate	491		25.0	5	06/25/2021 01:12	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 11:35	WG1692272
Ethane	ND		0.0130	1	06/22/2021 11:35	WG1692272
Ethene	ND		0.0130	1	06/22/2021 11:35	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 11:35	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 01:20	WG1693285
Toluene	ND		0.00100	1	06/23/2021 01:20	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 01:20	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 01:20	WG1693285
(S) Toluene-d8	*98.3*		*80.0-120*		*06/23/2021 01:20*	WG1693285
(S) 4-Bromofluorobenzene	*99.1*		*77.0-126*		*06/23/2021 01:20*	WG1693285
(S) 1,2-Dichloroethane-d4	*102*		*70.0-130*		*06/23/2021 01:20*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1110		20.0	1	06/20/2021 10:00	WG1691689

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	21.8	T8	20.0	1	06/24/2021 05:01	WG1694167

Sample Narrative:

L1368304-02 WG1694167: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	36.8		1.00	1	06/25/2021 01:25	WG1694369
Sulfate	584		50.0	10	06/25/2021 01:38	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	0.0441		0.0100	1	06/22/2021 11:39	WG1692272
Ethane	ND		0.0130	1	06/22/2021 11:39	WG1692272
Ethene	ND		0.0130	1	06/22/2021 11:39	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 11:39	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 01:41	WG1693285
Toluene	ND		0.00100	1	06/23/2021 01:41	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 01:41	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 01:41	WG1693285
(S) Toluene-d8	*131*	J1	*80.0-120*		*06/23/2021 01:41*	WG1693285
(S) 4-Bromofluorobenzene	*138*	J1	*77.0-126*		*06/23/2021 01:41*	WG1693285
(S) 1,2-Dichloroethane-d4	*99.1*		*70.0-130*		*06/23/2021 01:41*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	889		13.3	1	06/19/2021 15:58	WG1691687

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 05:05	WG1694167

Sample Narrative:

L1368304-03 WG1694167: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	66.8		1.00	1	06/25/2021 01:52	WG1694369
Sulfate	383		25.0	5	06/25/2021 02:05	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	0.0489		0.0100	1	06/22/2021 11:43	WG1692272
Ethane	ND		0.0130	1	06/22/2021 11:43	WG1692272
Ethene	ND		0.0130	1	06/22/2021 11:43	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 11:43	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 02:01	WG1693285
Toluene	ND		0.00100	1	06/23/2021 02:01	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 02:01	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 02:01	WG1693285
(S) Toluene-d8	*115*		*80.0-120*		*06/23/2021 02:01*	WG1693285
(S) 4-Bromofluorobenzene	*120*		*77.0-126*		*06/23/2021 02:01*	WG1693285
(S) 1,2-Dichloroethane-d4	*90.8*		*70.0-130*		*06/23/2021 02:01*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	976		20.0	1	06/20/2021 10:00	WG1691689

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 05:10	WG1694167

Sample Narrative:

L1368304-04 WG1694167: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	44.2		1.00	1	06/25/2021 02:18	WG1694369
Sulfate	316		25.0	5	06/25/2021 02:58	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 11:48	WG1692272
Ethane	ND		0.0130	1	06/22/2021 11:48	WG1692272
Ethene	ND		0.0130	1	06/22/2021 11:48	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 11:48	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 02:22	WG1693285
Toluene	ND		0.00100	1	06/23/2021 02:22	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 02:22	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 02:22	WG1693285
(S) Toluene-d8	*92.4*		*80.0-120*		*06/23/2021 02:22*	WG1693285
(S) 4-Bromofluorobenzene	*153*	J1	*77.0-126*		*06/23/2021 02:22*	WG1693285
(S) 1,2-Dichloroethane-d4	*99.1*		*70.0-130*		*06/23/2021 02:22*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1020		20.0	1	06/20/2021 10:00	WG1691689

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 05:01	WG1694216

Sample Narrative:

L1368304-05 WG1694216: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	46.8		1.00	1	06/25/2021 03:11	WG1694369
Sulfate	345		25.0	5	06/25/2021 03:24	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 11:51	WG1692272
Ethane	ND		0.0130	1	06/22/2021 11:51	WG1692272
Ethene	ND		0.0130	1	06/22/2021 11:51	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 11:51	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 02:42	WG1693285
Toluene	ND		0.00100	1	06/23/2021 02:42	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 02:42	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 02:42	WG1693285
(S) Toluene-d8	*110*		*80.0-120*		*06/23/2021 02:42*	WG1693285
(S) 4-Bromofluorobenzene	*119*		*77.0-126*		*06/23/2021 02:42*	WG1693285
(S) 1,2-Dichloroethane-d4	*91.1*		*70.0-130*		*06/23/2021 02:42*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1000		20.0	1	06/20/2021 10:00	WG1691689

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	22.7	T8	20.0	1	06/24/2021 05:10	WG1694216

Sample Narrative:

L1368304-06 WG1694216: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	41.3		1.00	1	06/25/2021 03:38	WG1694369
Sulfate	398		25.0	5	06/25/2021 03:51	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 11:55	WG1692272
Ethane	ND		0.0130	1	06/22/2021 11:55	WG1692272
Ethene	ND		0.0130	1	06/22/2021 11:55	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 11:55	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 03:02	WG1693285
Toluene	ND		0.00100	1	06/23/2021 03:02	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 03:02	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 03:02	WG1693285
(S) Toluene-d8	*98.1*		*80.0-120*		*06/23/2021 03:02*	WG1693285
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*06/23/2021 03:02*	WG1693285
(S) 1,2-Dichloroethane-d4	*76.9*		*70.0-130*		*06/23/2021 03:02*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1040		20.0	1	06/19/2021 15:58	WG1691687

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	21.3	T8	20.0	1	06/24/2021 05:17	WG1694216

Sample Narrative:

L1368304-07 WG1694216: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	41.7		1.00	1	06/25/2021 04:04	WG1694369
Sulfate	389		25.0	5	06/25/2021 04:17	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 11:59	WG1692272
Ethane	ND		0.0130	1	06/22/2021 11:59	WG1692272
Ethene	ND		0.0130	1	06/22/2021 11:59	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 11:59	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 03:22	WG1693285
Toluene	ND		0.00100	1	06/23/2021 03:22	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 03:22	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 03:22	WG1693285
(S) Toluene-d8	*109*		*80.0-120*		*06/23/2021 03:22*	WG1693285
(S) 4-Bromofluorobenzene	*115*		*77.0-126*		*06/23/2021 03:22*	WG1693285
(S) 1,2-Dichloroethane-d4	*90.5*		*70.0-130*		*06/23/2021 03:22*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	978		20.0	1	06/19/2021 15:58	WG1691687

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	23.5	T8	20.0	1	06/24/2021 05:25	WG1694216

Sample Narrative:

L1368304-08 WG1694216: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	42.1		1.00	1	06/25/2021 04:30	WG1694369
Sulfate	389		25.0	5	06/25/2021 04:44	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 12:07	WG1692272
Ethane	ND		0.0130	1	06/22/2021 12:07	WG1692272
Ethene	ND		0.0130	1	06/22/2021 12:07	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 12:07	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 03:43	WG1693285
Toluene	ND		0.00100	1	06/23/2021 03:43	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 03:43	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 03:43	WG1693285
(S) Toluene-d8	*92.9*		*80.0-120*		*06/23/2021 03:43*	WG1693285
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*06/23/2021 03:43*	WG1693285
(S) 1,2-Dichloroethane-d4	*100*		*70.0-130*		*06/23/2021 03:43*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	3710		50.0	1	06/19/2021 15:58	WG1691687

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	37.7	T8	20.0	1	06/24/2021 05:33	WG1694216

Sample Narrative:

L1368304-09 WG1694216: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	138		100	100	06/25/2021 04:57	WG1694369
Sulfate	1970		500	100	06/25/2021 04:57	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 12:36	WG1692272
Ethane	ND		0.0130	1	06/22/2021 12:36	WG1692272
Ethene	ND		0.0130	1	06/22/2021 12:36	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 12:36	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 04:03	WG1693285
Toluene	ND		0.00100	1	06/23/2021 04:03	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 04:03	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 04:03	WG1693285
(S) Toluene-d8	*147*	J1	*80.0-120*		*06/23/2021 04:03*	WG1693285
(S) 4-Bromofluorobenzene	*153*	J1	*77.0-126*		*06/23/2021 04:03*	WG1693285
(S) 1,2-Dichloroethane-d4	*91.2*		*70.0-130*		*06/23/2021 04:03*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	569		10.0	1	06/19/2021 15:58	WG1691687

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 05:40	WG1694216

Sample Narrative:

L1368304-10 WG1694216: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	5.35		1.00	1	06/25/2021 05:37	WG1694369
Sulfate	94.6		5.00	1	06/25/2021 05:37	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 12:40	WG1692272
Ethane	ND		0.0130	1	06/22/2021 12:40	WG1692272
Ethene	ND		0.0130	1	06/22/2021 12:40	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 12:40	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 04:24	WG1693285
Toluene	ND		0.00100	1	06/23/2021 04:24	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 04:24	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 04:24	WG1693285
(S) Toluene-d8	*96.2*		*80.0-120*		*06/23/2021 04:24*	WG1693285
(S) 4-Bromofluorobenzene	*101*		*77.0-126*		*06/23/2021 04:24*	WG1693285
(S) 1,2-Dichloroethane-d4	*91.9*		*70.0-130*		*06/23/2021 04:24*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1130		20.0	1	06/19/2021 15:58	WG1691687

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 05:48	WG1694216

Sample Narrative:

L1368304-11 WG1694216: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	32.8		1.00	1	06/25/2021 06:03	WG1694369
Sulfate	527		50.0	10	06/25/2021 06:16	WG1694369

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/22/2021 12:45	WG1692272
Ethane	ND		0.0130	1	06/22/2021 12:45	WG1692272
Ethene	ND		0.0130	1	06/22/2021 12:45	WG1692272
Acetylene	ND		0.0208	1	06/22/2021 12:45	WG1692272

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 04:45	WG1693285
Toluene	ND		0.00100	1	06/23/2021 04:45	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 04:45	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 04:45	WG1693285
(S) Toluene-d8	*96.8*		*80.0-120*		*06/23/2021 04:45*	WG1693285
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*06/23/2021 04:45*	WG1693285
(S) 1,2-Dichloroethane-d4	*93.6*		*70.0-130*		*06/23/2021 04:45*	WG1693285

Method Blank (MB)

(MB) R3670385-1 06/19/21 15:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1366135-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1366135-01 06/19/21 15:58 • (DUP) R3670385-3 06/19/21 15:58

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	852	894	1	4.81		5

L1368304-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1368304-11 06/19/21 15:58 • (DUP) R3670385-4 06/19/21 15:58

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1130	1140	1	0.530		5

Laboratory Control Sample (LCS)

(LCS) R3670385-2 06/19/21 15:58

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8620	98.0	77.4-123	

Method Blank (MB)

(MB) R3670981-1 06/20/21 10:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1366236-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1366236-05 06/20/21 10:00 • (DUP) R3670981-3 06/20/21 10:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	632	616	1	2.56		5

L1368304-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1368304-06 06/20/21 10:00 • (DUP) R3670981-4 06/20/21 10:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1000	990	1	1.01		5

Laboratory Control Sample (LCS)

(LCS) R3670981-2 06/20/21 10:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8670	98.5	77.4-123	

Method Blank (MB)

(MB) R3671435-2 06/24/21 03:10

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Free Carbon Dioxide	U		6.67	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1368078-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1368078-04 06/24/21 03:15 • (DUP) R3671435-4 06/24/21 03:18

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1368181-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1368181-13 06/24/21 04:22 • (DUP) R3671435-7 06/24/21 04:26

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R3671405-2 06/24/21 03:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Free Carbon Dioxide	U		6.67	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1368312-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1368312-02 06/24/21 03:45 • (DUP) R3671405-4 06/24/21 03:53

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	28.9	29.2	1	0.956		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1368338-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368338-01 06/24/21 05:56 • (DUP) R3671405-9 06/24/21 06:03

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R3671919-1 06/24/21 20:38

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Sulfate	U		0.594	5.00

L1366236-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1366236-04 06/24/21 23:13 • (DUP) R3671919-3 06/24/21 23:26

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3.05	3.06	1	0.223		15

L1369428-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1369428-03 06/25/21 06:56 • (DUP) R3671919-6 06/25/21 07:09

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1.21	1.14	1	5.48		15
Sulfate	ND	ND	1	5.03		15

L1366236-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1366236-04 06/25/21 08:02 • (DUP) R3671919-8 06/25/21 08:15

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	186	186	5	0.0206		15

Laboratory Control Sample (LCS)

(LCS) R3671919-2 06/24/21 20:51

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.9	99.7	80.0-120	
Sulfate	40.0	40.6	101	80.0-120	

L1366236-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1366236-05 06/24/21 23:39 • (MS) R3671919-4 06/25/21 00:19 • (MSD) R3671919-5 06/25/21 00:32

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	5.82	58.2	58.0	105	104	1	80.0-120			0.393	15
Sulfate	50.0	17.0	69.1	68.9	104	104	1	80.0-120			0.301	15

Method Blank (MB)

(MB) R3670355-2 06/22/21 11:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130
Acetylene	U		0.00558	0.0208

L1368304-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368304-01 06/22/21 11:35 • (DUP) R3670355-3 06/22/21 12:23

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
Acetylene	ND	ND	1	0.000		20

L1368304-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1368304-11 06/22/21 12:45 • (DUP) R3670355-4 06/22/21 13:20

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
Acetylene	ND	ND	1	0.000		20

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

(LCS) R3670355-1 06/22/21 11:18 • (LCSD) R3670355-5 06/22/21 13:25

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	0.0734	0.0775	108	114	85.0-115			5.43	20
Ethane	0.129	0.132	0.133	102	103	85.0-115			0.755	20
Ethene	0.127	0.131	0.132	103	104	85.0-115			0.760	20
Acetylene	0.208	0.218	0.215	105	103	85.0-115			1.39	20

Method Blank (MB)

(MB) R3672157-2 06/23/21 01:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*98.8*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3672157-1 06/23/21 00:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00547	109	70.0-123	
Ethylbenzene	0.00500	0.00491	98.2	79.0-123	
Toluene	0.00500	0.00502	100	79.0-120	
Xylenes, Total	0.0150	0.0150	100	79.0-123	
(S) Toluene-d8			*98.3*	*80.0-120*	
(S) 4-Bromofluorobenzene			*101*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*101*	*70.0-130*	

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, 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

Qualifier	Description
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	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.

Terracon - Longmont

1831 Lefthand Circle, Suite C
Longmont, CO 80501

Billing Information: **Same as Address**

Pres Chk

Report to: **Michael J. Skridulis**

Email To: **mike.skridulis@terracon.com**

Project Description: City of Longmont Annual GW Quality Monitoring

City/State Collected: Longmont, CO

Please Circle: PT (MT) CT ET

Phone: **303-454-5249**

Client Project # **22217000**

Lab Project #

Collected by (print): Charles A. Covington

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 #

Date Results Needed: STANDARD

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

SDG # 1368304

Table # 1166

Acctnum: **TERRALCO**

Template:

Prelogin:

PM: **Chris Ward**

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX8260 (2) 40ml Amber w/HCl	RSK-175 (2) 40ml Amber w/HCl	CO2 - 125ml HDPE No Pres	Cl, SO4 - 250ml HDPE No Pres	TDS - 250ml HDPE No Pres	Remarks	Sample # (lab only)
PL1-MW01	Grab	GW	-	6/15/21	0800	7	X	X	X	X	X		-01
PL1-MW02	Grab	GW	-	6/15/21	0700	7	X	X	X	X	X		-02
PL1-MW03	Grab	GW	-	6/15/21	0730	7	X	X	X	X	X		-03
CL1-MW01	Grab	GW	-	6/15/21	0930	7	X	X	X	X	X		-04
CL1-MW02	Grab	GW	-	6/15/21	1010	7	X	X	X	X	X		-05
MY1-MW01	Grab	GW	-	6/15/21	1100	7	X	X	X	X	X		-06
MY1-MW02	Grab	GW	-	6/15/21	1130	7	X	X	X	X	X		-07
MY1-MW03	Grab	GW	-	6/15/21	1200	7	X	X	X	X	X		-08

* 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 # 5117 4430 7240

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
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 3.8-12=3.6 °C Bottles Received:

Date: 6/18/21 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Terracon - Longmont

1831 Lefthand Circle, Suite C
Longmont, CO 80501

Billing Information: **Same as Address**

Pres Chk

Report to: **Michael J. Skridulis**

Email To: **mike.skridulis@terracon.com**

Project Description: City of Longmont Annual GW Quality Monitoring

City/State Collected: Longmont, CO

Please Circle: PT (MT) CT ET

Phone: **303-454-5249**

Client Project # **22217000**

Lab Project #

Collected by (print): Charles A. Covington

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 #

Date Results Needed: STANDARD

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX8260 (2) 40ml Amber w/HCl	RSK-175 (2) 40ml Amber w/HCl	CO2 - 125ml HDPE No Pres	Cl, SO4 - 250ml HDPE No Pres	TDS - 250ml HDPE No Pres					Remarks	Sample # (lab only)
MR2-MW01	Grab	GW	-	6/16/21	0720	7	X	X	X	X	X						-09
MR2-MW02	Grab	GW	-	6/16/21	0810	7	X	X	X	X	X						-10
MR2-MW03	Grab	GW	-	6/16/21	0850	7	X	X	X	X	X						-11

Chain of Custody Page 2 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

SDG # 1368304

Table #

Acctnum: **TERRALCO**

Template:

Prelogin:

PM: **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 X FedEx __ Courier __ ___

Tracking # 5117 4430 2240

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
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	If preservation required by Login: Date/Time
	6/17/21	1700	FEDEX	2	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.8-1.2=3.6 °C Bottles Received: 7	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/18/21 Time: 900	Hold: Condition: NCF / OK

ANALYTICAL REPORT

June 28, 2021

Terracon Consultants, Inc - Longmont, CO

Sample Delivery Group:	L1368338
Samples Received:	06/18/2021
Project Number:	22217000
Description:	City of Longmont Annual GW Quality Monitoring

Report To: Michael Skridulis
1242 Bramwood Place
Longmont, CO 80501

Entire Report Reviewed By: Chris Ward

Chris Ward
Project Manager

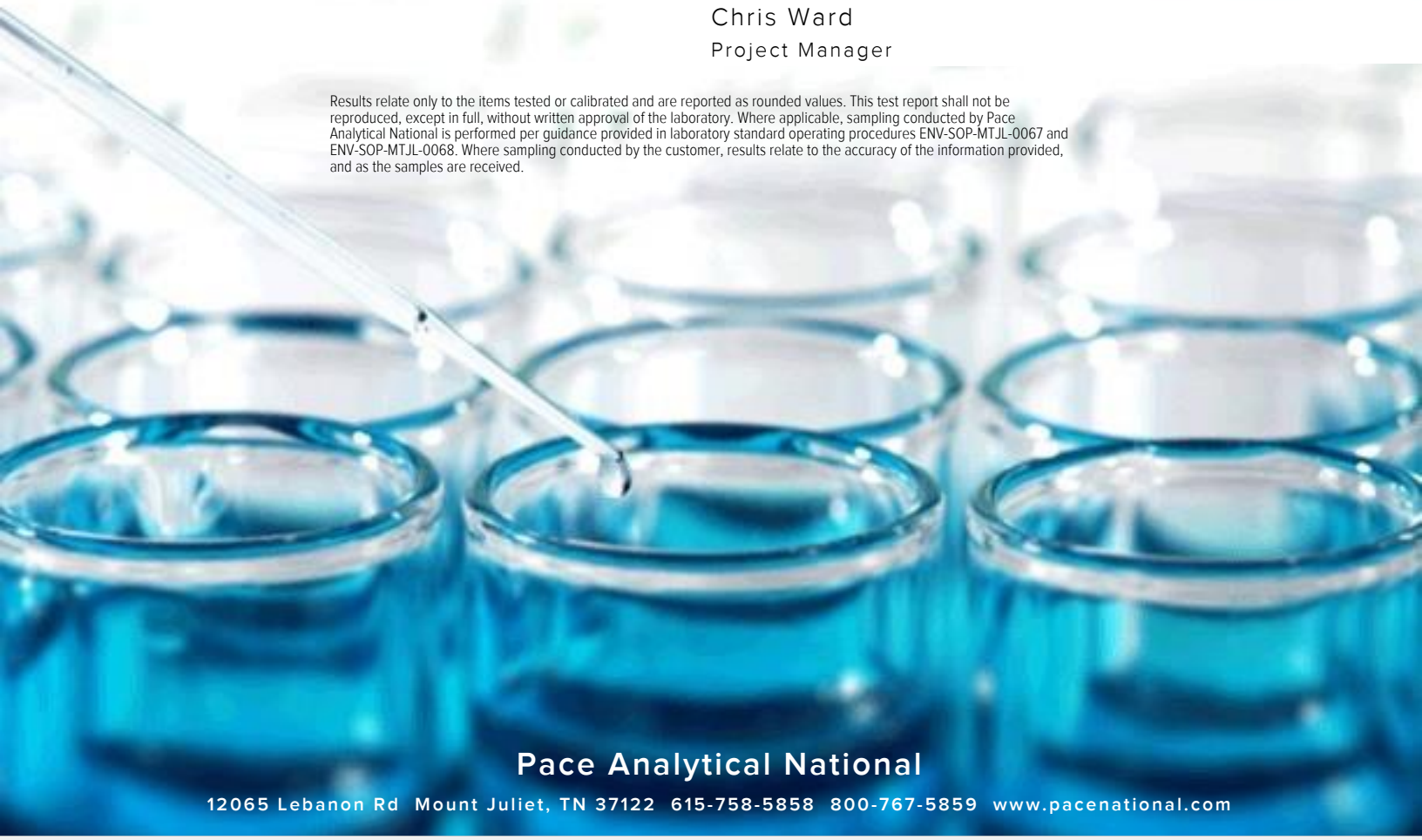


TABLE OF CONTENTS

TB7-MW01 L1368338-01 GW

Collected by: Charles A. Covington | Collected date/time: 06/16/21 11:40 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1693630	1	06/23/21 11:51	06/23/21 14:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 05:56	06/24/21 05:56	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	1	06/24/21 22:51	06/24/21 22:51	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	10	06/24/21 23:04	06/24/21 23:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:03	06/21/21 14:03	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 05:05	06/23/21 05:05	ACG	Mt. Juliet, TN

TB7-MW02 L1368338-02 GW

Collected by: Charles A. Covington | Collected date/time: 06/16/21 10:50 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1693630	1	06/23/21 11:51	06/23/21 14:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 06:11	06/24/21 06:11	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	1	06/24/21 23:17	06/24/21 23:17	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	10	06/24/21 23:30	06/24/21 23:30	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:06	06/21/21 14:06	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 05:26	06/23/21 05:26	ACG	Mt. Juliet, TN

TB7-MW03 L1368338-03 GW

Collected by: Charles A. Covington | Collected date/time: 06/16/21 09:50 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1693633	1	06/23/21 14:34	06/23/21 15:47	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 04:38	06/24/21 04:38	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	1	06/24/21 23:43	06/24/21 23:43	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	5	06/25/21 09:25	06/25/21 09:25	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:10	06/21/21 14:10	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 05:46	06/23/21 05:46	ACG	Mt. Juliet, TN

TB1-MW02 L1368338-04 GW

Collected by: Charles A. Covington | Collected date/time: 06/16/21 13:50 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1693630	1	06/23/21 11:51	06/23/21 14:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 06:27	06/24/21 06:27	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	100	06/25/21 09:38	06/25/21 09:38	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:14	06/21/21 14:14	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 06:07	06/23/21 06:07	ACG	Mt. Juliet, TN

TB1-MW03R L1368338-05 GW

Collected by: Charles A. Covington | Collected date/time: 06/16/21 14:30 | Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1693630	1	06/23/21 11:51	06/23/21 14:27	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 06:35	06/24/21 06:35	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	100	06/25/21 09:51	06/25/21 09:51	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:19	06/21/21 14:19	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 06:27	06/23/21 06:27	ACG	Mt. Juliet, TN

E6T-MW01 L1368338-06 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/17/21 08:10	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694437	1	06/24/21 12:20	06/24/21 14:08	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694216	1	06/24/21 06:42	06/24/21 06:42	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	1	06/25/21 01:16	06/25/21 01:16	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	20	06/25/21 10:04	06/25/21 10:04	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:22	06/21/21 14:22	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 06:47	06/23/21 06:47	ACG	Mt. Juliet, TN

E6T-MW02 L1368338-07 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/17/21 07:30	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694437	1	06/24/21 12:20	06/24/21 14:08	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694227	1	06/24/21 13:35	06/24/21 13:35	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	1	06/25/21 01:42	06/25/21 01:42	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	100	06/25/21 10:17	06/25/21 10:17	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:26	06/21/21 14:26	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 07:07	06/23/21 07:07	ACG	Mt. Juliet, TN

E6T-MW03 L1368338-08 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/17/21 07:00	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694437	1	06/24/21 12:20	06/24/21 14:08	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694227	1	06/24/21 13:40	06/24/21 13:40	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	10	06/25/21 02:22	06/25/21 02:22	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	100	06/25/21 10:29	06/25/21 10:29	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:30	06/21/21 14:30	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 07:28	06/23/21 07:28	ACG	Mt. Juliet, TN

E6W-MW02 L1368338-09 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/17/21 11:20	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694437	1	06/24/21 12:20	06/24/21 14:08	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694227	1	06/24/21 13:44	06/24/21 13:44	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	1	06/25/21 03:02	06/25/21 03:02	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	50	06/25/21 10:43	06/25/21 10:43	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:39	06/21/21 14:39	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1693285	1	06/23/21 07:48	06/23/21 07:48	ACG	Mt. Juliet, TN

E6W-MW03 L1368338-10 GW

Collected by	Collected date/time	Received date/time
Charles A. Covington	06/17/21 10:30	06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694437	1	06/24/21 12:20	06/24/21 14:08	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694227	1	06/24/21 13:48	06/24/21 13:48	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	10	06/25/21 03:28	06/25/21 03:28	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	100	06/25/21 10:56	06/25/21 10:56	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:46	06/21/21 14:46	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1694138	1	06/24/21 00:43	06/24/21 00:43	JCP	Mt. Juliet, TN

DM1-MW01 L1368338-11 GW

Collected by: Charles A. Covington
Collected date/time: 06/17/21 11:50
Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694437	1	06/24/21 12:20	06/24/21 14:08	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694227	1	06/24/21 13:53	06/24/21 13:53	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	5	06/25/21 11:09	06/25/21 11:09	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 14:50	06/21/21 14:50	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1694138	1	06/24/21 01:03	06/24/21 01:03	JCP	Mt. Juliet, TN

DM1-MW02 L1368338-12 GW

Collected by: Charles A. Covington
Collected date/time: 06/17/21 12:30
Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694437	1	06/24/21 12:20	06/24/21 14:08	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694227	1	06/24/21 13:57	06/24/21 13:57	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	5	06/25/21 12:00	06/25/21 12:00	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 15:17	06/21/21 15:17	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1694138	1	06/24/21 01:24	06/24/21 01:24	JCP	Mt. Juliet, TN

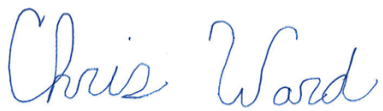
DM1-MW03 L1368338-13 GW

Collected by: Charles A. Covington
Collected date/time: 06/17/21 13:20
Received date/time: 06/18/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1694437	1	06/24/21 12:20	06/24/21 14:08	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1694227	1	06/24/21 14:07	06/24/21 14:07	AMH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1694370	5	06/25/21 12:13	06/25/21 12:13	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1692271	1	06/21/21 15:21	06/21/21 15:21	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1694138	1	06/24/21 01:44	06/24/21 01:44	JCP	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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1050		20.0	1	06/23/2021 14:27	WG1693630

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 05:56	WG1694216

Sample Narrative:

L1368338-01 WG1694216: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	44.0		1.00	1	06/24/2021 22:51	WG1694370
Sulfate	431		50.0	10	06/24/2021 23:04	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:03	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:03	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:03	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:03	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 05:05	WG1693285
Toluene	ND		0.00100	1	06/23/2021 05:05	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 05:05	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 05:05	WG1693285
(S) Toluene-d8	*96.4*		*80.0-120*		*06/23/2021 05:05*	WG1693285
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*06/23/2021 05:05*	WG1693285
(S) 1,2-Dichloroethane-d4	*91.4*		*70.0-130*		*06/23/2021 05:05*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1060		20.0	1	06/23/2021 14:27	WG1693630

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 06:11	WG1694216

Sample Narrative:

L1368338-02 WG1694216: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	47.2		1.00	1	06/24/2021 23:17	WG1694370
Sulfate	442		50.0	10	06/24/2021 23:30	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:06	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:06	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:06	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:06	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 05:26	WG1693285
Toluene	ND		0.00100	1	06/23/2021 05:26	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 05:26	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 05:26	WG1693285
(S) Toluene-d8	*94.0*		*80.0-120*		*06/23/2021 05:26*	WG1693285
(S) 4-Bromofluorobenzene	*99.8*		*77.0-126*		*06/23/2021 05:26*	WG1693285
(S) 1,2-Dichloroethane-d4	*92.0*		*70.0-130*		*06/23/2021 05:26*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1050	J3	20.0	1	06/23/2021 15:47	WG1693633

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 04:38	WG1694216

Sample Narrative:

L1368338-03 WG1694216: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	49.5		1.00	1	06/24/2021 23:43	WG1694370
Sulfate	437		25.0	5	06/25/2021 09:25	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:10	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:10	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:10	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:10	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 05:46	WG1693285
Toluene	ND		0.00100	1	06/23/2021 05:46	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 05:46	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 05:46	WG1693285
(S) Toluene-d8	*94.0*		*80.0-120*		*06/23/2021 05:46*	WG1693285
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*06/23/2021 05:46*	WG1693285
(S) 1,2-Dichloroethane-d4	*92.4*		*70.0-130*		*06/23/2021 05:46*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	4900		100	1	06/23/2021 14:27	WG1693630

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	39.7	T8	20.0	1	06/24/2021 06:27	WG1694216

Sample Narrative:

L1368338-04 WG1694216: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	400		100	100	06/25/2021 09:38	WG1694370
Sulfate	2620		500	100	06/25/2021 09:38	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:14	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:14	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:14	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:14	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 06:07	WG1693285
Toluene	ND		0.00100	1	06/23/2021 06:07	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 06:07	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 06:07	WG1693285
(S) Toluene-d8	*95.8*		*80.0-120*		*06/23/2021 06:07*	WG1693285
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*06/23/2021 06:07*	WG1693285
(S) 1,2-Dichloroethane-d4	*76.0*		*70.0-130*		*06/23/2021 06:07*	WG1693285

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	8830		100	1	06/23/2021 14:27	WG1693630

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	33.3	T8	20.0	1	06/24/2021 06:35	WG1694216

Sample Narrative:

L1368338-05 WG1694216: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	181		100	100	06/25/2021 09:51	WG1694370
Sulfate	5480		500	100	06/25/2021 09:51	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:19	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:19	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:19	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:19	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 06:27	WG1693285
Toluene	ND		0.00100	1	06/23/2021 06:27	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 06:27	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 06:27	WG1693285
(S) Toluene-d8	*95.0*		*80.0-120*		*06/23/2021 06:27*	WG1693285
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*06/23/2021 06:27*	WG1693285
(S) 1,2-Dichloroethane-d4	*92.8*		*70.0-130*		*06/23/2021 06:27*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	2460		50.0	1	06/24/2021 14:08	WG1694437

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 06:42	WG1694216

Sample Narrative:

L1368338-06 WG1694216: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	82.6		1.00	1	06/25/2021 01:16	WG1694370
Sulfate	1480		100	20	06/25/2021 10:04	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:22	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:22	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:22	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:22	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 06:47	WG1693285
Toluene	ND		0.00100	1	06/23/2021 06:47	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 06:47	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 06:47	WG1693285
(S) Toluene-d8	*65.2*	J2	*80.0-120*		*06/23/2021 06:47*	WG1693285
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*06/23/2021 06:47*	WG1693285
(S) 1,2-Dichloroethane-d4	*103*		*70.0-130*		*06/23/2021 06:47*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	3830		50.0	1	06/24/2021 14:08	WG1694437

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 13:35	WG1694227

Sample Narrative:

L1368338-07 WG1694227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	83.3		1.00	1	06/25/2021 01:42	WG1694370
Sulfate	2540		500	100	06/25/2021 10:17	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:26	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:26	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:26	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:26	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 07:07	WG1693285
Toluene	ND		0.00100	1	06/23/2021 07:07	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 07:07	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 07:07	WG1693285
(S) Toluene-d8	*94.3*		*80.0-120*		*06/23/2021 07:07*	WG1693285
(S) 4-Bromofluorobenzene	*99.4*		*77.0-126*		*06/23/2021 07:07*	WG1693285
(S) 1,2-Dichloroethane-d4	*92.6*		*70.0-130*		*06/23/2021 07:07*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	7100		100	1	06/24/2021 14:08	WG1694437

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 13:40	WG1694227

Sample Narrative:

L1368338-08 WG1694227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	126		10.0	10	06/25/2021 02:22	WG1694370
Sulfate	4890		500	100	06/25/2021 10:29	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:30	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:30	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:30	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:30	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 07:28	WG1693285
Toluene	ND		0.00100	1	06/23/2021 07:28	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 07:28	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 07:28	WG1693285
(S) Toluene-d8	*94.4*		*80.0-120*		*06/23/2021 07:28*	WG1693285
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*06/23/2021 07:28*	WG1693285
(S) 1,2-Dichloroethane-d4	*91.8*		*70.0-130*		*06/23/2021 07:28*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	2070		50.0	1	06/24/2021 14:08	WG1694437

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	20.9	B T8	20.0	1	06/24/2021 13:44	WG1694227

Sample Narrative:

L1368338-09 WG1694227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	51.9		1.00	1	06/25/2021 03:02	WG1694370
Sulfate	3610		250	50	06/25/2021 10:43	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:39	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:39	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:39	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:39	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/23/2021 07:48	WG1693285
Toluene	ND		0.00100	1	06/23/2021 07:48	WG1693285
Ethylbenzene	ND		0.00100	1	06/23/2021 07:48	WG1693285
Total Xylenes	ND		0.00300	1	06/23/2021 07:48	WG1693285
(S) Toluene-d8	*118*		*80.0-120*		*06/23/2021 07:48*	WG1693285
(S) 4-Bromofluorobenzene	*127*	J1	*77.0-126*		*06/23/2021 07:48*	WG1693285
(S) 1,2-Dichloroethane-d4	*91.3*		*70.0-130*		*06/23/2021 07:48*	WG1693285

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1900		25.0	1	06/24/2021 14:08	WG1694437

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	21.3	B T8	20.0	1	06/24/2021 13:48	WG1694227

Sample Narrative:

L1368338-10 WG1694227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	36.8		10.0	10	06/25/2021 03:28	WG1694370
Sulfate	1020		500	100	06/25/2021 10:56	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 14:46	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:46	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:46	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:46	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/24/2021 00:43	WG1694138
Toluene	ND		0.00100	1	06/24/2021 00:43	WG1694138
Ethylbenzene	ND		0.00100	1	06/24/2021 00:43	WG1694138
Total Xylenes	ND		0.00300	1	06/24/2021 00:43	WG1694138
(S) Toluene-d8	*97.9*		*80.0-120*		*06/24/2021 00:43*	WG1694138
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*06/24/2021 00:43*	WG1694138
(S) 1,2-Dichloroethane-d4	*85.1*		*70.0-130*		*06/24/2021 00:43*	WG1694138

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	958		20.0	1	06/24/2021 14:08	WG1694437

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	21.6	B T8	20.0	1	06/24/2021 13:53	WG1694227

Sample Narrative:

L1368338-11 WG1694227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	100		5.00	5	06/25/2021 11:09	WG1694370
Sulfate	221		25.0	5	06/25/2021 11:09	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	0.0149		0.0100	1	06/21/2021 14:50	WG1692271
Ethane	ND		0.0130	1	06/21/2021 14:50	WG1692271
Ethene	ND		0.0130	1	06/21/2021 14:50	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 14:50	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/24/2021 01:03	WG1694138
Toluene	ND		0.00100	1	06/24/2021 01:03	WG1694138
Ethylbenzene	ND		0.00100	1	06/24/2021 01:03	WG1694138
Total Xylenes	ND		0.00300	1	06/24/2021 01:03	WG1694138
(S) Toluene-d8	*94.4*		*80.0-120*		*06/24/2021 01:03*	WG1694138
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*06/24/2021 01:03*	WG1694138
(S) 1,2-Dichloroethane-d4	*85.9*		*70.0-130*		*06/24/2021 01:03*	WG1694138

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1080		20.0	1	06/24/2021 14:08	WG1694437

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	28.2	B T8	20.0	1	06/24/2021 13:57	WG1694227

Sample Narrative:

L1368338-12 WG1694227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	137		5.00	5	06/25/2021 12:00	WG1694370
Sulfate	333		25.0	5	06/25/2021 12:00	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 15:17	WG1692271
Ethane	ND		0.0130	1	06/21/2021 15:17	WG1692271
Ethene	ND		0.0130	1	06/21/2021 15:17	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 15:17	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/24/2021 01:24	WG1694138
Toluene	ND		0.00100	1	06/24/2021 01:24	WG1694138
Ethylbenzene	ND		0.00100	1	06/24/2021 01:24	WG1694138
Total Xylenes	ND		0.00300	1	06/24/2021 01:24	WG1694138
(S) Toluene-d8	*96.0*		*80.0-120*		*06/24/2021 01:24*	WG1694138
(S) 4-Bromofluorobenzene	*102*		*77.0-126*		*06/24/2021 01:24*	WG1694138
(S) 1,2-Dichloroethane-d4	*97.7*		*70.0-130*		*06/24/2021 01:24*	WG1694138

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	996		20.0	1	06/24/2021 14:08	WG1694437

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/24/2021 14:07	WG1694227

Sample Narrative:

L1368338-13 WG1694227: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	121		5.00	5	06/25/2021 12:13	WG1694370
Sulfate	367		25.0	5	06/25/2021 12:13	WG1694370

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	06/21/2021 15:21	WG1692271
Ethane	ND		0.0130	1	06/21/2021 15:21	WG1692271
Ethene	ND		0.0130	1	06/21/2021 15:21	WG1692271
Acetylene	ND		0.0208	1	06/21/2021 15:21	WG1692271

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/24/2021 01:44	WG1694138
Toluene	ND		0.00100	1	06/24/2021 01:44	WG1694138
Ethylbenzene	ND		0.00100	1	06/24/2021 01:44	WG1694138
Total Xylenes	ND		0.00300	1	06/24/2021 01:44	WG1694138
(S) Toluene-d8	*70.0*	J2	*80.0-120*		*06/24/2021 01:44*	WG1694138
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*06/24/2021 01:44*	WG1694138
(S) 1,2-Dichloroethane-d4	*96.8*		*70.0-130*		*06/24/2021 01:44*	WG1694138

Method Blank (MB)

(MB) R3671695-1 06/23/21 14:27

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1368338-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1368338-02 06/23/21 14:27 • (DUP) R3671695-3 06/23/21 14:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1060	1070	1	0.937		5

L1368404-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368404-01 06/23/21 14:27 • (DUP) R3671695-4 06/23/21 14:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1370	1420	1	3.58		5

Laboratory Control Sample (LCS)

(LCS) R3671695-2 06/23/21 14:27

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8860	101	77.4-123	

Method Blank (MB)

(MB) R3672575-1 06/23/21 15:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1367309-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1367309-01 06/23/21 15:47 • (DUP) R3672575-3 06/23/21 15:47

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	442	446	1	0.901		5

L1368338-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1368338-03 06/23/21 15:47 • (DUP) R3672575-4 06/23/21 15:47

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1050	1140	1	8.23	J3	5

Laboratory Control Sample (LCS)

(LCS) R3672575-2 06/23/21 15:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8700	98.9	77.4-123	

Method Blank (MB)

(MB) R3672814-1 06/24/21 14:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1368123-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368123-01 06/24/21 14:08 • (DUP) R3672814-3 06/24/21 14:08

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1120	1150	1	2.47		5

L1368608-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1368608-11 06/24/21 14:08 • (DUP) R3672814-4 06/24/21 14:08

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	3340	3340	1	0.000		5

Laboratory Control Sample (LCS)

(LCS) R3672814-2 06/24/21 14:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8690	98.8	77.4-123	

Method Blank (MB)

(MB) R3671405-2 06/24/21 03:25

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Free Carbon Dioxide	U		6.67	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1368312-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1368312-02 06/24/21 03:45 • (DUP) R3671405-4 06/24/21 03:53

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	28.9	29.2	1	0.956		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1368338-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368338-01 06/24/21 05:56 • (DUP) R3671405-9 06/24/21 06:03

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R3671772-2 06/24/21 13:13

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Free Carbon Dioxide	11.1	J	6.67	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1368349-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368349-01 06/24/21 13:21 • (DUP) R3671772-4 06/24/21 13:26

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1368547-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1368547-02 06/24/21 15:08 • (DUP) R3671772-7 06/24/21 15:13

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	ND	ND	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R3672102-1 06/24/21 19:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Sulfate	U		0.594	5.00

L1366446-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1366446-01 06/24/21 20:15 • (DUP) R3672102-3 06/24/21 20:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2.60	2.64	1	1.75		15
Sulfate	9.33	9.31	1	0.176		15

L1368338-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1368338-11 06/25/21 11:09 • (DUP) R3672102-8 06/25/21 11:21

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	100	97.7	5	2.74		15
Sulfate	221	215	5	2.98		15

Laboratory Control Sample (LCS)

(LCS) R3672102-2 06/24/21 19:34

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.8	102	80.0-120	
Sulfate	40.0	41.5	104	80.0-120	

L1366446-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1366446-02 06/24/21 20:42 • (MS) R3672102-4 06/24/21 20:55 • (MSD) R3672102-5 06/24/21 21:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	2.59	100	100	195	195	1	80.0-120	E J5	E J5	0.0648	15
Sulfate	50.0	9.32	107	107	194	194	1	80.0-120	E J5	E J5	0.00572	15

L1368338-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1368338-03 06/24/21 23:43 • (MS) R3672102-6 06/24/21 23:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	49.5	97.4	95.8	1	80.0-120	
Sulfate	50.0	442	478	72.3	1	80.0-120	E V

Method Blank (MB)

(MB) R3669953-2 06/21/21 13:55

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130
Acetylene	U		0.00558	0.0208

L1368338-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368338-01 06/21/21 14:03 • (DUP) R3669953-3 06/21/21 14:43

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
Acetylene	ND	ND	1	0.000		20

L1368537-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1368537-03 06/21/21 15:32 • (DUP) R3669953-4 06/21/21 15:54

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	0.864	0.899	1	3.97		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
Acetylene	ND	ND	1	0.000		20

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

(LCS) R3669953-1 06/21/21 13:35 • (LCSD) R3669953-7 06/21/21 16:16

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	0.0721	0.0678	106	100	85.0-115			6.15	20
Ethane	0.129	0.125	0.121	96.9	93.8	85.0-115			3.25	20
Ethene	0.127	0.126	0.121	99.2	95.3	85.0-115			4.05	20
Acetylene	0.208	0.208	0.192	100	92.3	85.0-115			8.00	20

L1368537-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1368537-02 06/21/21 15:28 • (MS) R3669953-5 06/21/21 16:02 • (MSD) R3669953-6 06/21/21 16:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	ND	0.126	0.110	186	162	1	85.0-115	J5	J5	13.6	20
Ethane	0.129	ND	0.230	0.203	178	157	1	85.0-115	J5	J5	12.5	20
Ethene	0.127	ND	0.229	0.203	180	160	1	85.0-115	J5	J5	12.0	20
Acetylene	0.208	ND	0.338	0.307	163	148	1	85.0-115	J5	J5	9.61	20

Method Blank (MB)

(MB) R3672157-2 06/23/21 01:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*98.8*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3672157-1 06/23/21 00:19

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00547	109	70.0-123	
Ethylbenzene	0.00500	0.00491	98.2	79.0-123	
Toluene	0.00500	0.00502	100	79.0-120	
Xylenes, Total	0.0150	0.0150	100	79.0-123	
(S) Toluene-d8			*98.3*	*80.0-120*	
(S) 4-Bromofluorobenzene			*101*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*101*	*70.0-130*	

Method Blank (MB)

(MB) R3671698-2 06/23/21 19:40

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*96.2*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*84.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3671698-1 06/23/21 18:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00550	110	70.0-123	
Ethylbenzene	0.00500	0.00505	101	79.0-123	
Toluene	0.00500	0.00509	102	79.0-120	
Xylenes, Total	0.0150	0.0156	104	79.0-123	
(S) Toluene-d8			*97.4*	*80.0-120*	
(S) 4-Bromofluorobenzene			*109*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*84.3*	*70.0-130*	

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, 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
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Terracon - Longmont

1831 Lefthand Circle, Suite C
Longmont, CO 80501

Billing Information: **Same as Address**

Pres Chk

Report to: **Michael J. Skridulis**

Email To: **mike.skridulis@terracon.com**

Project Description: City of Longmont Annual GW Quality Monitoring

City/State Collected: Longmont, CO

Please Circle: PT (MT) CT ET

Phone: **303-454-5249**

Client Project # **22217000**

Lab Project #

Collected by (print): Charles A. Covington

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 #

Date Results Needed: STANDARD

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

SDG # L1368338

Table H091

Acctnum: TERRALCO

Template:

Prelogin:

PM: Chris Ward

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX8260 (2) 40ml Amber w/HCl	RSK-175 (2) 40ml Amber w/HCl	CO2 - 125ml HDPE No Pres	Cl, SO4 - 250ml HDPE No Pres	TDS - 250ml HDPE No Pres	Remarks	Sample # (lab only)
TB7 - MW01	Grab	GW	-	6/16/21	1140	7	X	X	X	X	X		-01
TB7 - MW02	Grab	GW	-	6/16/21	1050	7	X	X	X	X	X		-02
TB7 - MW03	Grab	GW	-	6/16/21	0950	7	X	X	X	X	X		-03
TB1 - MW02	Grab	GW	-	6/16/21	1350	7	X	X	X	X	X		-04
TB1 - MW03R	Grab	GW	-	6/16/21	1430	7	X	X	X	X	X		-05
E6T - MW01	Grab	GW	-	6/17/21	0810	7	X	X	X	X	X		-06
E6T - MW02	Grab	GW	-	6/17/21	0730	7	X	X	X	X	X		-07
E6T - MW03	Grab	GW	-	6/17/21	0700	7	X	X	X	X	X		-08

* 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 # 5117 4430 2217

Sample Receipt Checklist

COC Seal Present/Intact:	NP	Y N
COC Signed/Accurate:		X N
Bottles arrive intact:		X N
Correct bottles used:		X N
Sufficient volume sent:		Y N
If Applicable		
VOA Zero Headspace:		X N
Preservation Correct/Checked:		Y N
RAD Screen <0.5 mR/hr:		X N

	Date:	Time:
Relinquished by : (Signature)		
Relinquished by : (Signature)		
Relinquished by : (Signature)		

Received by: (Signature)

Received by: (Signature)

Received for lab by: (Signature) Jasmine Angus

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: 2.8-2.2=.6 °C Bottles Received: 91

Date: 6/18/21 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF (OK)

Terracon - Longmont

1831 Lefthand Circle, Suite C
Longmont, CO 80501

Billing Information: **Same as Address**

Pres Chk

Report to: **Michael J. Skridulis**

Email To: **mike.skridulis@terracon.com**

Project Description: City of Longmont Annual GW Quality Monitoring

City/State Collected: Longmont, CO

Please Circle: PT (MT) CT ET

Phone: **303-454-5249**

Client Project # **22217000**

Lab Project #

Collected by (print): Charles A. Covington

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 #

Date Results Needed: STANDARD

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX8260 (2) 40ml Amber w/HCl	RSK-175 (2) 40ml Amber w/HCl	CO2 - 125ml HDPE No Pres	Cl, SO4 - 250ml HDPE No Pres	TDS - 250ml HDPE No Pres	Remarks	Sample # (lab only)
E6W-MW02	Grab	GW	-	6/17/21	1120	7	X	X	X	X	X		-09
E6W-MW03	Grab	GW	-	6/17/21	1030	7	X	X	X	X	X		-10
DM1-MW01	Grab	GW	-	6/17/21	1150	7	X	X	X	X	X		-11
DM1-MW02	Grab	GW	-	6/17/21	1230	7	X	X	X	X	X		-12
DM1-MW03	Grab	GW	-	6/17/21	1320	7	X	X	X	X	X		-13

Chain of Custody Page 2 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

SDG # L1368338

Table #

Acctnum: **TERRALCO**

Template:

Prelogin:

PM: **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 X FedEx ___ Courier ___

Tracking # 5117 4430 2217

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: 2.8-2.2=0.6°C Bottles Received: 9

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	6/17/21	1700	FEDEX
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature) Jasmine Fuqua

Date: 6/18/21 Time: 900

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
RAD Screen <0.5 mR/hr:	Y N

ANALYTICAL REPORT

July 12, 2021

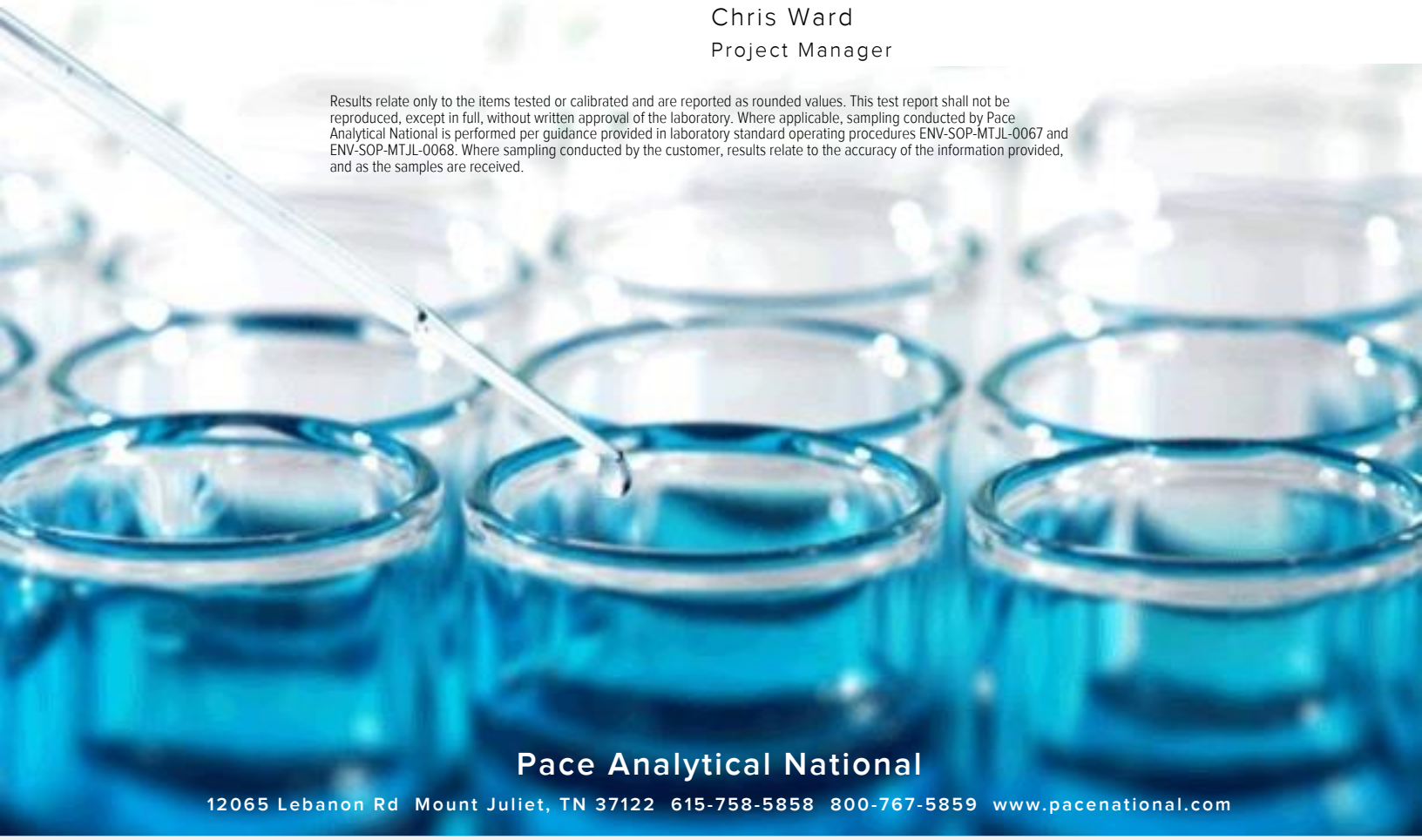
Terracon Consultants, Inc - Longmont, CO

Sample Delivery Group:	L1371217
Samples Received:	06/25/2021
Project Number:	22217000
Description:	City of Longmont Annual GW Quality Monitoring

Report To: Michael Skridulis
1242 Bramwood Place
Longmont, CO 80501

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

GM1-MW01 L1371217-01 GW

Collected by: Charles A Covington | Collected date/time: 06/21/21 13:10 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1695666	1	06/26/21 10:12	06/26/21 11:24	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 07:15	06/29/21 07:15	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/26/21 18:55	06/26/21 18:55	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 11:09	07/02/21 11:09	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	06/30/21 20:19	06/30/21 20:19	JCP	Mt. Juliet, TN

GM1-MW02 L1371217-02 GW

Collected by: Charles A Covington | Collected date/time: 06/21/21 13:45 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1695666	1	06/26/21 10:12	06/26/21 11:24	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 07:42	06/29/21 07:42	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/26/21 19:13	06/26/21 19:13	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 11:11	07/02/21 11:11	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	06/30/21 22:11	06/30/21 22:11	JCP	Mt. Juliet, TN

GM1-MW03 L1371217-03 GW

Collected by: Charles A Covington | Collected date/time: 06/21/21 14:20 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1695666	1	06/26/21 10:12	06/26/21 11:24	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 07:47	06/29/21 07:47	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	20	06/26/21 19:32	06/26/21 19:32	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 11:26	07/02/21 11:26	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	06/30/21 22:31	06/30/21 22:31	JCP	Mt. Juliet, TN

SGU-MW01 L1371217-04 GW

Collected by: Charles A Covington | Collected date/time: 06/21/21 15:00 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1695666	1	06/26/21 10:12	06/26/21 11:24	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 07:56	06/29/21 07:56	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/26/21 19:50	06/26/21 19:50	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 11:35	07/02/21 11:35	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	06/30/21 22:51	06/30/21 22:51	JCP	Mt. Juliet, TN

SGU-MW02 L1371217-05 GW

Collected by: Charles A Covington | Collected date/time: 06/21/21 16:30 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1695666	1	06/26/21 10:12	06/26/21 11:24	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 08:01	06/29/21 08:01	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/26/21 20:09	06/26/21 20:09	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 12:04	07/02/21 12:04	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	06/30/21 23:11	06/30/21 23:11	JCP	Mt. Juliet, TN

SGU-MW03 L1371217-06 GW

Collected by: Charles A Covington | Collected date/time: 06/21/21 15:30 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1695666	1	06/26/21 10:12	06/26/21 11:24	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 08:05	06/29/21 08:05	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/26/21 20:27	06/26/21 20:27	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 13:09	07/02/21 13:09	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	06/30/21 23:31	06/30/21 23:31	JCP	Mt. Juliet, TN

SGU-MW06 L1371217-07 GW

Collected by: Charles A Covington | Collected date/time: 06/21/21 16:00 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1695666	1	06/26/21 10:12	06/26/21 11:24	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 08:10	06/29/21 08:10	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	5	06/26/21 20:45	06/26/21 20:45	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 13:14	07/02/21 13:14	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	06/30/21 23:51	06/30/21 23:51	JCP	Mt. Juliet, TN

SGU-MW07 L1371217-08 GW

Collected by: Charles A Covington | Collected date/time: 06/21/21 17:00 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1695666	1	06/26/21 10:12	06/26/21 11:24	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 08:18	06/29/21 08:18	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	1	06/26/21 21:41	06/26/21 21:41	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 13:20	07/02/21 13:20	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	07/01/21 00:11	07/01/21 00:11	JCP	Mt. Juliet, TN

E6W-MW01 L1371217-09 GW

Collected by: Charles A Covington | Collected date/time: 06/23/21 11:45 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1698222	1	06/30/21 20:07	06/30/21 20:54	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 08:22	06/29/21 08:22	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/26/21 22:39	06/26/21 22:39	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 13:24	07/02/21 13:24	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	07/01/21 00:30	07/01/21 00:30	JCP	Mt. Juliet, TN

LM8-MW01 L1371217-10 GW

Collected by: Charles A Covington | Collected date/time: 06/23/21 13:10 | Received date/time: 06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1697728	1	06/30/21 14:49	06/30/21 15:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 08:37	06/29/21 08:37	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/26/21 22:57	06/26/21 22:57	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	100	06/26/21 23:16	06/26/21 23:16	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1698401	1	07/02/21 13:28	07/02/21 13:28	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	07/01/21 00:50	07/01/21 00:50	JCP	Mt. Juliet, TN

LM8-MW02 L1371217-11 GW

Collected by	Collected date/time	Received date/time
Charles A Covington	06/23/21 12:30	06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1697725	1	06/30/21 13:48	06/30/21 14:45	KAB	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 08:42	06/29/21 08:42	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/26/21 23:34	06/26/21 23:34	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	100	06/26/21 23:52	06/26/21 23:52	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1699032	1	07/02/21 14:23	07/02/21 14:23	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	07/01/21 01:10	07/01/21 01:10	JCP	Mt. Juliet, TN

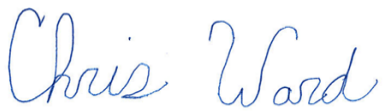
LM8-MW03 L1371217-12 GW

Collected by	Collected date/time	Received date/time
Charles A Covington	06/23/21 13:50	06/25/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1697733	1	06/30/21 15:35	06/30/21 16:28	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1696753	1	06/29/21 08:44	06/29/21 08:44	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	10	06/27/21 00:11	06/27/21 00:11	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1695778	100	06/27/21 00:29	06/27/21 00:29	ST	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1699032	1	07/02/21 14:26	07/02/21 14:26	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1697333	1	07/01/21 01:30	07/01/21 01:30	JCP	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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	796		13.3	1	06/26/2021 11:24	WG1695666

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	23.5	B T8	20.0	1	06/29/2021 07:15	WG1696753

Sample Narrative:

L1371217-01 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	19.0	B	10.0	10	06/26/2021 18:55	WG1695778
Sulfate	307		50.0	10	06/26/2021 18:55	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 11:09	WG1698401
Ethane	ND		0.0130	1	07/02/2021 11:09	WG1698401
Ethene	ND		0.0130	1	07/02/2021 11:09	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 11:09	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/30/2021 20:19	WG1697333
Toluene	ND		0.00100	1	06/30/2021 20:19	WG1697333
Ethylbenzene	ND		0.00100	1	06/30/2021 20:19	WG1697333
Total Xylenes	ND		0.00300	1	06/30/2021 20:19	WG1697333
(S) Toluene-d8	*110*		*80.0-120*		*06/30/2021 20:19*	WG1697333
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*06/30/2021 20:19*	WG1697333
(S) 1,2-Dichloroethane-d4	*80.9*		*70.0-130*		*06/30/2021 20:19*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	924		20.0	1	06/26/2021 11:24	WG1695666

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/29/2021 07:42	WG1696753

Sample Narrative:

L1371217-02 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	24.1	B	10.0	10	06/26/2021 19:13	WG1695778
Sulfate	396		50.0	10	06/26/2021 19:13	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 11:11	WG1698401
Ethane	ND		0.0130	1	07/02/2021 11:11	WG1698401
Ethene	ND		0.0130	1	07/02/2021 11:11	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 11:11	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/30/2021 22:11	WG1697333
Toluene	ND		0.00100	1	06/30/2021 22:11	WG1697333
Ethylbenzene	ND		0.00100	1	06/30/2021 22:11	WG1697333
Total Xylenes	ND		0.00300	1	06/30/2021 22:11	WG1697333
(S) Toluene-d8	*112*		*80.0-120*		*06/30/2021 22:11*	WG1697333
(S) 4-Bromofluorobenzene	*107*		*77.0-126*		*06/30/2021 22:11*	WG1697333
(S) 1,2-Dichloroethane-d4	*83.5*		*70.0-130*		*06/30/2021 22:11*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1010		20.0	1	06/26/2021 11:24	WG1695666

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/29/2021 07:47	WG1696753

Sample Narrative:

L1371217-03 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	22.9	B	20.0	20	06/26/2021 19:32	WG1695778
Sulfate	499		100	20	06/26/2021 19:32	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 11:26	WG1698401
Ethane	ND		0.0130	1	07/02/2021 11:26	WG1698401
Ethene	ND		0.0130	1	07/02/2021 11:26	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 11:26	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/30/2021 22:31	WG1697333
Toluene	ND		0.00100	1	06/30/2021 22:31	WG1697333
Ethylbenzene	ND		0.00100	1	06/30/2021 22:31	WG1697333
Total Xylenes	ND		0.00300	1	06/30/2021 22:31	WG1697333
(S) Toluene-d8	*109*		*80.0-120*		*06/30/2021 22:31*	WG1697333
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*06/30/2021 22:31*	WG1697333
(S) 1,2-Dichloroethane-d4	*81.8*		*70.0-130*		*06/30/2021 22:31*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	768		13.3	1	06/26/2021 11:24	WG1695666

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/29/2021 07:56	WG1696753

Sample Narrative:

L1371217-04 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	39.3	B	10.0	10	06/26/2021 19:50	WG1695778
Sulfate	182		50.0	10	06/26/2021 19:50	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 11:35	WG1698401
Ethane	ND		0.0130	1	07/02/2021 11:35	WG1698401
Ethene	ND		0.0130	1	07/02/2021 11:35	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 11:35	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/30/2021 22:51	WG1697333
Toluene	ND		0.00100	1	06/30/2021 22:51	WG1697333
Ethylbenzene	ND		0.00100	1	06/30/2021 22:51	WG1697333
Total Xylenes	ND		0.00300	1	06/30/2021 22:51	WG1697333
(S) Toluene-d8	*108*		*80.0-120*		*06/30/2021 22:51*	WG1697333
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*06/30/2021 22:51*	WG1697333
(S) 1,2-Dichloroethane-d4	*84.1*		*70.0-130*		*06/30/2021 22:51*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	835		13.3	1	06/26/2021 11:24	WG1695666

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/29/2021 08:01	WG1696753

Sample Narrative:

L1371217-05 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	60.2		10.0	10	06/26/2021 20:09	WG1695778
Sulfate	211		50.0	10	06/26/2021 20:09	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 12:04	WG1698401
Ethane	ND		0.0130	1	07/02/2021 12:04	WG1698401
Ethene	ND		0.0130	1	07/02/2021 12:04	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 12:04	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/30/2021 23:11	WG1697333
Toluene	ND		0.00100	1	06/30/2021 23:11	WG1697333
Ethylbenzene	ND		0.00100	1	06/30/2021 23:11	WG1697333
Total Xylenes	ND		0.00300	1	06/30/2021 23:11	WG1697333
(S) Toluene-d8	*109*		*80.0-120*		*06/30/2021 23:11*	WG1697333
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*06/30/2021 23:11*	WG1697333
(S) 1,2-Dichloroethane-d4	*80.8*		*70.0-130*		*06/30/2021 23:11*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	917		13.3	1	06/26/2021 11:24	WG1695666

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/29/2021 08:05	WG1696753

Sample Narrative:

L1371217-06 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	56.9		10.0	10	06/26/2021 20:27	WG1695778
Sulfate	272		50.0	10	06/26/2021 20:27	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 13:09	WG1698401
Ethane	ND		0.0130	1	07/02/2021 13:09	WG1698401
Ethene	ND		0.0130	1	07/02/2021 13:09	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 13:09	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/30/2021 23:31	WG1697333
Toluene	ND		0.00100	1	06/30/2021 23:31	WG1697333
Ethylbenzene	ND		0.00100	1	06/30/2021 23:31	WG1697333
Total Xylenes	ND		0.00300	1	06/30/2021 23:31	WG1697333
(S) Toluene-d8	*110*		*80.0-120*		*06/30/2021 23:31*	WG1697333
(S) 4-Bromofluorobenzene	*105*		*77.0-126*		*06/30/2021 23:31*	WG1697333
(S) 1,2-Dichloroethane-d4	*83.0*		*70.0-130*		*06/30/2021 23:31*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	928		20.0	1	06/26/2021 11:24	WG1695666

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	29.7	B T8	20.0	1	06/29/2021 08:10	WG1696753

Sample Narrative:

L1371217-07 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	50.1		5.00	5	06/26/2021 20:45	WG1695778
Sulfate	265		25.0	5	06/26/2021 20:45	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 13:14	WG1698401
Ethane	ND		0.0130	1	07/02/2021 13:14	WG1698401
Ethene	ND		0.0130	1	07/02/2021 13:14	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 13:14	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	06/30/2021 23:51	WG1697333
Toluene	ND		0.00100	1	06/30/2021 23:51	WG1697333
Ethylbenzene	ND		0.00100	1	06/30/2021 23:51	WG1697333
Total Xylenes	ND		0.00300	1	06/30/2021 23:51	WG1697333
(S) Toluene-d8	*109*		*80.0-120*		*06/30/2021 23:51*	WG1697333
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*06/30/2021 23:51*	WG1697333
(S) 1,2-Dichloroethane-d4	*84.7*		*70.0-130*		*06/30/2021 23:51*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	474		10.0	1	06/26/2021 11:24	WG1695666

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/29/2021 08:18	WG1696753

Sample Narrative:

L1371217-08 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	37.9		1.00	1	06/26/2021 21:41	WG1695778
Sulfate	79.6		5.00	1	06/26/2021 21:41	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	0.0247		0.0100	1	07/02/2021 13:20	WG1698401
Ethane	ND		0.0130	1	07/02/2021 13:20	WG1698401
Ethene	ND		0.0130	1	07/02/2021 13:20	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 13:20	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/01/2021 00:11	WG1697333
Toluene	ND		0.00100	1	07/01/2021 00:11	WG1697333
Ethylbenzene	ND		0.00100	1	07/01/2021 00:11	WG1697333
Total Xylenes	ND		0.00300	1	07/01/2021 00:11	WG1697333
(S) Toluene-d8	*109*		*80.0-120*		*07/01/2021 00:11*	WG1697333
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*07/01/2021 00:11*	WG1697333
(S) 1,2-Dichloroethane-d4	*86.7*		*70.0-130*		*07/01/2021 00:11*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	1290	J3	20.0	1	06/30/2021 20:54	WG1698222

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/29/2021 08:22	WG1696753

Sample Narrative:

L1371217-09 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	38.6	B	10.0	10	06/26/2021 22:39	WG1695778
Sulfate	735		50.0	10	06/26/2021 22:39	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 13:24	WG1698401
Ethane	ND		0.0130	1	07/02/2021 13:24	WG1698401
Ethene	ND		0.0130	1	07/02/2021 13:24	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 13:24	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/01/2021 00:30	WG1697333
Toluene	ND		0.00100	1	07/01/2021 00:30	WG1697333
Ethylbenzene	ND		0.00100	1	07/01/2021 00:30	WG1697333
Total Xylenes	ND		0.00300	1	07/01/2021 00:30	WG1697333
(S) Toluene-d8	*109*		*80.0-120*		*07/01/2021 00:30*	WG1697333
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*07/01/2021 00:30*	WG1697333
(S) 1,2-Dichloroethane-d4	*84.3*		*70.0-130*		*07/01/2021 00:30*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	4140		50.0	1	06/30/2021 15:32	WG1697728

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	06/29/2021 08:37	WG1696753

Sample Narrative:

L1371217-10 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	42.5		10.0	10	06/26/2021 22:57	WG1695778
Sulfate	2960		500	100	06/26/2021 23:16	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 13:28	WG1698401
Ethane	ND		0.0130	1	07/02/2021 13:28	WG1698401
Ethene	ND		0.0130	1	07/02/2021 13:28	WG1698401
Acetylene	ND		0.0208	1	07/02/2021 13:28	WG1698401

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/01/2021 00:50	WG1697333
Toluene	ND		0.00100	1	07/01/2021 00:50	WG1697333
Ethylbenzene	ND		0.00100	1	07/01/2021 00:50	WG1697333
Total Xylenes	ND		0.00300	1	07/01/2021 00:50	WG1697333
(S) Toluene-d8	*110*		*80.0-120*		*07/01/2021 00:50*	WG1697333
(S) 4-Bromofluorobenzene	*103*		*77.0-126*		*07/01/2021 00:50*	WG1697333
(S) 1,2-Dichloroethane-d4	*84.6*		*70.0-130*		*07/01/2021 00:50*	WG1697333

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	3580		50.0	1	06/30/2021 14:45	WG1697725

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	141	T8	20.0	1	06/29/2021 08:42	WG1696753

Sample Narrative:

L1371217-11 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	36.2	B	10.0	10	06/26/2021 23:34	WG1695778
Sulfate	2730		500	100	06/26/2021 23:52	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 14:23	WG1699032
Ethane	ND		0.0130	1	07/02/2021 14:23	WG1699032
Ethene	ND		0.0130	1	07/02/2021 14:23	WG1699032
Acetylene	ND		0.0208	1	07/02/2021 14:23	WG1699032

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/01/2021 01:10	WG1697333
Toluene	ND		0.00100	1	07/01/2021 01:10	WG1697333
Ethylbenzene	ND		0.00100	1	07/01/2021 01:10	WG1697333
Total Xylenes	ND		0.00300	1	07/01/2021 01:10	WG1697333
(S) Toluene-d8	*112*		*80.0-120*		*07/01/2021 01:10*	WG1697333
(S) 4-Bromofluorobenzene	*104*		*77.0-126*		*07/01/2021 01:10*	WG1697333
(S) 1,2-Dichloroethane-d4	*82.0*		*70.0-130*		*07/01/2021 01:10*	WG1697333

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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	3510		50.0	1	06/30/2021 16:28	WG1697733

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	56.9	B T8	20.0	1	06/29/2021 08:44	WG1696753

Sample Narrative:

L1371217-12 WG1696753: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	38.6	B	10.0	10	06/27/2021 00:11	WG1695778
Sulfate	2740		500	100	06/27/2021 00:29	WG1695778

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/02/2021 14:26	WG1699032
Ethane	ND		0.0130	1	07/02/2021 14:26	WG1699032
Ethene	ND		0.0130	1	07/02/2021 14:26	WG1699032
Acetylene	ND		0.0208	1	07/02/2021 14:26	WG1699032

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/01/2021 01:30	WG1697333
Toluene	ND		0.00100	1	07/01/2021 01:30	WG1697333
Ethylbenzene	ND		0.00100	1	07/01/2021 01:30	WG1697333
Total Xylenes	ND		0.00300	1	07/01/2021 01:30	WG1697333
(S) Toluene-d8	*111*		*80.0-120*		*07/01/2021 01:30*	WG1697333
(S) 4-Bromofluorobenzene	*100*		*77.0-126*		*07/01/2021 01:30*	WG1697333
(S) 1,2-Dichloroethane-d4	*84.3*		*70.0-130*		*07/01/2021 01:30*	WG1697333

Method Blank (MB)

(MB) R3673124-1 06/26/21 11:24

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1368173-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1368173-01 06/26/21 11:24 • (DUP) R3673124-3 06/26/21 11:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	942	950	1	0.846		5

L1369639-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1369639-01 06/26/21 11:24 • (DUP) R3673124-4 06/26/21 11:24

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1580	1370	1	14.1	J3	5

Laboratory Control Sample (LCS)

(LCS) R3673124-2 06/26/21 11:24

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8800	100	77.4-123	

Method Blank (MB)

(MB) R3678181-1 06/30/21 14:45

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

Laboratory Control Sample (LCS)

(LCS) R3678181-2 06/30/21 14:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8830	100	77.4-123	

Method Blank (MB)

(MB) R3677720-1 06/30/21 15:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1369926-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1369926-04 06/30/21 15:32 • (DUP) R3677720-3 06/30/21 15:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1870	1850	1	1.48		5

L1370209-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1370209-03 06/30/21 15:32 • (DUP) R3677720-4 06/30/21 15:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	830	830	1	0.000		5

Laboratory Control Sample (LCS)

(LCS) R3677720-2 06/30/21 15:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8770	99.7	77.4-123	

Method Blank (MB)

(MB) R3675076-1 06/30/21 16:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1369791-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1369791-03 06/30/21 16:28 • (DUP) R3675076-3 06/30/21 16:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	709	720	1	1.49		5

L1372318-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1372318-02 06/30/21 16:28 • (DUP) R3675076-4 06/30/21 16:28

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	453	458	1	1.10		5

Laboratory Control Sample (LCS)

(LCS) R3675076-2 06/30/21 16:28

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8840	100	77.4-123	

Method Blank (MB)

(MB) R3675662-1 06/30/21 20:54

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1371213-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1371213-03 06/30/21 20:54 • (DUP) R3675662-3 06/30/21 20:54

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1380	1470	1	6.88	J3	5

L1371217-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1371217-09 06/30/21 20:54 • (DUP) R3675662-4 06/30/21 20:54

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1290	966	1	28.4	J3	5

Laboratory Control Sample (LCS)

(LCS) R3675662-2 06/30/21 20:54

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8340	94.8	77.4-123	

Method Blank (MB)

(MB) R3673221-2 06/29/21 06:23

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Free Carbon Dioxide	9.15	J	6.67	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1370870-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1370870-03 06/29/21 06:31 • (DUP) R3673221-4 06/29/21 06:35

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	106	105	1	0.913		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1371071-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1371071-09 06/29/21 07:35 • (DUP) R3673221-7 06/29/21 07:39

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	21.0	22.2	1	5.28		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R3672642-1 06/26/21 11:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	0.405	J	0.379	1.00
Sulfate	U		0.594	5.00

L1368537-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1368537-04 06/26/21 14:56 • (DUP) R3672642-3 06/26/21 15:14

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	41.1	41.1	1	0.0165		15
Sulfate	14.3	14.4	1	0.0551		15

L1371217-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1371217-08 06/26/21 21:41 • (DUP) R3672642-6 06/26/21 21:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	37.9	37.3	1	1.60		15
Sulfate	79.6	79.4	1	0.242		15

Laboratory Control Sample (LCS)

(LCS) R3672642-2 06/26/21 11:26

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.9	99.7	80.0-120	
Sulfate	40.0	40.4	101	80.0-120	

L1367220-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1367220-02 06/26/21 16:46 • (MS) R3672642-4 06/26/21 17:04 • (MSD) R3672642-5 06/26/21 18:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	3.16	53.0	53.5	99.8	101	1	80.0-120			0.923	15
Sulfate	50.0	406	433	433	54.1	54.0	1	80.0-120	E V	E V	0.0171	15

L1371217-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1371217-08 06/26/21 21:41 • (MS) R3672642-7 06/26/21 22:17

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	37.9	85.5	95.2	1	80.0-120	
Sulfate	50.0	79.6	126	93.7	1	80.0-120	E

Method Blank (MB)

(MB) R3675034-2 07/02/21 10:34

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130
Acetylene	U		0.00558	0.0208

L1371217-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1371217-04 07/02/21 11:35 • (DUP) R3675034-3 07/02/21 11:50

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
Acetylene	ND	ND	1	0.000		20

L1371381-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1371381-09 07/02/21 13:32 • (DUP) R3675034-4 07/02/21 13:59

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	0.209	0.196	1	6.42		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
Acetylene	ND	ND	1	0.000		20

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

(LCS) R3675034-1 07/02/21 10:30 • (LCSD) R3675034-5 07/02/21 14:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	0.0660	0.0710	97.3	105	85.0-115			7.30	20
Ethane	0.129	0.123	0.123	95.3	95.3	85.0-115			0.000	20
Ethene	0.127	0.123	0.123	96.9	96.9	85.0-115			0.000	20
Acetylene	0.208	0.207	0.198	99.5	95.2	85.0-115			4.44	20

Method Blank (MB)

(MB) R3675115-2 07/02/21 14:11

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130
Acetylene	U		0.00558	0.0208

L1371026-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1371026-09 07/02/21 14:15 • (DUP) R3675115-3 07/02/21 15:07

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
Acetylene	ND	ND	1	0.000		20

L1371343-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1371343-01 07/02/21 15:30 • (DUP) R3675115-4 07/02/21 15:56

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	4.27	3.44	1	21.5		20
Ethane	0.0159	0.0149	1	6.49		20
Ethene	ND	ND	1	0.000		20
Acetylene	ND	ND	1	0.000		20

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

(LCS) R3675115-1 07/02/21 14:04 • (LCSD) R3675115-5 07/02/21 16:09

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	0.0710	0.0711	105	105	85.0-115			0.141	20
Ethane	0.129	0.123	0.118	95.3	91.5	85.0-115			4.15	20
Ethene	0.127	0.123	0.118	96.9	92.9	85.0-115			4.15	20
Acetylene	0.208	0.198	0.199	95.2	95.7	85.0-115			0.504	20

Method Blank (MB)

(MB) R3674613-3 06/30/21 19:19

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*112*			*80.0-120*
(S) 4-Bromofluorobenzene	*105*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*84.1*			*70.0-130*

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

(LCS) R3674613-1 06/30/21 18:19 • (LCSD) R3674613-2 06/30/21 18:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.00500	0.00498	0.00500	99.6	100	70.0-123			0.401	20
Ethylbenzene	0.00500	0.00529	0.00542	106	108	79.0-123			2.43	20
Toluene	0.00500	0.00499	0.00517	99.8	103	79.0-120			3.54	20
Xylenes, Total	0.0150	0.0162	0.0164	108	109	79.0-123			1.23	20
(S) Toluene-d8				*106*	*109*	*80.0-120*				
(S) 4-Bromofluorobenzene				*99.9*	*97.8*	*77.0-126*				
(S) 1,2-Dichloroethane-d4				*84.8*	*83.4*	*70.0-130*				

L1370953-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1370953-14 06/30/21 19:39 • (MS) R3674613-4 07/01/21 03:49 • (MSD) R3674613-5 07/01/21 04:09

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.00500	0.00157	0.00684	0.00668	105	102	1	17.0-158			2.37	27
Ethylbenzene	0.00500	0.00224	0.00817	0.00846	119	124	1	30.0-155			3.49	27
Toluene	0.00500	0.00200	0.00693	0.00652	98.6	90.4	1	26.0-154			6.10	28
Xylenes, Total	0.0150	ND	0.0168	0.0158	112	105	1	29.0-154			6.13	28
(S) Toluene-d8					*103*	*105*		*80.0-120*				
(S) 4-Bromofluorobenzene					*101*	*103*		*77.0-126*				
(S) 1,2-Dichloroethane-d4					*83.2*	*82.3*		*70.0-130*				

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, 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

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Terracon - Longmont

1831 Lefthand Circle, Suite C
Longmont, CO 80501

Billing Information: **Same as Address**

Report to: **Michael J. Skridulis**

Email To: **mike.skridulis@terracon.com**

Project Description: City of Longmont Annual GW Quality Monitoring

City/State Collected: Longmont, CO

Please Circle: PT (MT) CT ET

Phone: **303-454-5249**

Client Project # **22217000**

Lab Project #

Collected by (print): Charles A. Covington

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 #

Date Results Needed: STANDARD

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

SDG # L1371217

Table # E108

Acctnum: **TERRALCO**

Template:

Prelogin:

PM: **Chris Ward**

PB:

Shipped Via:

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX8260 (2) 40ml Amber w/HCl	RSK-175 (2) 40ml Amber w/HCl	CO2 - 125ml HDPE No Pres	Cl, SO4 - 250ml HDPE No Pres	TDS - 250ml HDPE No Pres	Remarks	Sample # (lab only)
GM1-MW01	Grab	GW	-	6/21/21	1310	7	X	X	X	X	X		-01
GM1-MW02	Grab	GW	-	6/21/21	1345	7	X	X	X	X	X		-02
GM1-MW03	Grab	GW	-	6/21/21	1420	7	X	X	X	X	X		-03
SGU-MW01	Grab	GW	-	6/21/21	1500	7	X	X	X	X	X		-04
SGU-MW02	Grab	GW	-	6/21/21	1630	7	X	X	X	X	X		-05
SGU-MW03	Grab	GW	-	6/21/21	1530	7	X	X	X	X	X		-06
SGU-MW06	Grab	GW	-	6/21/21	1600	7	X	X	X	X	X		-07
SGU-MW07	Grab	GW	-	6/21/21	1700	7	X	X	X	X	X		-08
EGW-MW01	Grab	GW	-	6/23/21	1145	7	X	X	X	X	X		-09

* 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
RAD Screen <0.5 mR/hr: Y N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: ~~4.7~~ °C 4.0-1.3 = 4.3	Bottles Received: 84
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 6/25/21	Time: 900

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Terracon - Longmont

1831 Lefthand Circle, Suite C
Longmont, CO 80501

Billing Information:
Same as Address

Pres Chk

Report to:
Michael J. Skridulis

Email To:
mike.skridulis@terracon.com

Project Description:
City of Longmont Annual GW Quality Monitoring

City/State Collected: Longmont, CO

Please Circle: PT (MT) CT ET

Phone: **303-454-5249**

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22217000

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Charles A. Covington

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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 #

Date Results Needed
STANDARD

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	BTEX8260 (2) 40ml Amber w/HCl	RSK-175 (2) 40ml Amber w/HCl	CO2 - 125ml HDPE No Pres	Cl, SO4 - 250ml HDPE No Pres	TDS - 250ml HDPE No Pres	Remarks	Sample # (lab only)
LM8-MW01	Grab	GW	-	6/23/21	1310	7	X	X	X	X	X		10
LM8-MW02	Grab	GW	-	6/23/21	1230	7	X	X	X	X	X		11
LM8-MW03	Grab	GW	-	6/23/21	1350	7	X	X	X	X	X		12

Chain of Custody Page 2 of 2

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
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SDG # L1371217

Table #

Acctnum: **TERRALCO**

Template:

Prelogin:

PM: **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 X FedEx __ Courier

Tracking # 5117 4430 2239

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
RAD Screen <0.5 mR/hr: Y N

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	6/24/21	1600	FEDEX
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 4.7 °C
4.0+.3=4.3

Bottles Received: 84

Date: 6-25-21 Time: 9:00

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

July 12, 2021

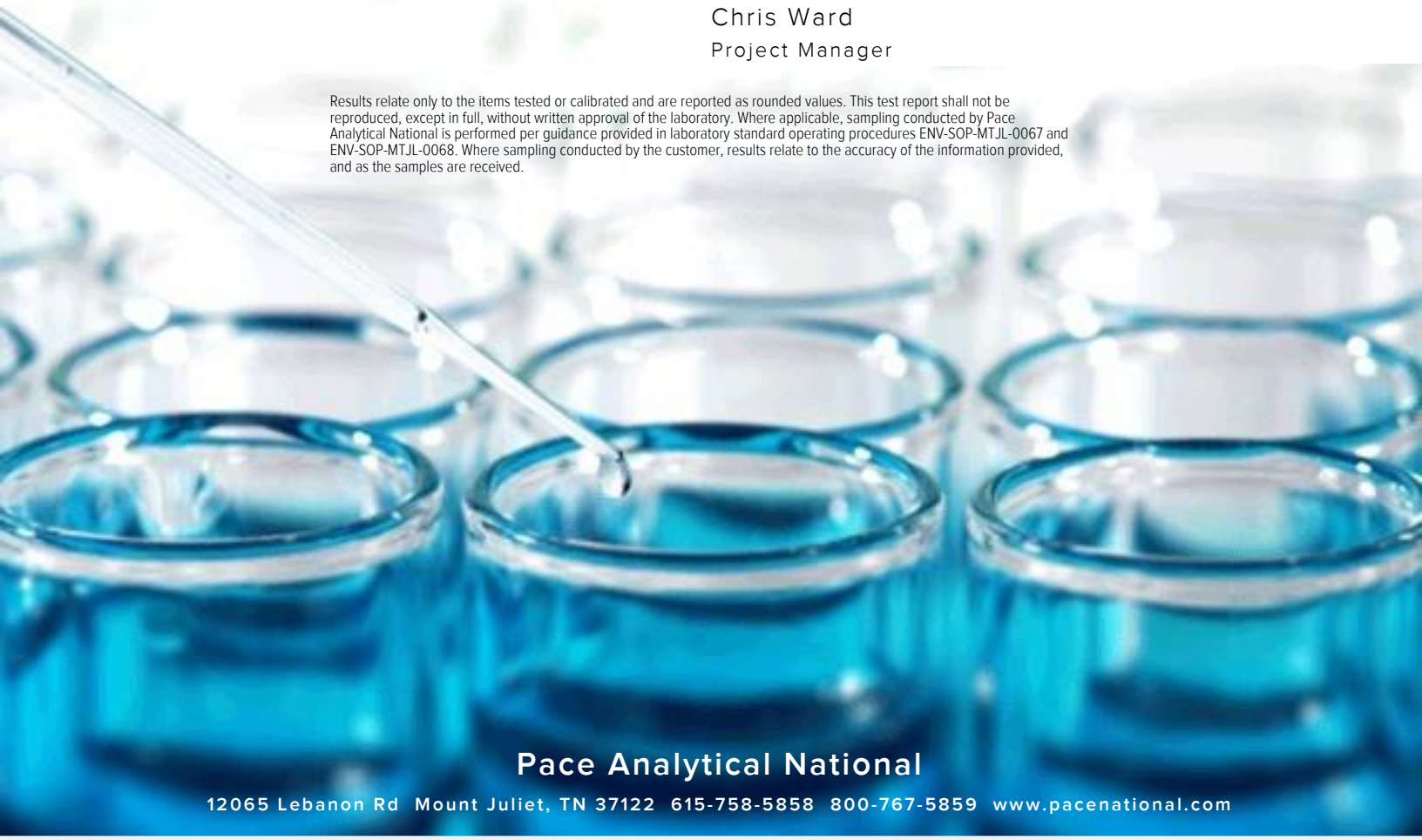
Terracon Consultants, Inc - Longmont, CO

Sample Delivery Group:	L1373482
Samples Received:	07/01/2021
Project Number:	22217000
Description:	COL Annual GW Quality Monitoring

Report To: Michael Skridulis
1242 Bramwood Place
Longmont, CO 80501

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

WT1-MW01 L1373482-01 GW

Collected by: Charles A. Covington | Collected date/time: 06/28/21 12:00 | Received date/time: 07/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1699735	1	07/03/21 15:41	07/03/21 16:37	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1700200	1	07/05/21 08:49	07/05/21 08:49	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1702253	5	07/11/21 15:08	07/11/21 15:08	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1701847	1	07/08/21 15:36	07/08/21 15:36	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1699942	1	07/04/21 00:21	07/04/21 00:21	JCP	Mt. Juliet, TN

WT1-MW02 L1373482-02 GW

Collected by: Charles A. Covington | Collected date/time: 06/28/21 12:30 | Received date/time: 07/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1699735	1	07/03/21 15:41	07/03/21 16:37	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1700200	1	07/05/21 08:58	07/05/21 08:58	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1702253	5	07/11/21 15:21	07/11/21 15:21	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1701847	1	07/08/21 15:39	07/08/21 15:39	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1699942	1	07/04/21 00:42	07/04/21 00:42	JCP	Mt. Juliet, TN

WT1-MW03 L1373482-03 GW

Collected by: Charles A. Covington | Collected date/time: 06/28/21 11:30 | Received date/time: 07/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1699741	1	07/05/21 19:58	07/05/21 21:08	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1700200	1	07/05/21 09:03	07/05/21 09:03	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1702253	5	07/11/21 15:35	07/11/21 15:35	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1701847	1	07/08/21 15:47	07/08/21 15:47	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1702366	1	07/08/21 20:48	07/08/21 20:48	JAH	Mt. Juliet, TN

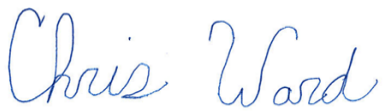
CL1-MW03 L1373482-04 GW

Collected by: Charles A. Covington | Collected date/time: 06/28/21 11:00 | Received date/time: 07/01/21 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1699738	1	07/05/21 12:21	07/05/21 13:32	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1700200	1	07/05/21 09:13	07/05/21 09:13	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1702253	5	07/11/21 16:14	07/11/21 16:14	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1701847	1	07/08/21 15:55	07/08/21 15:55	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1702366	1	07/08/21 21:07	07/08/21 21:07	JAH	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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	676		13.3	1	07/03/2021 16:37	WG1699735

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	28.2	T8	20.0	1	07/05/2021 08:49	WG1700200

Sample Narrative:

L1373482-01 WG1700200: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	41.8		5.00	5	07/11/2021 15:08	WG1702253
Sulfate	272		25.0	5	07/11/2021 15:08	WG1702253

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/08/2021 15:36	WG1701847
Ethane	ND		0.0130	1	07/08/2021 15:36	WG1701847
Ethene	ND		0.0130	1	07/08/2021 15:36	WG1701847
Acetylene	ND		0.0208	1	07/08/2021 15:36	WG1701847

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/04/2021 00:21	WG1699942
Toluene	ND		0.00100	1	07/04/2021 00:21	WG1699942
Ethylbenzene	ND		0.00100	1	07/04/2021 00:21	WG1699942
Total Xylenes	ND		0.00300	1	07/04/2021 00:21	WG1699942
(S) Toluene-d8	*108*		*80.0-120*		*07/04/2021 00:21*	WG1699942
(S) 4-Bromofluorobenzene	*85.6*		*77.0-126*		*07/04/2021 00:21*	WG1699942
(S) 1,2-Dichloroethane-d4	*77.8*		*70.0-130*		*07/04/2021 00:21*	WG1699942

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	888		20.0	1	07/03/2021 16:37	WG1699735

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	40.0	T8	20.0	1	07/05/2021 08:58	WG1700200

Sample Narrative:

L1373482-02 WG1700200: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	40.3		5.00	5	07/11/2021 15:21	WG1702253
Sulfate	377		25.0	5	07/11/2021 15:21	WG1702253

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/08/2021 15:39	WG1701847
Ethane	ND		0.0130	1	07/08/2021 15:39	WG1701847
Ethene	ND		0.0130	1	07/08/2021 15:39	WG1701847
Acetylene	ND		0.0208	1	07/08/2021 15:39	WG1701847

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/04/2021 00:42	WG1699942
Toluene	ND		0.00100	1	07/04/2021 00:42	WG1699942
Ethylbenzene	ND		0.00100	1	07/04/2021 00:42	WG1699942
Total Xylenes	ND		0.00300	1	07/04/2021 00:42	WG1699942
(S) Toluene-d8	*109*		*80.0-120*		*07/04/2021 00:42*	WG1699942
(S) 4-Bromofluorobenzene	*86.3*		*77.0-126*		*07/04/2021 00:42*	WG1699942
(S) 1,2-Dichloroethane-d4	*77.6*		*70.0-130*		*07/04/2021 00:42*	WG1699942

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	628		13.3	1	07/05/2021 21:08	WG1699741

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	21.5	T8	20.0	1	07/05/2021 09:03	WG1700200

Sample Narrative:

L1373482-03 WG1700200: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	31.1		5.00	5	07/11/2021 15:35	WG1702253
Sulfate	256		25.0	5	07/11/2021 15:35	WG1702253

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/08/2021 15:47	WG1701847
Ethane	ND		0.0130	1	07/08/2021 15:47	WG1701847
Ethene	ND		0.0130	1	07/08/2021 15:47	WG1701847
Acetylene	ND		0.0208	1	07/08/2021 15:47	WG1701847

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/08/2021 20:48	WG1702366
Toluene	ND		0.00100	1	07/08/2021 20:48	WG1702366
Ethylbenzene	ND		0.00100	1	07/08/2021 20:48	WG1702366
Total Xylenes	ND		0.00300	1	07/08/2021 20:48	WG1702366
(S) Toluene-d8	*97.2*		*80.0-120*		*07/08/2021 20:48*	WG1702366
(S) 4-Bromofluorobenzene	*106*		*77.0-126*		*07/08/2021 20:48*	WG1702366
(S) 1,2-Dichloroethane-d4	*98.0*		*70.0-130*		*07/08/2021 20:48*	WG1702366

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	986		20.0	1	07/05/2021 13:32	WG1699738

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	ND	T8	20.0	1	07/05/2021 09:13	WG1700200

Sample Narrative:

L1373482-04 WG1700200: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	45.9		5.00	5	07/11/2021 16:14	WG1702253
Sulfate	337	V	25.0	5	07/11/2021 16:14	WG1702253

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/08/2021 15:55	WG1701847
Ethane	ND		0.0130	1	07/08/2021 15:55	WG1701847
Ethene	ND		0.0130	1	07/08/2021 15:55	WG1701847
Acetylene	ND		0.0208	1	07/08/2021 15:55	WG1701847

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/08/2021 21:07	WG1702366
Toluene	ND		0.00100	1	07/08/2021 21:07	WG1702366
Ethylbenzene	ND		0.00100	1	07/08/2021 21:07	WG1702366
Total Xylenes	ND		0.00300	1	07/08/2021 21:07	WG1702366
(S) Toluene-d8	*104*		*80.0-120*		*07/08/2021 21:07*	WG1702366
(S) 4-Bromofluorobenzene	*94.1*		*77.0-126*		*07/08/2021 21:07*	WG1702366
(S) 1,2-Dichloroethane-d4	*98.7*		*70.0-130*		*07/08/2021 21:07*	WG1702366

Method Blank (MB)

(MB) R3676121-1 07/03/21 16:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1372587-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1372587-02 07/03/21 16:37 • (DUP) R3676121-3 07/03/21 16:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	693	691	1	0.384		5

L1372596-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1372596-01 07/03/21 16:37 • (DUP) R3676121-4 07/03/21 16:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	890	892	1	0.224		5

Laboratory Control Sample (LCS)

(LCS) R3676121-2 07/03/21 16:37

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8800	100	77.4-123	

Method Blank (MB)

(MB) R3676981-1 07/05/21 13:32

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1372596-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1372596-02 07/05/21 13:32 • (DUP) R3676981-3 07/05/21 13:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	685	733	1	6.77	J3	5

L1372632-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1372632-01 07/05/21 13:32 • (DUP) R3676981-4 07/05/21 13:32

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	655	656	1	0.203		5

Laboratory Control Sample (LCS)

(LCS) R3676981-2 07/05/21 13:32

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8570	97.4	77.4-123	

Method Blank (MB)

(MB) R3676977-1 07/05/21 21:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1372242-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1372242-02 07/05/21 21:08 • (DUP) R3676977-3 07/05/21 21:08

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	584	612	1	4.68		5

L1372363-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1372363-04 07/05/21 21:08 • (DUP) R3676977-4 07/05/21 21:08

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	608	625	1	2.81		5

Laboratory Control Sample (LCS)

(LCS) R3676977-2 07/05/21 21:08

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8360	95.0	77.4-123	

Method Blank (MB)

(MB) R3675777-2 07/05/21 07:47

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Free Carbon Dioxide	U		6.67	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

Method Blank (MB)

(MB) R3678151-1 07/11/21 10:33

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Sulfate	U		0.594	5.00

L1369467-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1369467-03 07/11/21 12:44 • (DUP) R3678151-3 07/11/21 12:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	20.4	20.5	5	0.515		15
Sulfate	96.4	97.7	5	1.27		15

L1373482-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1373482-04 07/11/21 16:14 • (DUP) R3678151-6 07/11/21 16:27

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	45.9	45.8	5	0.166		15
Sulfate	337	335	5	0.407		15

Laboratory Control Sample (LCS)

(LCS) R3678151-2 07/11/21 10:45

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	40.1	100	80.0-120	
Sulfate	40.0	40.5	101	80.0-120	

L1369467-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1369467-03 07/11/21 12:44 • (MS) R3678151-4 07/11/21 13:36 • (MSD) R3678151-5 07/11/21 13:49

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	20.4	69.0	68.8	97.2	96.8	5	80.0-120			0.342	15
Sulfate	50.0	96.4	142	141	91.4	89.2	5	80.0-120			0.775	15

L1373482-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1373482-04 07/11/21 16:14 • (MS) R3678151-7 07/11/21 16:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	45.9	97.5	103	5	80.0-120	
Sulfate	50.0	337	376	79.3	5	80.0-120	V

Method Blank (MB)

(MB) R3677222-2 07/08/21 14:53

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130
acetylene	U		0.00558	0.0208

L1373284-12 Original Sample (OS) • Duplicate (DUP)

(OS) L1373284-12 07/08/21 15:17 • (DUP) R3677222-3 07/08/21 15:51

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
acetylene	ND	ND	1	0.000		20

L1373487-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1373487-04 07/08/21 16:14 • (DUP) R3677222-4 07/08/21 16:57

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20
acetylene	ND	ND	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R3677222-1 07/08/21 14:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Methane	0.0678	0.0741	109	85.0-115	
Ethane	0.129	0.129	100	85.0-115	
Ethene	0.127	0.131	103	85.0-115	
acetylene	0.208	0.194	93.3	85.0-115	

Method Blank (MB)

(MB) R3677243-2 07/03/21 20:58

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*106*			*80.0-120*
(S) 4-Bromofluorobenzene	*90.4*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*92.9*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3677243-1 07/03/21 20:17

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00504	101	70.0-123	
Ethylbenzene	0.00500	0.00540	108	79.0-123	
Toluene	0.00500	0.00492	98.4	79.0-120	
Xylenes, Total	0.0150	0.0146	97.3	79.0-123	
(S) Toluene-d8			*101*	*80.0-120*	
(S) 4-Bromofluorobenzene			*91.7*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*95.6*	*70.0-130*	

Method Blank (MB)

(MB) R3677992-2 07/08/21 17:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*97.7*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3677992-1 07/08/21 16:42

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00583	117	70.0-123	
Ethylbenzene	0.00500	0.00513	103	79.0-123	
Toluene	0.00500	0.00544	109	79.0-120	
Xylenes, Total	0.0150	0.0158	105	79.0-123	
(S) Toluene-d8			*101*	*80.0-120*	
(S) 4-Bromofluorobenzene			*98.3*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*96.4*	*70.0-130*	

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, 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
J3	The associated batch QC was outside the established quality control range for precision.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	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.

Terracon - Longmont
1831 Lefthand Circle Suite C
Longmont CO 80501

Billing Information: **SAME AS ADDRESS**

Pres Chk

Report to: **Mike Skridulis**

Email To: **mjskridulis@terracon.com**

Project Description: **COL Annual GW Quality Monitoring**

City/State Collected: **Longmont, CO**

Please Circle: PT MT CT ET

Phone:

Client Project # **22217000**

Lab Project #

Collected by (print): **Charles A. Covington**

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 #

Date Results Needed: **STANDARD**

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	CO2 - 125ml HDPE No Pres.	RSK175 - (2) 40ml amber w/ HCl	BTEX8260 - (2) 40 ml amber w/ HCl	Cl, SO4 - 250 ml HDPE No Pres.	TDS - 250 ml HDPE No Pres.	Remarks	Sample # (lab only)
WT1-MW01	Grab	GW		6/28/2021	1200	6	X	X	X	X	X		-01
WT1-MW02	Grab	GW		6/28/2021	1230	6	X	X	X	X	X		02
WT1-MW03	Grab	GW		6/28/2021	1130	6	X	X	X	X	X		03
CL1-MW03	Grab	GW		6/30/2021	1100	6	X	X	X	X	X		04

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

SDG # L1373482

H082

Acctnum:

Template:

Prelogin:

PM:

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 X FedEx __ Courier __ ___

Tracking # 5117 4430 4253

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
RAD Screen <0.5 mR/hr:		Y N

	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	6/30/21	1500	FEDEX
Relinquished by : (Signature)			
Relinquished by : (Signature)			

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: 1.3 1.2 °C Bottles Received: 28

Date: 7/1/21 Time: 900

Received for lab by: (Signature)

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

July 16, 2021

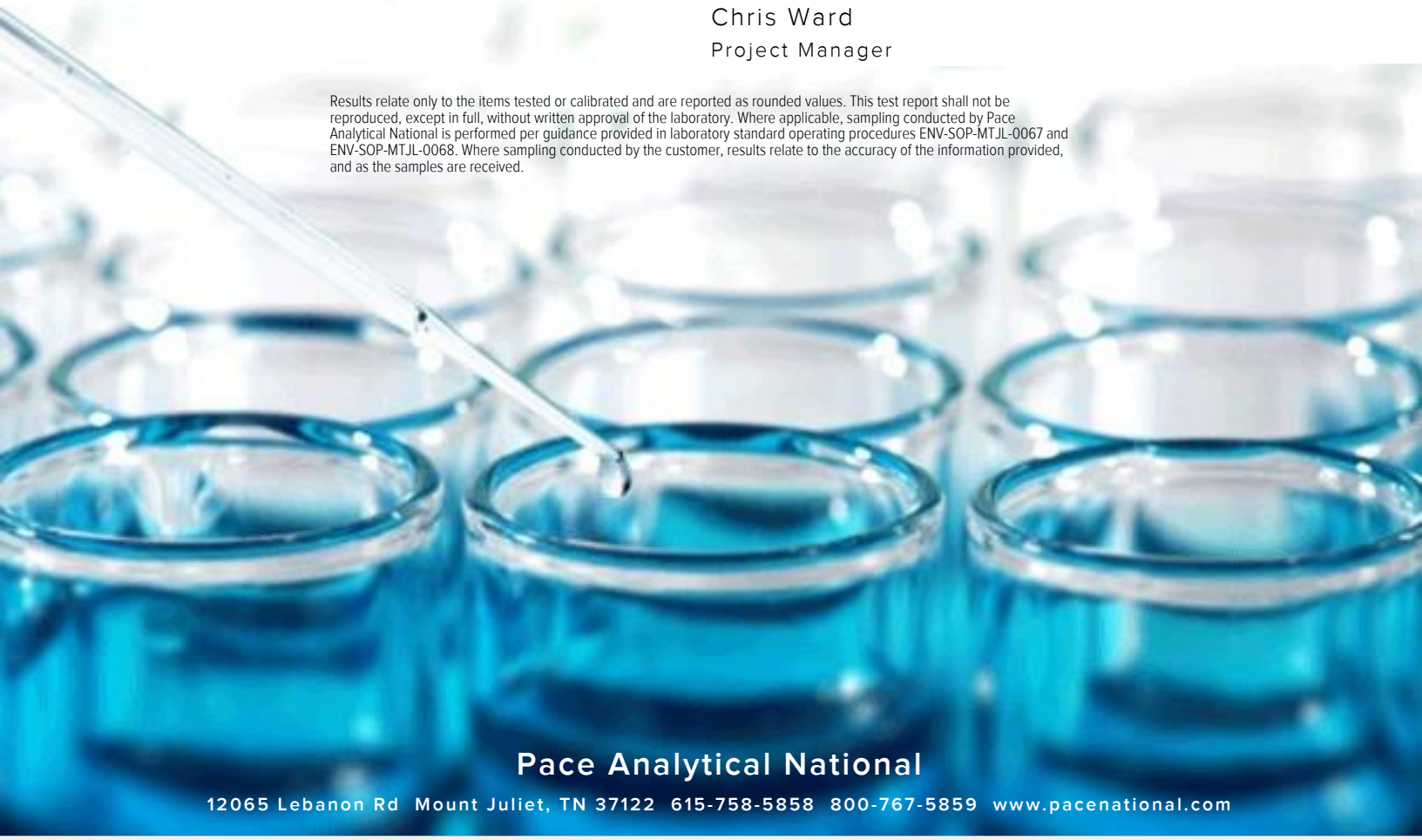
Terracon Consultants, Inc - Longmont, CO

Sample Delivery Group:	L1376390
Samples Received:	07/09/2021
Project Number:	22217000
Description:	COL Annual GW Quality Monitoring

Report To: Mike Skridulis
1242 Bramwood Place
Longmont, CO 80501

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

SAMPLE SUMMARY

ST1-MW05 L1376390-01 GW

Collected by	Collected date/time	Received date/time
	07/07/21 09:35	07/09/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1704516	1	07/13/21 15:17	07/13/21 16:21	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1703572	1	07/13/21 07:11	07/13/21 07:11	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1704532	100	07/13/21 18:09	07/13/21 18:09	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1704532	1000	07/14/21 01:42	07/14/21 01:42	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1704181	1	07/13/21 15:06	07/13/21 15:06	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1703233	1	07/11/21 00:39	07/11/21 00:39	JCP	Mt. Juliet, TN

ST1-MW03 L1376390-02 GW

Collected by	Collected date/time	Received date/time
	07/07/21 10:00	07/09/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1704516	1	07/13/21 15:17	07/13/21 16:21	VRP	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1703572	1	07/13/21 07:15	07/13/21 07:15	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1704532	100	07/13/21 18:25	07/13/21 18:25	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1704181	1	07/13/21 15:10	07/13/21 15:10	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1703233	1	07/11/21 01:00	07/11/21 01:00	JCP	Mt. Juliet, TN

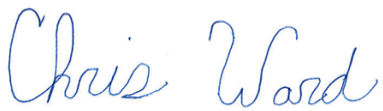
ST1-MW02 L1376390-03 GW

Collected by	Collected date/time	Received date/time
	07/07/21 10:35	07/09/21 14:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG1704495	1	07/13/21 14:07	07/13/21 15:12	MMF	Mt. Juliet, TN
Wet Chemistry by Method 4500CO2 D-2011	WG1703572	1	07/13/21 07:18	07/13/21 07:18	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1704532	100	07/13/21 18:42	07/13/21 18:42	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1704532	1000	07/14/21 01:58	07/14/21 01:58	ELN	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1704181	1	07/13/21 15:14	07/13/21 15:14	CMS	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1703233	1	07/11/21 01:20	07/11/21 01:20	JCP	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

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	24400		400	1	07/13/2021 16:21	WG1704516

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	29.8		20.0	1	07/13/2021 07:11	WG1703572

Sample Narrative:

L1376390-01 WG1703572: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	917		100	100	07/13/2021 18:09	WG1704532
Sulfate	15600		5000	1000	07/14/2021 01:42	WG1704532

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/13/2021 15:06	WG1704181
Ethane	ND		0.0130	1	07/13/2021 15:06	WG1704181
Ethene	ND		0.0130	1	07/13/2021 15:06	WG1704181

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/11/2021 00:39	WG1703233
Toluene	ND		0.00100	1	07/11/2021 00:39	WG1703233
Ethylbenzene	ND		0.00100	1	07/11/2021 00:39	WG1703233
Total Xylenes	ND		0.00300	1	07/11/2021 00:39	WG1703233
(S) Toluene-d8	*101*		*80.0-120*		*07/11/2021 00:39*	WG1703233
(S) 4-Bromofluorobenzene	*89.5*		*77.0-126*		*07/11/2021 00:39*	WG1703233
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*07/11/2021 00:39*	WG1703233

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	9760		100	1	07/13/2021 16:21	WG1704516

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	26.4		20.0	1	07/13/2021 07:15	WG1703572

Sample Narrative:

L1376390-02 WG1703572: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	131		100	100	07/13/2021 18:25	WG1704532
Sulfate	6490		500	100	07/13/2021 18:25	WG1704532

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/13/2021 15:10	WG1704181
Ethane	ND		0.0130	1	07/13/2021 15:10	WG1704181
Ethene	ND		0.0130	1	07/13/2021 15:10	WG1704181

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/11/2021 01:00	WG1703233
Toluene	ND		0.00100	1	07/11/2021 01:00	WG1703233
Ethylbenzene	ND		0.00100	1	07/11/2021 01:00	WG1703233
Total Xylenes	ND		0.00300	1	07/11/2021 01:00	WG1703233
(S) Toluene-d8	*102*		*80.0-120*		*07/11/2021 01:00*	WG1703233
(S) 4-Bromofluorobenzene	*90.6*		*77.0-126*		*07/11/2021 01:00*	WG1703233
(S) 1,2-Dichloroethane-d4	*105*		*70.0-130*		*07/11/2021 01:00*	WG1703233

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Dissolved Solids	20300		200	1	07/13/2021 15:12	WG1704495

Wet Chemistry by Method 4500CO2 D-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Free Carbon Dioxide	26.2		20.0	1	07/13/2021 07:18	WG1703572

Sample Narrative:

L1376390-03 WG1703572: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Chloride	662		100	100	07/13/2021 18:42	WG1704532
Sulfate	12500		5000	1000	07/14/2021 01:58	WG1704532

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Methane	ND		0.0100	1	07/13/2021 15:14	WG1704181
Ethane	ND		0.0130	1	07/13/2021 15:14	WG1704181
Ethene	ND		0.0130	1	07/13/2021 15:14	WG1704181

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis	Batch
	mg/l		mg/l		date / time	
Benzene	ND		0.00100	1	07/11/2021 01:20	WG1703233
Toluene	ND		0.00100	1	07/11/2021 01:20	WG1703233
Ethylbenzene	ND		0.00100	1	07/11/2021 01:20	WG1703233
Total Xylenes	ND		0.00300	1	07/11/2021 01:20	WG1703233
(S) Toluene-d8	*101*		*80.0-120*		*07/11/2021 01:20*	WG1703233
(S) 4-Bromofluorobenzene	*89.1*		*77.0-126*		*07/11/2021 01:20*	WG1703233
(S) 1,2-Dichloroethane-d4	*108*		*70.0-130*		*07/11/2021 01:20*	WG1703233

Method Blank (MB)

(MB) R3680014-1 07/13/21 15:12

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1375292-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1375292-01 07/13/21 15:12 • (DUP) R3680014-3 07/13/21 15:12

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	1160	1300	1	10.7	J3	5

L1375365-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1375365-01 07/13/21 15:12 • (DUP) R3680014-4 07/13/21 15:12

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	22500	22900	1	1.41		5

Laboratory Control Sample (LCS)

(LCS) R3680014-2 07/13/21 15:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8870	101	77.4-123	

Method Blank (MB)

(MB) R3679761-1 07/13/21 16:21

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1376266-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1376266-01 07/13/21 16:21 • (DUP) R3679761-3 07/13/21 16:21

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	619	617	1	0.217		5

L1376442-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1376442-06 07/13/21 16:21 • (DUP) R3679761-4 07/13/21 16:21

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	432	434	1	0.462		5

Laboratory Control Sample (LCS)

(LCS) R3679761-2 07/13/21 16:21

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8870	101	77.4-123	

Method Blank (MB)

(MB) R3678611-2 07/13/21 05:53

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Free Carbon Dioxide	U		6.67	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1376032-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1376032-08 07/13/21 06:16 • (DUP) R3678611-4 07/13/21 06:19

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	128	127	1	1.04		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1376128-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1376128-07 07/13/21 06:58 • (DUP) R3678611-7 07/13/21 07:02

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Free Carbon Dioxide	ND	ND	1	2.10		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Method Blank (MB)

(MB) R3679204-1 07/13/21 13:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Chloride	U		0.379	1.00
Sulfate	U		0.594	5.00

L1377305-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1377305-01 07/13/21 14:36 • (DUP) R3679204-3 07/13/21 14:52

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3.41	3.39	1	0.456		15
Sulfate	27.5	27.4	1	0.202		15

L1372927-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1372927-01 07/13/21 22:58 • (DUP) R3679204-6 07/13/21 23:14

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1.17	1.17	1	0.0683		15
Sulfate	7.04	7.07	1	0.454		15

Laboratory Control Sample (LCS)

(LCS) R3679204-2 07/13/21 13:36

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40.0	39.0	97.4	80.0-120	
Sulfate	40.0	39.2	98.0	80.0-120	

L1377305-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1377305-02 07/13/21 15:08 • (MS) R3679204-4 07/13/21 15:25 • (MSD) R3679204-5 07/13/21 15:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50.0	4.33	55.5	55.4	102	102	1	80.0-120			0.0611	15
Sulfate	50.0	44.2	93.8	93.6	99.2	98.8	1	80.0-120			0.174	15

L1372927-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1372927-02 07/13/21 23:31 • (MS) R3679204-7 07/13/21 23:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50.0	70.7	119	97.4	1	80.0-120	E
Sulfate	50.0	102	146	89.3	1	80.0-120	E

Method Blank (MB)

(MB) R3678917-2 07/13/21 13:28

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Methane	U		0.00291	0.0100
Ethane	U		0.00407	0.0130
Ethene	U		0.00426	0.0130

L1376229-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1376229-01 07/13/21 14:06 • (DUP) R3678917-3 07/13/21 14:50

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20

L1376482-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1376482-04 07/13/21 15:29 • (DUP) R3678917-4 07/13/21 15:47

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	ND	1	0.000		20
Ethane	ND	ND	1	0.000		20
Ethene	ND	ND	1	0.000		20

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

(LCS) R3678917-1 07/13/21 13:25 • (LCSD) R3678917-5 07/13/21 15:56

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	0.0678	0.0749	0.0725	110	107	85.0-115			3.26	20
Ethane	0.129	0.129	0.129	100	100	85.0-115			0.000	20
Ethene	0.127	0.129	0.130	102	102	85.0-115			0.772	20

Method Blank (MB)

(MB) R3678924-2 07/10/21 21:05

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Benzene	U		0.0000941	0.00100
Ethylbenzene	U		0.000137	0.00100
Toluene	U		0.000278	0.00100
Xylenes, Total	U		0.000174	0.00300
(S) Toluene-d8	*101*			*80.0-120*
(S) 4-Bromofluorobenzene	*92.5*			*77.0-126*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3678924-1 07/10/21 19:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Benzene	0.00500	0.00468	93.6	70.0-123	
Ethylbenzene	0.00500	0.00483	96.6	79.0-123	
Toluene	0.00500	0.00446	89.2	79.0-120	
Xylenes, Total	0.0150	0.0133	88.7	79.0-123	
(S) Toluene-d8			*98.9*	*80.0-120*	
(S) 4-Bromofluorobenzene			*95.3*	*77.0-126*	
(S) 1,2-Dichloroethane-d4			*109*	*70.0-130*	

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.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, 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
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J3	The associated batch QC was outside the established quality control range for precision.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

[1] Drinking Water [2] Underground Storage Tanks [3] Aquatic Toxicity [4] Chemical/Microbiological [5] Mold [6] Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Terracon - Longmont
1831 Lefthand Cir. Ste. C
Longmont, CO 80501

Billing Information: SAME

Report to: Mike Skridulis

Email To: Mjskridulis@terracon.com

Project Description: COL Annual GW Quality Monitoring

City/State Collected: Longmont, CO

Please Circle: PT (MT) CT ET

Phone:

Client Project # 22217000

Lab Project #

Collected by (print): Charles A. Covington

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 #

Date Results Needed: STANDARD

Chain of Custody Page 1 of 1

Pace Analytical® National Center for Testing & Innovation

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

SDG # L1376390

Tabl E108

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	Pres Chk	CO2 - 125 mL HDPE no pres.	RSK175 - (2) 40mL w/ HCl	BTEX 8260 - (2) 40mL w/ HCl	Cl, SO4 - 250 mL HDPE no pres.	TDS - 250 mL HDPE no pres.						Remarks	Sample # (lab only)
ST1-MW05	Grab	GW	-	7/7/21	0935	6		X	X	X	X	X	X						-01
ST1-MW03	Grab	GW	-	7/7/21	1000	6		X	X	X	X	X	X						-02
ST1-MW02	Grab	GW	-	7/7/21	1035	6		X	X	X	X	X							-03

Invoice:
Customer : PNDCO
Phone : (615)758-5858
SAT Del : N
Date : 10May21
Weight : 10 LBS
COD :
DV :
Svcs: PRIORITY OVERNIGHT
TRCK: 5117 4430 2228

Shipping :	0.00
Special :	0.00
Handling :	0.00
Total :	0.00

* 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 X FedEx __ Courier ___

Tracking # 5117 4430 2228

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
RAD Screen <0.5 mR/hr:		Y N

Relinquished by : (Signature)	Date: 7/8/21	Time: 1600	Received by: (Signature) FEDEX	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: -.1 °C Bottles Received: 2.2 2.1
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7-9-21 Time: 1430

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK