Received by OCD: 10/21/2022 8:09:38 AM

Accepted for the record
11/22/2022

NV

TRANSWESTERN PIPELINE COMPANY
An ENERGY TRANSFER Company

April 29, 2021

Mr. Kevin Pierard, Bureau Chief
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

RE: Submittal of 2020 Groundwater Remediation Activities For the Former Surface Impoundments Annual Report
Roswell Compressor Station No. 9
Transwestern Pipeline Company, LLC
Roswell, Chavez County, New Mexico
NMOCD Case #GW-052/EPA ID NO. NMD986676955

Dear Mr. Pierard:

In general accordance with *Section IX – Reporting Requirements* of the March 2013 *Stipulated Final Order* for Transwestern Pipeline Company, LLC's (Transwestern) Roswell Compressor Station No. 9 (Site), attached for your review is the *2020 Groundwater Remediation Activities for the Former Surface Impoundments Annual Report* for the site.

If you have any questions or comments regarding this submission, please do not hesitate to contact me at 210.870.2725 (office) or Steve Diamond of EarthCon Consultants, Inc. at 770-973-2100, ext. 2876.

Sincerely,

SBoultinghouse

Stacy Boultinghouse, PG(TX4889/LA73)
Environmental Manager
Transwestern Pipeline Company, LLC
Stacy.Boultinghouse@energytransfer.com

Attachment: 2020 Groundwater Remediation Activities for the Former Surface Impoundments Annual Report

ec: D. Cobrain, NMED HWB
M. Suzuki, NMED HWB
Mr. M. Bratcher, NMOCD
B. Billings, NMOCD
L. King, USEPA Region 6
JD Haines, EarthCon
S. Diamond, EarthCon

Released to Imaging: 11/22/2022 9:07:27 AM

REPORT OF 2020 GROUNDWATER REMEDIATION ACTIVITIES
FORMER SURFACE IMPOUNDMENTS
TRANSWESTERN COMPRESSOR STATION NO. 9
(ROSWELL COMPRESSOR STATION)
6381 NORTH MAIN STREET
ROSWELL, CHAVES COUNTY, NEW MEXICO
NMOCD GW-052
NMED 1656; EPA ID NMD986676955

PREPARED FOR:

TRANSWESTERN PIPELINE COMPANY, LLC
1300 MAIN
HOUSTON, TEXAS 77002

PREPARED BY:

EARTHCON CONSULTANTS, INC.
14405 WALTERS ROAD, SUITE 700
HOUSTON, TEXAS 77014
281.240.5200

EarthCon Project No. 02.20180005.00

April 2021

Report of 2020 Groundwater Remediation Activities
Former Surface Impoundments
Transwestern Compressor Station No. 9
(Roswell Compressor Station)
6381 North Main Street
Roswell, Chaves County, New Mexico
NMOCD GW-052
NMED 1656; EPA ID NMD986676955

Prepared For:

Transwestern Pipeline Company, LLC
1300 Main
Houston, TX 77002

April 2021

EarthCon Project No. 02.20180005.00

EarthCon Consultants, Inc. (EarthCon) is submitting to Transwestern Pipeline Company, LLC (Transwestern) this *Report of 2020 Groundwater Remediation Activities* for the Roswell Compressor Station in Roswell, Chaves County, New Mexico. This report has been prepared for the exclusive use of and reliance by Transwestern and may not be relied upon by any other person or entity without the express written authorization of EarthCon.

Any reliance, use, or re-use of this document (or the opinions, findings, conclusions, or recommendations if any represented herein), by parties other than those expressly authorized by EarthCon is at the sole risk of those parties. This report was prepared by or performed under the direction of the EarthCon Professionals listed below and approved by Transwestern.

Signed:

Hannah Behar

Hannah Behar
Staff Scientist
EarthCon Consultants, Inc.

Steve Diamond

Steve Diamond, PE (AL, GA, LA, MO, SC, MI)
Senior Engineer
EarthCon Consultants, Inc.

JD Haines

J.D. Haines, LPG (IN)
Principal Geologist
EarthCon Consultants, Inc.

Date: 4/29/2021

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Report of 2020 Groundwater Remediation Activities
Former Surface Impoundments
Transwestern Compressor Station No. 9
(Roswell Compressor Station)
6381 North Main Street
Roswell, Chaves County, New Mexico
NMOCD GW-052
NMED 1656; EPA ID NMD986676955

Prepared For:

Transwestern Pipeline Company, LLC
1300 Main
Houston, TX 77002

April 2021

Certification Statement
40 CFR 270.11(d)(1)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SBoultinghouse

4/29/2021

Stacy Boultinghouse, PG (TX, LA)
Environmental Manager
Transwestern Pipeline Company, LLC

Date

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

EXECUTIVE SUMMARY

This *Report of 2020 Groundwater Remediation Activities* was prepared by EarthCon Consultants, Inc. (EarthCon) on behalf of Transwestern Pipeline Company, LLC (Transwestern) for the Former Surface Impoundments at the Transwestern Compressor Station No. 9 (also known as the Roswell Compressor Station) property located at 6381 North Main Street in Roswell, New Mexico. On March 13, 2013, the New Mexico Environment Department (NMED) issued a Stipulated Final Order (SFO) that governs activities associated with the Former Surface Impoundments. The purpose of the SFO, as stated in *Section III.A*, are 1) to ensure the continuance of ongoing remediation of contaminated soils and groundwater in the vicinity of the former surface impoundments to levels protective of human health or the environment in order to complete clean closure of the interim status units; and 2) to prevent or mitigate the migration of hazardous constituents at or from the Facility. As per *Section III.O* of the SFO, investigations, remediation, and other work that has been satisfactorily completed prior to the effective date of this Order, and that fulfills the substantive requirements of this Order, may be used to comply with this Order. Based on past investigations and the implementation of the corrective action plan, the groundwater treatment system continues to effectively control the migration of the PSH plume and continues to recover PSH and dissolved-phase hydrocarbons. Transwestern has fully complied with SFO objectives and has taken numerous actions to ensure that soils and groundwater at the Former Surface Impoundments will not adversely impact human health or the environment. This annual groundwater report was developed in general accordance with *Section IX.D – Reporting Requirements* of the SFO.

The former surface impoundments were historically used to store waste hydrocarbons, including pipeline condensate, pigging wastes, spent solvents, and other wastes and debris from pipeline maintenance activities conducted at the Roswell Compressor Station. The wastes were removed from the former surface impoundments and the area was backfilled with clean soil in 2001. A soil and groundwater remediation system was subsequently designed and installed to address dissolved-phase and phase separated hydrocarbons (PSH) detected in groundwater.

The remediation system in operation at the Roswell Compressor Station uses multiphase extraction (MPE) technology consisting of a soil vapor extraction (SVE) and treatment unit and a groundwater/PSH recovery and treatment unit. The recovery well network currently consists of 9 SVE-only wells and 35 MPE wells. A network of 30 monitoring wells (29 wells installed in

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

the Upper Aquifer and one well installed in the deeper regional San Andres Formation Aquifer) is used to assess groundwater conditions within the Project Area.

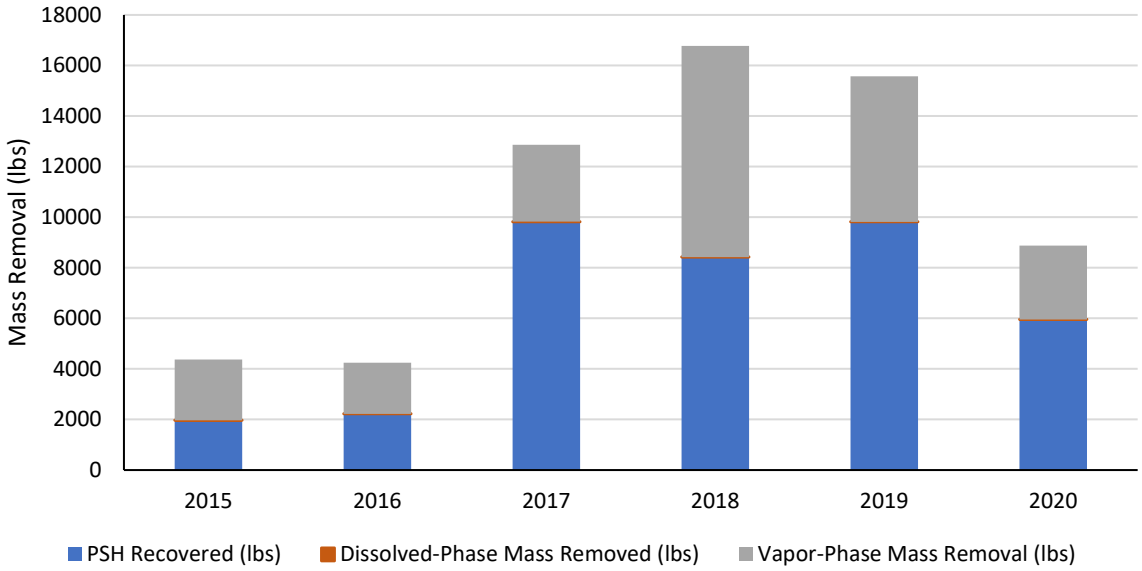
During 2020, the SVE portion of the recovery system operated from January through December. During this time, the system operated full-time except for periods of maintenance and during the semi-annual sampling events. The groundwater portion of the system operated from April through October in 2020. As during prior years of operation, the groundwater portion of the system was manually deactivated in January, February, March, November, and December of 2020 due to freezing temperatures. To protect the groundwater treatment system and minimize deactivation periods during future operations, heat tape and pipe insulation have since been installed throughout the process. Additional weather protection will be added as needed to minimize downtime during winter months.

The remediation system recovered approximately 2,918 pounds of vapor-phase hydrocarbons (or approximately 461 equivalent gallons) in 2020 during SVE system operation. The groundwater/PSH recovery system treated and discharged approximately 97,400 gallons of groundwater, removed approximately 8.07 pounds (approximately 1.27 equivalent gallons) of dissolved-phase hydrocarbons and recovered approximately 940 gallons (5,950 pounds) of PSH. A total of approximately 8,882 pounds of hydrocarbons were removed by the system in 2020. This compares to a total of approximately 15,600 pounds of hydrocarbon removed in 2019 (5,786 pounds of vapor-phase hydrocarbons, 1,550 gallons (9,811 pounds) of PSH, and 2.58 pounds of dissolved phase hydrocarbons). Removal rates for the last six years of operation are included below in **ES.1**. and **ES.2** as a comparison.

ES.1 - Historical Hydrocarbon Removal Summary

Year	Extracted Groundwater (gals)	PSH Recovered (lbs)	Dissolved-Phase Mass Removal (lbs)	Vapor-Phase Mass Removal (lbs)
2015	64,140	1,962	2.94	2,405
2016	137,650	2,216	5.35	2,026
2017	90,550	9,812	8.60	3,038
2018	41,120	8,419	3.12	8,356
2019	23,620	9,812	2.58	5,760
2020	97,400	5,950	8.07	2,918

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®



ES.2 - Historical Hydrocarbon Removal Summary

While the groundwater/PSH recovery portion of the remediation system was operational, water samples were collected from four locations in the treatment process to assess treatment efficiency and compliance with discharge requirements. Additionally, semi-annual groundwater sampling was conducted in May 2020 and November 2020 to assess groundwater conditions.

Consistent with historical data, the May and November 2020 groundwater elevation data indicated groundwater flow in the Upper Aquifer was to the north/northeast on the northern portion of the Project Area and to the southeast on the southern portion of the Project Area. The divide in the hydraulic gradient is located near the northeast corner of the Facility, indicating the presence of a complex water-bearing unit with areas of preferential flow.

During the 2020 semi-annual groundwater sampling events, PSH was present in groundwater monitoring wells, SVE wells, and MPE wells located in the vicinity of the Former Surface Impoundments. Dissolved benzene, toluene, ethylbenzene, and xylenes (BTEX), 1,1-DCE and Naphthalene were detected in groundwater at concentrations exceeding the applicable cleanup levels during the sampling events. It appears the benzene exceeding the GCLs is closely associated with observable PSH. Samples from MW-20, MW-22, MW-26, MW-39, MW-40, MW-41, MW-42, SVE-28, SVE-30, and RW-1 were also analyzed for 1,4-dioxane, but this constituent was only detected at SVE-30, at concentrations below the applicable cleanup levels. The data indicates delineation of PSH and dissolved constituents of concern

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

Received by OCD: 10/21/2022 8:09:38 AM

to applicable New Mexico Water Quality Control Commission's (NMWQCC) standards and the EPA Maximum Contaminant Levels (MCLs) was maintained within the existing monitoring network.

Based on the groundwater remediation activities completed in 2020, Transwestern recommends continued operation of the remediation system in 2021 to recover PSH and reduce dissolved-phase hydrocarbons, continued semi-annual groundwater monitoring, and continued monitoring of the effluent from the SVE system and discharge from the groundwater treatment system.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014

P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®
Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

TABLE OF CONTENTS

EXECUTIVE SUMMARY iv
1.0 INTRODUCTION 1
2.0 SCOPE OF ACTIVITIES 3
3.0 SEMI-ANNUAL GROUNDWATER MONITORING 3
3.1 Groundwater Monitoring Regulatory Criteria 5
3.2 Groundwater Monitoring & Chemical Analytical Data Results 5
3.2.1 Perched Aquifer 6
3.2.2 Upper Aquifer 6
3.3 PSH Thickness 7
3.3.1 Perched Aquifer 7
3.3.2 Upper Aquifer 8
3.4 Groundwater Analytical Results 8
3.4.1 Perched Aquifer 8
3.4.2 Upper Aquifer 9
4.0 REMEDIATION SYSTEM OPERATION, MAINTENANCE, AND MONITORING 9
4.1 Soil Vapor Extraction System Monitoring Results 11
4.2 Groundwater Treatment System Monitoring Results 12
5.0 SUMMARY OF FINDINGS AND CONCLUSIONS 13

TABLES

Table 3-1 Sampling and Analysis Plan
Table 3-2 Summary of Groundwater Surface Elevations
Table 3-3 Summary of Field Parameters
Table 3-4 Summary of Historical Field Parameters
Table 3-5 Summary of Groundwater Analytical Results
Table 3-5a Summary of Groundwater Analytical Results – Other Detected Constituents.
Table 3-6 Summary of Well Completion Details
Table 4-1 SVE System Mass Removal Calculations for Total Volatile Organic Compounds
Table 4-2 Summary of Treated Water Irrigation Rates
Table 4-3 Groundwater Treatment System Mass Removal Calculations for Total BTEX
Table 4-4 Summary of Water Treatment System Analyses
Table 4-5 Summary of Air Stripper Vapor Discharge Monitoring
Table 4-6 Historical Hydrocarbon Removal Summary

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®
Released to Imaging: 11/22/2022 9:07:27 AM

FIGURES

Figure 1-1 Site Location Map
Figure 1-2 Site Features
Figure 1-3 Remediation System Layout
Figure 1-4 Equipment Compound Detail
Figure 3-1 Well Locations
Figure 3-2a Groundwater Surface Elevations in the Perched Aquifer, May 2020
Figure 3-2b Groundwater Surface Elevations in the Perched Aquifer, November 2020
Figure 3-3a Groundwater Surface Elevations in the Upper Aquifer, May 2020
Figure 3-3b Groundwater Surface Elevations in the Upper Aquifer, November 2020
Figure 3-4a Distribution of PSH in the Perched Aquifer, May 2020
Figure 3-4b Distribution of PSH in the Perched Aquifer, November 2020
Figure 3-5a Distribution of PSH in the Upper Aquifer, May 2020
Figure 3-5b Distribution of PSH in the Upper Aquifer, November 2020
Figure 3-6 Distribution of Dissolved Benzene in the Perched Aquifer, November 2020
Figure 3-7a Distribution of Dissolved Benzene in the Upper Aquifer, May 2020
Figure 3-7b Distribution of Dissolved Benzene in the Upper Aquifer, November 2020
Figure 3-8 Distribution of Dissolved BTEX in the Perched Aquifer, November 2020
Figure 3-9a Distribution of Dissolved BTEX in the Upper Aquifer, May 2020
Figure 3-9b Distribution of Dissolved BTEX in the Upper Aquifer, November 2020
Figure 3-10 Distribution of Dissolved 1,1-DCE in the Perched Aquifer, November 2020
Figure 3-11a Distribution of Dissolved 1,1-DCE in the Upper Aquifer, May 2020
Figure 3-11b Distribution of Dissolved 1,1-DCE in the Upper Aquifer, November 2020

APPENDICES

Appendix A Copies of the May, September, and November 2020 PSH Evaluation Field Notes
Appendix B Analytical Data Packages – Semi-annual Groundwater Sampling
Appendix C Analytical Data Packages – SVE and Groundwater Treatment System Sampling
Appendix D Historical SVE System Tables for Gasoline Range Organics
Appendix E Depth to Water and Product Thickness Graphs

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

Received by OCD: 10/21/2022 8:09:38 AM

1.0 INTRODUCTION

This *Report of 2020 Groundwater Remediation Activities* was prepared by EarthCon Consultants, Inc. (EarthCon) on behalf of Transwestern Pipeline Company, LLC (Transwestern) to document on-going corrective actions associated with the Former Surface Impoundments at the Transwestern Compressor Station No. 9 (also known as the Roswell Compressor Station) property, located at 6381 North Main Street in Roswell, New Mexico (the "Site").

The Site consists of the Roswell Compressor Station and the area undergoing corrective action (the "Project Area") (**Figure 1-1** and **Figure 1-2**). On March 13, 2013, the New Mexico Environment Department (NMED) issued a Stipulated Final Order (SFO) that governs environmental activities conducted within the Project Area. This report was developed in general accordance with *Section IX.D – Reporting Requirements* of the SFO.

The Facility is an active natural gas compressor station, owned and operated by Transwestern, located approximately 8 miles north of the city center of Roswell, New Mexico along the eastern side of U.S. Highway 285. The Facility occupies approximately 77 acres of land in Section 21 (SW¼ of the SW¼) and Section 28 (NW¼ of the NW¼) of Township 9S and Range 24E, Chaves County, New Mexico (**Figure 1-1**). Access is via U.S. Highway 285, and the entire Facility is secured by a chain-link fence with locked gates.

The Project Area encompasses a portion of the northeast corner of the Facility and a portion of a 40-acre easement of land to the northeast, leased from the New Mexico State Land Office (SLO) State Trust Land for remediation and monitoring purposes (**Figure 1-2**). There are no adjacent structures on either the Facility or the State Land other than those associated with the remediation system. Most of the off-site extraction and monitoring wells are located within a fenced perimeter.

The Facility is located along the Transwestern natural gas pipeline that extends from Texas to the Arizona/California border, and serves as the district office for Transwestern's New Mexico operations. The compressor station services two 30-inch main lines and two 24-inch lateral pipelines. The primary function of the compressor station is to boost the pressure of the natural gas stream by means of compressors powered by natural gas-fueled internal combustion engines. Additionally, the Facility conducts gas transmission pipeline maintenance operations that generate waste hydrocarbons, including pipeline condensate, pigging wastes, spent solvents, and other wastes and debris, which were historically discharged to the former surface impoundments (also

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®
Released to Imaging: 11/22/2022 9:07:27 AM

referred to as Pits 1 and 2). Currently, wastes generated as a result of operations are transported offsite for disposal in accordance with all local, state and federal requirements.

The historic wastes were removed from the former surface impoundments and the excavations were lined with a polyethylene liner and backfilled with clean soil in 2001. A soil and groundwater remediation system was subsequently designed and installed to address dissolved and phase separated hydrocarbons (PSH) detected in groundwater in 2002/2003. The soil vapor extraction (SVE) portion of the system began operation in March 2003, and the groundwater/PSH recovery portion of the system began operation April 2004.

The remediation system consists of SVE blowers with a treatment unit, a groundwater/PSH recovery and treatment unit, and a network of 9 active SVE-only wells and 35 multi-phase extraction (MPE) wells (**Figures 1-3** and **1-4**). Three additional SVE wells (SVE-1A, 2A, and 3) are inactive at the Site. Vapor-phase hydrocarbons are extracted via SVE-only wells and MPE wells and routed to two Baker Furnace thermal oxidizer units for treatment. Groundwater and PSH are recovered by pneumatic pumps installed in the MPE recovery wells. The recovered fluids are conveyed to a 210-barrel aboveground storage tank that serves as a surge tank and separation unit for PSH and groundwater. Separated groundwater is conveyed to a treatment train consisting of an air stripper followed by a particulate filter vessel and two additional liquid-phase granulated activated carbon (GAC) units in series. The treated water is then conveyed to an irrigation water tank for dispersal via an irrigation system. PSH separated in the surge tank is removed by a vacuum truck and sent to a permitted off-site disposal facility periodically. The vapor stream from the air strippers is treated via two vapor-phase GAC units followed by discharge to the atmosphere.

Typically, the SVE portion of the system operates year-round, and groundwater/PSH recovery occurs from spring to fall, with brief shutdowns for repair and maintenance. For the 2020 reporting year, the SVE system operated year-round and the groundwater/PSH recovery occurred from April to October. In addition, the system is deactivated for 48 to 72 hours in preparation for semi-annual monitoring.

Currently, a network of 30 monitoring wells (29 installed in the Upper Aquifer and one installed in the deeper regional San Andres Formation Aquifer) is used to assess groundwater conditions within the Project Area.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

This report documents groundwater remediation and monitoring activities conducted at the Project Area during year 2020. Field activities were conducted by CMB Environmental & Geologic Services, Inc. (CMB) of Roswell, New Mexico.

2.0 SCOPE OF ACTIVITIES

The activities performed at the Site during 2020 include the following and are summarized below:

- Semi-annual groundwater monitoring;
- Remediation system operation, maintenance, and monitoring;
- Investigation of a suspected perched aquifer.

3.0 SEMI-ANNUAL GROUNDWATER MONITORING

Semi-annual groundwater sampling to assess groundwater conditions was conducted in May 2020 and November 2020 by CMB in general accordance with the SFO. Six groundwater samples were collected from MW-10, MW-11, MW-17, SVE-28, SVE-30, and RW-1 in September 2020 as a response to the HWB-TWP-20-001 Comments from the State received on July 2, 2020. The groundwater monitoring network at the Site consists of 30 monitoring wells, of which 25 are included within the monitoring plan and the remaining wells are used for gauging. Groundwater samples were collected from 11 of these monitoring wells during the May 2020 sampling event and from 22 of these monitoring wells during the November 2020 sampling event, in general accordance with the approved *Sampling and Analysis Plan* (SAP) presented in **Table 3-1**.

In correspondence dated July 2, 2020, NMED requested that groundwater samples be collected for wells RW-1, MW-10, MW-11, MW-17, SVE-28 and SVE-30 during the 2020 semi-annual sampling events. These wells were sampled in September 2020, and again in November 2020 (Response to HWB-TWP-20-002 Comment 2).

Prior to commencing semi-annual groundwater gauging and sampling, the remediation system (groundwater extraction and soil vapor extraction) was manually deactivated for a period of 48 to 72 hours. Depth to PSH, if present, and depth to groundwater was measured in each monitoring well and MPE well using an interface probe, which consists of an optical sensor probe capable of distinguishing between PSH and groundwater. Apparent PSH thickness and water levels were recorded to the nearest 0.01-foot and the data is presented in **Table 3-2**.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com

Prior to sampling, the selected monitoring wells were purged and monitored for stabilization of water quality parameters, including pH, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP), and temperature using a calibrated YSI Meter, in accordance with US EPA Sampling and Analysis Plan Guidance and Template Version 4, dated May 2014. Stable water quality parameter (temperature, pH and specific conductance) measurements indicate representative sampling is obtainable. Water quality is considered stable if for three consecutive readings:

- temperature range is no more than +1C;
- pH varies by no more than 0.2 pH units;
- specific conductance readings are within 10% of the average.

Field parameters recorded from the May 2020, September 2020, and November 2020 sampling events are presented in **Table 3-3**. Historical field parameters prior to the 2020 sampling events are included in **Table 3-4**. During the September 2020 event, MW-11 did not meet stabilization criteria for temperature after three well volumes had been purged. However, the other water quality parameters were stable for MW-11, so the sample was considered acceptable. During the November 2020 sampling event, pH stabilization criteria was not met for MW-13, MW-14, MW-17, MW-22, MW-24D, MW-35, or SVE-28. Of these wells, MW-13, MW-14, MW-17, MW-22, MW-35, and SVE-28 were purged for at least three well volumes. Well MW-24D was purged for less than three well volumes but used low flow purging. All other water quality parameters besides pH stabilized, so the samples were considered acceptable. As per EPA Region 4 SESD Operating Procedure, an adequate purge is normally achieved when three to five well volumes have been purged. In future sampling events, at least three purge volumes (and up to a total of five well volumes) will be used if necessary, to achieve parameter stability (Response to HWB-TWP-20-001 Comment 7).

A combination of disposable bailers and bladder pumps with dedicated tubing was used to purge and collect groundwater samples from selected monitoring wells. The groundwater samples collected during the semi-annual sampling event were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) via EPA Method 8260, for Volatile Organic Compounds (VOCs) via EPA Method 8260B, and for 1,4-Dioxane via EPA Method 8270C SIM in accordance with the SAP (Response to HWB-TWP-20-002 Comment 2). Quality control samples including

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

groundwater sample duplicates, field blanks, equipment blanks, and trip blanks were collected during the semi-annual sampling events. Purged groundwater and equipment decontamination water were collected in a dedicated 55-gallon drum during sampling and then transferred to the surge tank for on-site treatment and disposal as described in Section 1.0. Copies of the field documentation are included in **Appendix A**.

3.1 Groundwater Monitoring Regulatory Criteria

Groundwater cleanup levels (GCLs) were identified for evaluating analytical data for groundwater samples collected during the semi-annual sampling events, in accordance with Section VI.A. of the March 2013 SFO for the Site. The GCLs shown in **Table 3-5** were identified as described in the following paragraphs.

The target constituents-of-concern (COCs) required to be sampled per the approved 2020 Sampling Plan for the Project Area include BTEX, 1,1-dichloroethane (1,1-DCA), and 1,1-dichloroethene (1,1-DCE). The GCLs for the target COCs were identified using the NMWQCC standards Human Health Standard (HHS) described in NMAC 20.6.2, as well as the EPA MCLs for drinking water contaminants. If both a NMWQCC standard and a MCL have been established for an individual substance, then the lower of the two levels is used as the GCL for that COC. If neither a NMWQCC standard nor a MCL has been established for a COC, then the cleanup level is identified as the screening level for tap water in Table A-1 of the 2012 NMED Risk Assessment Guidance for Site Investigation and Remediation, or the EPA Region 6 Screening Levels for tap water.

The Project Area has been in active remediation since 2001 and the remediation system formerly operated under NMOCD's formal Discharge Permit GW-052. The NMOCD determined that the Discharge Permit is not necessary for the Site, and it is more practical to regulate the Site under a *Stage 2 Abatement Plan* (AP). In December 2015, the Discharge Permit for the Site was allowed to expire. A Stage 2 AP for the Site was submitted to the NMOCD and was approved on March 14, 2016.

3.2 Groundwater Monitoring & Chemical Analytical Data Results

The water bearing unit at the Site has been reported as a perched aquifer within the area of the former surface impoundments, an upper aquifer within which most of the monitoring and remedial activities take place, and the deeper San Andres Formation Aquifer. To date, the deeper San Andres Formation

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

Aquifer has not been impacted by the release associated with the Former Surface Impoundments. Well locations are illustrated in **Figure 3-1** and a summary of well construction information is provided in **Table 3-6**.

Groundwater elevations shown in **Table 3-2** were calculated using the May and November 2020 groundwater elevation data collected from the Site groundwater monitoring wells and top-of-casing data from a survey conducted by PR Patton & Associates in October 2013.

3.2.1 Perched Aquifer

Based on current data and historical information dating back to 1991, a perched aquifer appears to intersect wells SVE-23, SVE-25, SVE-27, SVE-28, SVE-31, and RW-1. In addition to the information presented in this report, an evaluation of the perched aquifer and corrective action recommendations will be submitted separately as per April 9, 2021 NMED correspondence. The potentiometric surface maps for the Perched Aquifer are presented in **Figures 3-2a** and **3-2b.**

3.2.2 Upper Aquifer

The potentiometric surface maps for the Upper Aquifer, presented in **Figures 3-3a** and **3-3b,** indicate that groundwater flows generally to the north on the northern portion of the Project Area and to the southeast on the southern portion of the Project Area. The divide in the hydraulic gradient is located near the northeast corner of the Facility, indicating the presence of a complex water-bearing unit with areas of preferential flow.

Based on the groundwater elevation data, the hydraulic gradient for the northern component of groundwater flow, between monitoring wells MW-12 and MW-40, was 0.019 ft/ft during the May 2020 sampling event and 0.018 ft/ft during the November 2020 sampling event, which appears to be consistent with historical data. The hydraulic gradient for the southeastern component of groundwater flow, between monitoring wells MW-16 and MW-35, was 0.005 ft/ft during the May 2020 sampling event and 0.004 ft/ft during the November 2020 sampling event, which appears to be consistent with historical data.

A review of historical groundwater elevation data for the Site monitoring wells (**Table 3-2**) indicates the Upper Aquifer within the Project Area has experienced an average decrease in groundwater level elevation of 1.54 feet between October 2009 and November 2020. The groundwater elevation in MW-24D, installed in the deeper regional San Andres Formation Aquifer, decreased by 4.22 feet between 2009 and 2020.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

3.3 PSH Thickness

Groundwater gauging data collected from Site monitoring and recovery wells during the May 2020 sampling event indicates that the average apparent PSH thickness was 0.94 feet, with a maximum of 2.98 feet measured in SVE-23. Groundwater gauging data collected from Site monitoring and recovery wells during the November 2020 sampling event indicates that the average apparent PSH thickness was 0.73 feet, with the maximum thickness of 1.99 feet measured in MPE-38. As of 2021, eleven wells (MPE-10, MPE-16, MPE-17, MPE-27, MPE-38, MW-16, MPE-40, MPE-41, MW-1B, SVE-23, and SVE-25) contain PSH. Correlation graphs have been developed between depth to water and PSH (Response to HWB-TWP-20-002 Comment 3) and are presented in **Appendix E**. Due to recovery efforts, PSH thickness has decreased in certain wells despite fluctuations in the water table. PSH thickness has decreased or has not been measurable for multiple consecutive years in MW-2, MW-12, MPE-20, MPE-21, MPE-23, MPE-24, MPE-28, and MPE-31.

3.3.1 Perched Aquifer

On May 13, 2020 and November 10, 2020, liquid levels were measured in SVE-23 using an optical interface probe to determine the presence and apparent thickness of PSH. According to liquid levels, the apparent thickness of 2.98 feet and 1.17 feet was measured in SVE-23 in May and November 2020, respectively. During 2020, PSH thickness at SVE-23 appeared to be positively correlated with depth to water, but more data is needed for evaluation (Response to HWB-TWP-20-002 Comment 3). Gauging will be conducted every month in 2021, the first four months of which are presented in **Table 3-2**, and an evaluation will be presented in a separate report, as per NMED correspondence dated April 9, 2021. Distribution of PSH apparent thickness is presented in **Figures 3-2a** and **3-2b**. Further PSH monitoring will continue for SVE-23 in 2021. In addition, the SVE-23 will be re-developed using clean water and bailing techniques to remove PSH that may trapped in the well sand pack.

In correspondence dated July 2, 2020 and November 25, 2020, NMED requested Transwestern to provide a work plan to delineate the PSH in SVE-23 which is in the perched aquifer. Based on further review of historical records, Transwestern notes that certain work related to the perched aquifer was first delineated during the 1991 Shallow Subsurface Investigation and in multiple reports prior to the 2013 SFO. Since SVE-23 is the only well to contain PSH, it is believed the

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

PSH in SVE-23 may be residual product that may have accumulated in that well. Historical PSH measurements in wells located in the perched aquifer and upper aquifer indicate that the PSH footprint has stabilized or decreased. Therefore, incurring additional cost to further delineate the PSH in the perched aquifer would not be beneficial to the overall objective of recovering PSH at this time. In correspondence dated July 2, 2020 and November 25, 2020, NMED requested Transwestern to suspend PSH recovery activities in SVE-23 and monitor PSH thickness over time; however, Transwestern recommends that PSH recovery via manual bailing be initiated immediately in SVE-23 considering the overall corrective action objective for the site. Liquid levels and recovery data collected from SVE-23 during bailing activities will be evaluated to determine if a more aggressive recovery method is warranted. Although, it should be noted that the current recovery well network for the groundwater extraction and soil vapor extraction is within the footprint of the perched aquifer, specifically in SVE-23.

3.3.2 Upper Aquifer

The areal extent of PSH in the Upper Aquifer, as measured during the May and November 2020 semi-annual sampling events, remains delineated within the Project Area and appears consistent with 2019 data. (**Figures 3-5a** and **3-5b**). PSH trends decrease since 2018. Current and historical groundwater gauging data is presented in **Table 3-2**.

3.4 Groundwater Analytical Results

Groundwater samples were collected and analyzed for BTEX by EPA method 8260 or for VOCs via EPA Method 8260B, and 1,4-dioxane was analyzed by EPA method 8270SIM in accordance with the SAP. The analytical results for groundwater samples collected during the May, September, and November 2020 sampling events are summarized in **Table 3-5** and the laboratory analytical reports are included in **Appendix B**. Due to PSH detections, a groundwater sample was not collected from MW-16 in May or November 2020.

3.4.1 Perched Aquifer

In the Perched Aquifer, BTEX was detected above reporting limits in wells SVE-28, SVE-30, and RW-1. However, benzene was the only BTEX constituent in these wells that exceeded GCLs (Response to HWB-TWP-19-001 Comment 2). Analytical data also indicates that 1,4-dioxane was not detected in SVE-28 or RW-1; although 1-4-dioxane was detected in SVE-30, it was not above the GCL.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Analytical data indicates that 1,1-DCA was detected in concentrations exceeding the GCLs in well SVE-30 during the September and November 2020 sampling events (Response to HWB-TWP-20-001 Comment 15). Based on the 2020 analytical data, the areal distribution of BTEX, 1,1-DCA, and 1,1-DCE in the Perched Aquifer remains delineated within the Project Area and is consistent with the 2019 data (**Figures 3-6** through **3-11**).

3.4.2 Upper Aquifer

In the Upper Aquifer, BTEX were not detected above reporting limits in MW-10, MW-11, MW-13, MW-14, MW-17, MW-20, MW-21, MW-22, MW-24D, MW-26, MW-27, MW-29, MW-32, MW-34, MW-35, MW-37, MW-39, MW-40, MW-41, MW-42, and SVE-31. None of the BTEX detects exceeded GCL in the Upper Aquifer. The results also indicate that 1,4-dioxane was not detected in MW-20, MW-22, MW-26, MW-39, MW-41, or MW-42.

Analytical data indicates that other VOCs were detected in MW-20, MW-22, MW-26, MW-39, MW-41, and MW-42, but only 1,1-DCE was detected at concentrations exceeding GCLs in wells MW-26 and MW-39. Based on the 2020 analytical data, the areal distribution of BTEX, 1,1-DCA, and 1,1-DCE in the Upper Aquifer remains delineated within the Project Area and is consistent with the 2019 data. Furthermore, it appears that benzene and PSH concentration are closely related (**Figures 3-6** through **3-11**).

Analytical results for the duplicates are included in the laboratory data packages in **Appendix B** and indicate that the only target analyte detections were for MW-39, MW-22, and MW-26. For quality assurance purposes, the relative percent difference (RPD) of the reported concentrations between the original samples and their duplicates was calculated for each semi-annual sampling event. The RPDs were at or below 7% for each sampling event, with the calculations included in **Appendix B**.

4.0 REMEDIATION SYSTEM OPERATION, MAINTENANCE, AND MONITORING

During 2020, the SVE portion of the recovery system was operational year-round and included all circuits except for when the SVE system was deactivated for equipment repairs and semi-annual sampling events.

The groundwater/PSH recovery portion of the remediation system operated from April 9, 2020 to October 31, 2020, except for periods of maintenance and during the semi-annual sampling events. Specifically, the groundwater/PSH recovery portion of the remediation system was

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

deactivated in January, February, March, November, and December 2020 due to freezing temperatures. Transwestern reviewed potential cost to winterize the groundwater extraction and treatment equipment components by installing a new heated building, replace the existing outdoor surge tank with an oil/water separator, and replace the spray field with an infiltration gallery (Response to HWB-TWP-20-001 Comment 13). Considering the tasks needed for this upgrade (design, geotechnical study, procurement, installation and permitting), the probable cost for the upgrade could range between $200,000 to $300,000. The benefit for incurring the additional cost to upgrade the system for operating over the extreme winter months would not be considerable since the remaining LNAPL in the subsurface appears to be at residual saturation levels. Furthermore, since the LNAPL and dissolved-phase plume is controlled, it is recommended that the groundwater extraction system operate in a pulsing manner by alternating the operation of select extraction wells over a certain period time. This will allow sufficient time for residual LNAPL to rebound and be recovered more efficiently. If groundwater data suggest that the plume is migrating, the pulsing program would be suspended. The details of the proposed pulsing enhancement will be described in the annual update to the Operation, Maintenance and Monitoring Plan (O&MM Plan), as per March 16, 2021 correspondence with NMED.

To protect the groundwater treatment system and minimize deactivation periods during future operations, heat tape and pipe insulation have since been installed throughout the process. Additional weather protection will be added as needed to minimize downtime during winter months. However, during extreme freezing temperatures that exist over consecutive days in the winter months, the system will be deactivated. Constant days of severe freezing would increase the risk of failures and major damage to equipment components, piping system, and spray field and possibly lead to uncontrolled discharges or safety hazards. Therefore, deactivation of the system during these occurrences is recommend.

The groundwater/PSH recovery portion of the remediation system was deactivated 48 to 72 hours prior to the 2020 semi-annual sampling events (May 2020 and November 2020).

The remediation system was monitored on a weekly basis to assess for continuous operation of components, maintenance needs, and early detection of potential leaks. System readings, such as flow rates, pressure, and temperature, were collected by the operator on a routine basis to monitor system performance and treatment efficiencies. During this reporting period, maintenance activities of the groundwater recovery system consisted of installing a new meter on

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

the surge tank, replacing filters and rubber washers, decalcifying the air stripper, replacing irrigation sprinkler heads, repairing discharge lines, changing filter bags, cleaning the float switch, installing new sumps, installing new o-rings, fixing hose leaks, changing sock filters, maintenance on the compressor, replacing V-belts on the compressor, repairing the GAC water hose, and repairing the compressor switch. Maintenance activities on the SVE portion of the treatment system during this reporting period included installing new 55-gallon GAC drums on the air stripper, repaired flex hose on the west baker unit, repairing a 4" line, repairing the outlet on the surge tank, repairing an airline on MPE-27, replacing the chart recorder paper periodically, minor maintenance on the compressor, installing a new thermocouple, decalcifying the air stripper, fixing electrical issues, greasing bakers, and repairing a linkage bolt.

Monthly samples were collected from April through October 2020 from the groundwater treatment system at four locations in the treatment process: at the inlet of the air-stripper (Pre-Treatment); at the outlet of the air stripper (Post Air Stripper); at the outlet of the first GAC unit (Between GACs); and at the outlet of the irrigation water holding tank (Post-Treatment). The samples collected from the Pre-Treatment, Post Air Stripper, and Between GACs locations were analyzed for BTEX via method 8021B, and the Post-Treatment sample was analyzed for anions via EPA method 300.0, dissolved metals via EPA method 200.7, and VOCs via EPA method 8260B. In addition, vapor readings are collected bimonthly along the process line of the vapor-phase granular carbon connected to the air stripper air exhaust port. Monitoring data is summarized in **Table 4-5** (Response to HWB-TWP-19-002 Comment 3).

Influent air samples from the process pipes prior to entering the east and west Baker Furnaces were collected and analyzed for total VOCs (TVOCs) by EPA Method TO-15 in March 2020, September 2020, and January 2021. In July 2020 only east Baker Furnace samples were collected and analyzed, and in August 2020 only west Baker Furnace samples were collected and analyzed. Total VOCs concentrations are presented in **Table 4-1**.

4.1 Soil Vapor Extraction System Monitoring Results

The average combined air flowrate of the SVE system was approximately 320 cubic feet per minute (cfm) with an applied vacuum between 14 and 82 inches of water. The two thermal oxidizers maintained an average chamber treatment temperature of 1,500ºF, which is above the required thermal destruction temperature of 1,400ºF.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

In 2020, air samples of influent vapor were collected from the Baker Furnaces and were analyzed for TVOCs using EPA method TO-15. Analytical data results summarized in **Table 4-1** indicate that the SVE system recovered approximately 2,918 pounds (or about 461 equivalent gallons) of vapor-phase TVOCs in 2020, compared to the approximately 5,767 pounds (or about 910 gallons) removed in 2019. Historical recovery amounts are provided in **Table 4-6.**

Laboratory data packages are included in **Appendix C**. Historical SVE data was analyzed for TPH in the gasoline range organics (GRO) via EPA method 8015D. These historical tables have been included in **Appendix D**.

4.2 Groundwater Treatment System Monitoring Results

The groundwater extraction flowrate averaged 0.37 gallons per minute (gpm) in 2020. Operation records for the irrigation system presented in **Table 4-2** indicate that the volume of groundwater recovered, treated, and discharged in 2020 was approximately 97,400 gallons.

According to **Table 4-3**, approximately 8.07 pounds (1.27 equivalent gallons) of dissolved-phase hydrocarbons were removed by the groundwater/PSH recovery system in 2020. The amount of dissolved phase hydrocarbons removed in 2020 appears to have increased compared to 2019, during which 2.58 pounds (0.41 equivalent gallons) of dissolved phase hydrocarbons were removed from approximately 24,080 gallons of treated groundwater. A total of approximately 79 pounds of dissolved TVOCs has been removed by the groundwater remediation system since 2009. In addition, approximately 940 gallons of PSH accumulated in the surge tank in 2020. PSH separated in the surge tank is removed by a vacuum truck and sent to a permitted off-site disposal facility periodically. Historical PSH recovery volumes are provided in **Table 4-6.**

Based on NMED Comment 14 (7/2/2020) an evaluation of the MPE wells were conducted in 2020. The MPE wells are installed on top of the clay layer, and the pumps are currently installed 6 inches from the bottom of the wells. Lowering the pumps in the wells is not possible as the clay layer might be penetrated. The water level in the Upper Aquifer is near the confining clay layer and fluctuates with the season. Recharge rates decline during the summer months (droughts) as water levels decrease. The groundwater level, clay layer, and the down-well pneumatic pump design limits the water recovery rate in the Upper Aquifer. Therefore, increasing the flowrate in the MPE wells with the current remedial design is not feasible (Response to HWB-TWP-20-001 Comment 14).

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

To address residual soil contamination within the source area, SVE wells were co-located with the MPE wells. The SVE wells (apart from SVE-3, SVE-23, and SVE-30) were advanced approximately 30-35 ft below ground surface (bgs) within the shallow soil zone consisting of primarily sands and gravels. Due to their shallow depth, the SVE wells are frequently above the water table elevation and may not have detectable water. During 2020, SVE-1A, SVE-2A, SVE-3, SVE-22, SVE-24, SVE-25, SVE-26, SVE-27, and SVE-31, were dry during at least one sampling event.

Monthly water treatment samples were collected between April and October 2020. Samples from the locations identified as Pre-Treatment, Between GACs, and Post Air Stripper were analyzed for BTEX via EPA Method 8021B, and the Post Treatment sample was analyzed for anions via EPA method 300.0, dissolved metals via EPA method 200.7, and VOCs via EPA method 8260B. The analytical data for these samples demonstrates that the treatment system is effectively removing the hydrocarbon constituents present in the recovered groundwater. Furthermore, analytical data for the Post-Treatment sample indicate that BTEX was not detected above laboratory reporting limits. Analytical data for the monthly samples is summarized in **Table 4-4** and laboratory data packages are included in **Appendix C**.

Between April and September 2020, the air stripper was monitored at multiple points to detect potential breakthrough of VOCs through the carbon treatment system. The PID readings from locations identified as Prior to Carbon, Between Carbon Vessels, and After Carbon Vessels are provided in **Table 4-5 (**Response HWB-TWP-19-002 Comment 3**)**.

5.0 SUMMARY OF FINDINGS AND CONCLUSIONS

Based on the information presented in the previous sections regarding the operation of the remediation system installed at the Project Area, the following findings and conclusions are offered:

- The 2020 Upper Aquifer groundwater gauging data identified a northern component of groundwater flow with a gradient of 0.019 ft/ft and 0.018 ft/ft during the May 2020 and November 2020 sampling events respectively, and a southeastern component of groundwater flow with a gradient of 0.005 ft/ft during the May 2020 sampling event and 0.004 ft/ft during the November 2020 sampling event. These gradients are generally consistent with previous years' observations.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

- Historical gauging data for the Site monitoring wells indicates that between 2009 and 2020 groundwater elevation in the Upper Aquifer of the Project Area has decreased by an average of 1.54 feet and groundwater elevation in the deeper San Andres Formation Aquifer has decreased by 4.22 feet.

- Groundwater gauging data collected from the Site monitoring and recovery wells during the May and November 2020 semi-annual groundwater monitoring events indicates that PSH remains delineated within the Project Area. The average side-wide apparent thicknesses of PSH measured in 2020 was 0.94 feet during the May 2020 sampling event and 0.73 feet during the November 2020 sampling event. The maximum site-wide apparent thicknesses of PSH measured in 2020 was 2.98 feet in SVE-23 during the May 2020 sampling event and 1.99 feet in MPE-38 during the November 2020 sampling event.

- Analytical data from the 2020 semi-annual groundwater monitoring events indicates that BTEX, 1,1-DCE, and 1,1-DCA were detected at dissolved concentrations exceeding the GCLs in four monitoring wells. These exceedances are within the existing monitoring network. Benzene exceeding the GCLs is closely associated with observable PSH. 1,1-DCE concentrations are generally consistent with previous results. 1,1-DCA is above GCL in SVE-30, which is located in the monitoring network.

- During 2020, the SVE portion of the recovery system operated year-round except for periods of maintenance and prior to sampling events. The groundwater/PSH recovery portion of the system operated full-time from April to October except for periods of system maintenance, and the semi-annual sampling events. Approximately 2,918 pounds of vapor-phase TVOCs (approximately 461 equivalent gallons) were recovered by the SVE technology.

- The groundwater/PSH recovery system recovered, treated, and discharged 97,400 gallons of groundwater in 2020. Approximately 8.07 pounds of dissolved-phase BTEX hydrocarbons were removed by the groundwater/PSH recovery system in 2020. A total of approximately 79 pounds of dissolved-phase hydrocarbons have been removed by the system since May 2009. The groundwater/PSH recovery system recovered approximately 940 gallons (approximately 5,950 pounds) of PSH in 2020. In total, approximately 8,882 pounds of hydrocarbons were removed by the system in 2020.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

- Based on the evaluation and historical information, a perched aquifer appears to exist and intersect wells SVE-23, SVE-25, SVE-27, SVE-28, SVE-31, and RW-1. Recommendations and an evaluation of the perched aquifer will be given in a separate report, as per NMED correspondence dated April 9, 2021.
- Two semiannual sampling events were completed for the recovery well RW-1, several SVE wells, and monitoring wells MW-10, MW-11, and MW-17 as requested by NMED.
- Samples collected on a monthly basis between April and October 2020 from the groundwater treatment system demonstrate that the treatment system is effectively removing the hydrocarbon constituents present in the recovered groundwater.

Based on the 2020 groundwater data, the groundwater treatment system continues to control the migration of the PSH plume and continues to recover PSH and dissolved-phase hydrocarbons.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014

P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

TABLES

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-1B	3/10/2009	3609.96	60.46	62.20	1.74	3,549.08
	10/8/2009		sheen	64.18	sheen	3,545.78
	1/26/2010		60.32	60.60	0.28	3,549.57
	3/22/2010		59.82	61.86	2.04	3,549.65
	4/17/2011		60.18	62.05	1.87	3,549.33
	12/22/2011		61.01	63.24	2.23	3,548.41
	4/17/2012		60.65	62.45	1.80	3,548.88
	10/18/2012		61.88	64.21	2.33	3,547.52
	1/22/2013		61.38	63.55	2.17	3,548.06
	4/15/2013		61.24	63.10	1.86	3,548.27
	11/3/2013	3610.74 (h)	62.19	63.35	1.16	3,548.27
	4/30/2014		61.50	62.73	1.23	3,548.94
	11/19/2014		61.87	64.03	2.16	3,548.35
	4/21/2015		61.76	63.25	1.49	3,548.62
	11/3/2015		61.88	63.66	1.78	3,548.43
	4/29/2016		61.81	63.28	1.47	3,548.58
	11/16/2016		62.12	63.68	1.56	3,548.25
	5/22/2017		61.80	62.90	1.10	3548.68
	11/13/2017		62.65	64.41	1.76	3,547.67
	6/1/2018		60.60	61.25	0.65	3,549.98
	11/6/2018		63.08	63.09	0.01	3,547.66
	6/24/2019		61.27	62.18	0.91	3,549.25
	1/5/2020		61.60	61.95	0.35	3,549.06
	5/13/2020		61.73	62.07	0.34	3,548.93
	11/10/2020		62.75	62.95	0.20	3,547.94
	1/18/2021		(a)	62.38	(a)	3,548.36
	2/10/2021		62.70	62.91	0.21	3,547.99
	3/8/2021		62.65	62.91	0.26	3,548.03
	4/5/2021		62.71	62.95	0.24	3,547.97
MW-2	3/10/2009	3611.76	(a)	59.10	(a)	3,552.66
	10/8/2009		(a)	60.39	(a)	3,551.37
	3/22/2010		(a)	59.66	(a)	3,552.10
	4/17/2011		(a)	59.77	(a)	3,551.99
	12/22/2011		(a)	59.79	(a)	3,551.97
	4/17/2012		(a)	60.30	(a)	3,551.46
	10/18/2012		(a)	61.30	(a)	3,550.46
	1/22/2013		(a)	61.07	(a)	3,550.69
	4/15/2013		(a)	61.30	(a)	3,550.46
	11/3/2013	3612.62 (h)	(a)	60.77	(a)	3,551.85
	4/30/2014		(a)	60.48	(a)	3,552.14
	11/19/2014		(a)	60.60	(a)	3,552.02
	4/21/2015		(a)	58.85	(a)	3,553.77
	11/3/2015		(a)	59.45	(a)	3,553.17
	4/28/2016		(a)	59.59	(a)	3,553.03
	11/16/2016		(a)	59.97	(a)	3,552.65
	5/22/2017		(a)	60.29	(a)	3,552.33
	11/13/2017		(a)	60.83	(a)	3,551.79
	6/1/2018		(a)	dry	(a)	NA
	11/6/2018		(a)	60.42	(a)	3,552.20
	6/24/2019		(a)	59.78	(a)	3,552.84
	1/5/2020		(a)	59.88	(a)	3,552.74
	5/13/2020		(a)	60.25	(a)	3,552.37
	11/10/2020		(a)	61.50	(a)	3,551.12

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-3	3/10/2009	3614.87	(a)	66.23	(a)	3,548.64
	10/8/2009		(a)	66.77	(a)	3,548.10
	3/22/2010		(a)	66.37	(a)	3,548.50
	4/17/2011		(a)	66.39	(a)	3,548.48
	12/22/2011		(a)	66.86	(a)	3,548.01
	4/17/2012		(a)	66.67	(a)	3,548.20
	10/18/2012		(a)	67.28	(a)	3,547.59
	1/22/2013		(a)	67.22	(a)	3,547.65
	4/15/2013		(a)	67.11	(a)	3,547.76
	11/3/2013	3615.75 (h)	(a)	67.47	(a)	3,548.28
	4/30/2014		(a)	67.31	(a)	3,548.44
	11/19/2014		(a)	67.74	(a)	3,548.01
	4/21/2015		(a)	67.52	(a)	3,548.23
	11/3/2015		(a)	67.61	(a)	3,548.14
	4/29/2016		(a)	67.42	(a)	3,548.33
	11/16/2016		(a)	67.95	(a)	3,547.80
	5/22/2017		(a)	67.55	(a)	3,548.20
	11/13/2017		(a)	68.20	(a)	3,547.55
	6/1/2018		(a)	67.85	(a)	3,547.90
	11/6/2018		(a)	68.05	(a)	3,547.70
	6/24/2019		(a)	67.45	(a)	3,548.30
	1/5/2020		(a)	67.55	(a)	3,548.20
	5/13/2020		(a)	67.90	(a)	3,547.85
	11/10/2020		(a)	68.10	(a)	3,547.65
MW-7	3/10/2009	3599.20	(a)	58.24	(a)	3,540.96
	10/8/2009		(a)	62.12	(a)	3,537.08
	3/22/2010		(a)	58.68	(a)	3,540.52
	4/17/2011		(a)	59.42	(a)	3,539.78
	12/22/2011		(a)	63.09	(a)	3,536.11
	4/17/2012		(a)	62.30	(a)	3,536.90
	10/18/2012		(a)	66.14	(a)	3,533.06
	1/22/2013		(a)	64.40	(a)	3,534.80
	4/15/2013		(a)	63.71	(a)	3,535.49
	11/3/2013	3599.96 (h)	(a)	66.07	(a)	3,533.89
	4/30/2014		(a)	64.30	(a)	3,535.66
	11/19/2014		(a)	64.02	(a)	3,535.94
	4/20/2015		(a)	61.04	(a)	3,538.92
	11/3/2015		(a)	63.24	(a)	3,536.72
	4/27/2016		(a)	61.15	(a)	3,538.81
	11/16/2016		(a)	63.8	(a)	3,536.16
	5/22/2017		(a)	62.30	(a)	3,537.66
	11/13/2017		(a)	64.46	(a)	3,535.50
	6/1/2018		(a)	63.37	(a)	3,536.59
	11/6/2018		(a)	65.55	(a)	3,534.41
	6/24/2019		(a)	62.93	(a)	3,537.03
	1/6/2020		(a)	65.10	(a)	3,534.86
	5/12/2020		(a)	64.19	(a)	3,535.77
	11/9/2020		(a)	67.85	(a)	3,532.11

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-10	3/10/2009	3617.85	(a)	68.49	(a)	3,549.36
	10/8/2009		(a)	69.18	(a)	3,548.67
	3/22/2010		(a)	68.85	(a)	3,549.00
	4/17/2011		(a)	68.85	(a)	3,549.00
	12/22/2011		(a)	69.32	(a)	3,548.53
	4/17/2012		(a)	69.19	(a)	3,548.66
	10/18/2012		(a)	69.78	(a)	3,548.07
	1/22/2013		(a)	69.79	(a)	3,548.06
	4/15/2013		(a)	69.70	(a)	3,548.15
	11/3/2013	3618.81 (h)	(a)	70.04	(a)	3,548.77
	4/30/2014		(a)	69.93	(a)	3,548.88
	11/19/2014		(a)	70.23	(a)	3,548.58
	4/21/2015		(a)	70.06	(a)	3,548.75
	11/3/2015		(a)	70.07	(a)	3,548.74
	4/29/2016		(a)	69.90	(a)	3,548.91
	11/16/2016		(a)	70.43	(a)	3,548.38
	5/22/2017		(a)	70.03	(a)	3,548.78
	11/13/2017		(a)	70.62	(a)	3,548.19
	6/1/2018		(a)	70.35	(a)	3,548.46
	11/6/2018		(a)	70.45	(a)	3,548.36
	6/24/2019		(a)	69.85	(a)	3,548.96
	1/5/2020		(a)	69.91	(a)	3,548.90
	2/13/2020		(a)	69.87	(a)	3,548.94
	5/13/2020		(a)	69.97	(a)	3,548.84
	11/10/2020		(a)	70.49	(a)	3,548.32
MW-11	3/10/2009	3613.31	(a)	64.30	(a)	3,549.01
	10/8/2009		(a)	65.39	(a)	3,547.92
	3/22/2010		(a)	64.69	(a)	3,548.62
	4/17/2011		(a)	64.55	(a)	3,548.76
	12/22/2011		(a)	65.36	(a)	3,547.95
	4/17/2012		(a)	64.97	(a)	3,548.34
	10/18/2012		(a)	66.03	(a)	3,547.28
	1/22/2013		(a)	65.69	(a)	3,547.62
	4/15/2013		(a)	65.45	(a)	3,547.86
	11/3/2013	3614.08 (h)	(a)	65.95	(a)	3,548.13
	4/30/2014		(a)	65.71	(a)	3,548.37
	11/19/2014		(a)	66.47	(a)	3,547.61
	4/21/2015		(a)	65.70	(a)	3,548.38
	11/3/2015		(a)	65.53	(a)	3,548.55
	4/28/2016		(a)	65.50	(a)	3,548.58
	11/16/2016		(a)	66.67	(a)	3,547.41
	5/22/2017		(a)	65.55	(a)	3,548.53
	11/13/2017		(a)	66.83	(a)	3,547.25
	6/1/2018		(a)	66.07	(a)	3,548.01
	11/6/2018		(a)	65.90	(a)	3,548.18
	6/24/2019		(a)	65.18	(a)	3,548.90
	1/5/2020		(a)	65.25	(a)	3,548.83
	2/13/2020		(a)	65.10	(a)	3,548.98
	5/13/2020		(a)	65.42	(a)	3,548.66
	11/10/2020		(a)	66.00	(a)	3,548.08

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-12	3/10/2009	3606.38	56.16	56.57	0.41	3,550.12
	10/8/2009		57.17	57.18	0.01	3,549.21
	1/26/2010		(a)	56.95	(a)	3,549.43
	3/22/2010		56.34	58.23	1.89	3,549.59
	4/17/2011		56.00	57.47	1.47	3,550.03
	12/22/2011		57.01	57.18	0.17	3,549.33
	4/17/2012		56.75	59.72	2.97	3,548.92
	10/15/2012		57.33	58.28	0.95	3,548.82
	1/22/2013		54.93	57.30	2.37	3,550.88
	4/15/2013		57.28	60.74	3.46	3,548.27
	11/3/2013	3606.98 (h)	57.71	60.15	2.44	3,548.68
	4/30/2014		57.57	62.68	5.11	3,548.18
	11/19/2014		56.9	59.91	3.01	3,549.36
	4/21/2015		56.51	56.74	0.23	3,550.41
	11/3/2015		56.03	56.18	0.15	3,550.91
	4/27/2016		56.21	56.27	0.06	3,550.76
	11/16/2016		56.58	56.60	0.02	3,550.40
	5/22/2017		(a)	56.68	(a)	3,550.30
	11/13/2017		(a)	57.21	(a)	3,549.77
	6/1/2018		(a)	56.85	(a)	3,550.13
	11/6/2018		(a)	54.79	(a)	3,552.19
	6/24/2019		(a)	55.38	(a)	3,551.60
	1/6/2020		(a)	56.00	(a)	3,550.98
	5/13/2020		(a)	56.14	(a)	3,550.84
	11/9/2020		(a)	57.12	(a)	3,549.86
MW-13	3/10/2009	3612.46	(a)	63.76	(a)	3,548.70
	10/8/2009		(a)	64.35	(a)	3,548.11
	1/26/2010		(a)	64.05	(a)	3,548.41
	3/22/2010		(a)	63.78	(a)	3,548.68
	4/17/2011		(a)	63.65	(a)	3,548.81
	12/22/2011		(a)	64.64	(a)	3,547.82
	4/17/2012		(a)	64.31	(a)	3,548.15
	10/18/2012		(a)	64.99	(a)	3,547.47
	1/22/2013		(a)	64.70	(a)	3,547.76
	4/15/2013		(a)	64.59	(a)	3,547.87
	11/3/2013	3613.19 (h)	(a)	64.70	(a)	3,548.49
	4/30/2014		(a)	64.91	(a)	3,548.28
	11/19/2014		(a)	65.27	(a)	3,547.92
	4/21/2015		(a)	64.93	(a)	3,548.26
	11/3/2015		(a)	65.13	(a)	3,548.06
	4/29/2016		(a)	65.03	(a)	3,548.16
	11/16/2016		(a)	65.37	(a)	3,547.82
	5/22/2017		(a)	65.10	(a)	3,548.09
	11/13/2017		(a)	66.42	(a)	3,546.77
	6/1/2018		(a)	65.37	(a)	3,547.82
	11/6/2018		(a)	66.38	(a)	3,546.81
	6/24/2019		(a)	65.18	(a)	3,548.01
	1/5/2020		(a)	65.05	(a)	3,548.14
	5/13/2020		(a)	64.96	(a)	3,548.23
	11/10/2020		(a)	66.28	(a)	3,546.91

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-14	3/10/2009	3604.83	(a)	54.43	(a)	3,550.40
	10/8/2009		(a)	54.57	(a)	3,550.26
	3/22/2010		(a)	54.23	(a)	3,550.60
	4/17/2011		(a)	54.72	(a)	3,550.11
	12/22/2011		(a)	55.43	(a)	3,549.40
	4/17/2012		(a)	h	(a)	NA
	10/15/2012		(a)	55.52	(a)	3,549.31
	1/22/2013		(a)	55.63	(a)	3,549.20
	4/15/2013		(a)	55.61	(a)	3,549.22
	11/3/2013	3605.55 (h)	(a)	55.89	(a)	3,549.66
	4/30/2014		(a)	56.03	(a)	3,549.52
	11/19/2014		(a)	56.08	(a)	3,549.47
	4/20/2015		(a)	55.83	(a)	3,549.72
	11/3/2015		(a)	55.89	(a)	3,549.66
	4/27/2016		(a)	55.94	(a)	3,549.61
	11/16/2016		(a)	56.14	(a)	3,549.41
	5/22/2017		(a)	56.14	(a)	3,549.41
	11/13/2017		(a)	56.67	(a)	3,548.88
	6/1/2018		(a)	56.25	(a)	3,549.30
	11/6/2018		(a)	56.49	(a)	3,549.06
	6/24/2019		(a)	55.88	(a)	3,549.67
	1/6/2020		(a)	55.95	(a)	3,549.60
	5/13/2020		(a)	56.25	(a)	3,549.30
	11/9/2020		(a)	56.68	(a)	3,548.87
MW-15	3/10/2009	3610.43	(a)	59.30	(a)	3,551.13
	10/8/2009		(a)	58.82	(a)	3,551.61
	3/22/2010		(a)	58.43	(a)	3,552.00
	4/17/2011		(a)	58.94	(a)	3,551.49
	12/22/2011		(a)	59.26	(a)	3,551.17
	4/17/2012		(a)	59.45	(a)	3,550.98
	10/15/2012		(a)	59.65	(a)	3,550.78
	1/22/2013		(a)	59.88	(a)	3,550.55
	4/15/2013		(a)	59.99	(a)	3,550.44
	11/3/2013	3611.24 (h)	(a)	60.10	(a)	3,551.14
	4/30/2014		(a)	60.36	(a)	3,550.88
	11/19/2014		(a)	60.38	(a)	3,550.86
	4/20/2015		(a)	60.50	(a)	3,550.74
	11/3/2015		(a)	60.73	(a)	3,550.51
	4/27/2016		(a)	60.81	(a)	3,550.43
	11/15/2016		(a)	60.75	(a)	3,550.49
	5/22/2017		(a)	60.67	(a)	3,550.57
	11/13/2017		(a)	61.20	(a)	3,550.04
	5/31/2018		(a)	61.11	(a)	3,550.13
	11/6/2018		(a)	61.16	(a)	3,550.08
	6/24/2019		(a)	61.14	(a)	3,550.10
	1/6/2020		(a)	61.18	(a)	3,550.06
	5/12/2020		(a)	61.42	(a)	3,549.82
	11/9/2020		(a)	61.58	(a)	3,549.66

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-16	3/10/2009	3612.41	65.25	65.26	0.01	3,547.16
	10/8/2009		65.91	65.92	0.01	3,546.50
	1/26/2010		(a)	65.57	(a)	3,546.84
	3/22/2010		(a)	65.19	sheen	3,547.22
	4/17/2011		(a)	65.36	(a)	3,547.05
	12/22/2011		(a)	65.99	sheen	3,546.42
	4/17/2012		65.58	65.59	0.01	3,546.83
	10/15/2012		(a)	66.55	(a)	3,545.86
	1/22/2013		(a)	66.32	(a)	3,546.09
	4/15/2013		(a)	66.17	(a)	3,546.24
	11/3/2013	3613.16 (h)	(a)	66.48	(a)	3,546.68
	4/30/2014		(a)	66.20	(a)	3,546.96
	11/19/2014		66.8	66.91	0.11	3,546.33
	4/20/2015		(a)	66.48	(a)	3,546.68
	11/3/2015		67.29	67.46	0.17	3,545.83
	4/27/2016		67.05	67.19	0.14	3,546.08
	11/16/2016		68.11	68.15	0.04	3,545.04
	5/22/2017		66.96	67.20	0.24	3,546.14
	7/14/2017		68.72	69.11	0.39	3,544.35
	7/28/2017		69.11	69.63	0.52	3,543.93
	8/7/2017		69.07	69.61	0.54	3,543.96
	9/9/2017		70.11	70.47	0.36	3,542.96
	11/13/2017		68.44	68.55	0.11	3,544.69
	5/31/2018		67	68.22	1.22	3,545.87
	11/6/2018		67.7	69.10	1.40	3,545.12
	6/24/2019		66.96	68.40	1.44	3,545.85
	1/6/2020		68.85	68.90	0.05	3,544.30
	5/12/2020		69.08	69.39	0.31	3,544.01
	11/9/2020		67.7	68.50	0.80	3,545.27
	1/18/2021		67.35	67.40	0.05	3,545.80
	2/10/2021		67.42	67.70	0.28	3,545.67
	3/8/2021		67.57	69.11	1.54	3,545.22
	4/5/2021		67.65	69.31	1.66	3,545.11
MW-17	3/10/2009	3608.43 (d)	(a)	61.20	(a)	3,547.23
	10/8/2009		(a)	61.64	(a)	3,546.79
	3/22/2010		(a)	60.95	(a)	3,547.48
	4/17/2011		(a)	61.11	(a)	3,547.32
	12/22/2011		(a)	61.42	(a)	3,547.01
	4/17/2012		(a)	61.43	(a)	3,547.00
	10/15/2012		(a)	61.95	(a)	3,546.48
	1/22/2013		(a)	62.17	(a)	3,546.26
	4/15/2013		(a)	61.97	(a)	3,546.46
	11/3/2013	3609.20 (h)	(a)	62.23	(a)	3,546.97
	4/30/2014		(a)	62.12	(a)	3,547.08
	11/19/2014		(a)	62.40	(a)	3,546.80
	4/20/2015		(a)	62.21	(a)	3,546.99
	11/3/2015		(a)	62.91	(a)	3,546.29
	4/27/2016		(a)	62.51	(a)	3,546.69
	11/15/2016		(a)	63.37	(a)	3,545.83
	5/22/2017		(a)	62.89	(a)	3,546.31
	11/13/2017		(a)	63.92	(a)	3,545.28
	5/31/2018		(a)	63.11	(a)	3,546.09
	11/6/2018		(a)	63.48	(a)	3,545.72
	6/23/2019		(a)	63.05	(a)	3,546.15
	1/6/2020		(a)	63.00	(a)	3,546.20
	2/13/2020		(a)	63.23	(a)	3,545.97
	5/12/2020		(a)	63.25	(a)	3,545.95
	11/9/2020		(a)	63.56	(a)	3,545.64

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-20	3/10/2009	3600.65	(a)	52.08	(a)	3,548.57
	10/8/2009		(a)	58.30	(a)	3,542.35
	10/9/2009		(a)	55.57	(a)	3,545.08
	3/22/2010		(a)	52.62	(a)	3,548.03
	4/17/2011		(a)	52.43	(a)	3,548.22
	12/22/2011		(a)	58.35	(a)	3,542.30
	4/17/2012		(a)	53.50	(a)	3,547.15
	10/15/2012		(a)	54.92	(a)	3,545.73
	1/22/2013		(a)	54.13	(a)	3,546.52
	4/15/2013		(a)	53.90	(a)	3,546.75
	11/3/2013	3601.34 (h)	(a)	54.35	(a)	3,546.99
	4/30/2014		(a)	54.28	(a)	3,547.06
	11/19/2014		(a)	55.82	(a)	3,545.52
	4/21/2015		(a)	53.24	(a)	3,548.10
	11/3/2015		(a)	52.47	(a)	3,548.87
	4/28/2016		(a)	53.13	(a)	3,548.21
	11/16/2016		(a)	54.28	(a)	3,547.06
	5/22/2017		(a)	53.43	(a)	3,547.91
	11/13/2017		(a)	56.10	(a)	3,545.24
	6/1/2018		(a)	54.03	(a)	3,547.31
	11/6/2018		(a)	50.93	(a)	3,550.41
	6/24/2019		(a)	52.00	(a)	3,549.34
	1/6/2020		(a)	52.45	(a)	3,548.89
	5/13/2020		(a)	52.70	(a)	3,548.64
	11/9/2020		(a)	53.90	(a)	3,547.44
MW-21	3/10/2009	3611.99 (d)	(a)	65.43	(a)	3,546.56
	10/8/2009		(a)	66.30	(a)	3,545.69
	1/26/2010		(a)	65.79	(a)	3,546.20
	3/22/2010		(a)	65.31	(a)	3,546.68
	4/17/2011		(a)	65.02	(a)	3,546.97
	12/22/2011		(a)	65.28	(a)	3,546.71
	4/17/2012		(a)	65.44	(a)	3,546.55
	10/15/2012		(a)	65.57	(a)	3,546.42
	1/22/2013		(a)	65.51	(a)	3,546.48
	4/15/2013		(a)	65.54	(a)	3,546.45
	11/3/2013	3612.71 (h)	(a)	66.08	(a)	3,546.63
	4/30/2014		(a)	65.82	(a)	3,546.89
	11/19/2014		(a)	66.17	(a)	3,546.54
	4/20/2015		(a)	66.08	(a)	3,546.63
	11/3/2015		(a)	66.15	(a)	3,546.56
	4/27/2016		(a)	66.34	(a)	3,546.37
	11/15/2016		(a)	66.43	(a)	3,546.28
	5/22/2017		(a)	66.32	(a)	3,546.39
	7/14/2017		(a)	67.38	(a)	3,545.33
	7/28/2017		(a)	67.28	(a)	3,545.43
	8/7/2017		(a)	67.17	(a)	3,545.54
	9/9/2017		(a)	67.53	(a)	3,545.18
	11/13/2017		(a)	66.65	(a)	3,546.06
	5/31/2018		(a)	66.77	(a)	3,545.94
	11/6/2018		(a)	66.88	(a)	3,545.83
	6/23/2019		(a)	66.6	(a)	3,546.11
	11/19/2019		(a)	66.98	(a)	3,545.73
	5/13/2020		(a)	66.7	(a)	3,546.01
	11/9/2020		(a)	66.65	(a)	3,546.06

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-22	3/10/2009	3606.04	(a)	57.14	(a)	3,548.90
	10/8/2009		(a)	58.25	(a)	3,547.79
	3/22/2010		(a)	57.33	(a)	3,548.71
	4/17/2011		(a)	57.38	(a)	3,548.66
	12/22/2011		(a)	58.65	(a)	3,547.39
	4/17/2012		(a)	57.88	(a)	3,548.16
	10/15/2012		(a)	58.93	(a)	3,547.11
	1/22/2013		(a)	58.60	(a)	3,547.44
	4/15/2013		(a)	58.36	(a)	3,547.68
	11/3/2013	3606.62 (h)	(a)	58.94	(a)	3,547.68
	4/30/2014		(a)	58.49	(a)	3,548.13
	11/19/2014		(a)	59.38	(a)	3,547.24
	4/21/2015		(a)	58.56	(a)	3,548.06
	11/3/2015		(a)	58.42	(a)	3,548.20
	4/28/2016		(a)	58.38	(a)	3,548.24
	11/16/2016		(a)	59.33	(a)	3,547.29
	5/22/2017		(a)	58.47	(a)	3,548.15
	11/13/2017		(a)	59.63	(a)	3,546.99
	6/1/2018		(a)	58.96	(a)	3,547.66
	11/6/2018		(a)	58.59	(a)	3,548.03
	6/24/2019		(a)	57.75	(a)	3,548.87
	1/6/2020		(a)	58.01	(a)	3,548.61
	5/13/2020		(a)	58.10	(a)	3,548.52
	11/9/2020		(a)	58.78	(a)	3,547.84
MW-24 D	3/10/2009	3595.95 (c)	(a)	56.62	(a)	3,539.33
	10/8/2009		(a)	61.13	(a)	3,534.82
	3/22/2010		(a)	56.22	(a)	3,539.73
	4/17/2011		(a)	58.73	(a)	3,537.22
	12/22/2011		(a)	60.28	(a)	3,535.67
	4/17/2012		(a)	61.39	(a)	3,534.56
	10/15/2012		(a)	65.33	(a)	3,530.62
	1/22/2013		(a)	61.26	(a)	3,534.69
	4/15/2013		(a)	62.76	(a)	3,533.19
	11/3/2013	3596.80 (h)	(a)	64.42	(a)	3,532.38
	4/30/2014		(a)	62.91	(a)	3,533.89
	11/19/2014		(a)	61.76	(a)	3,535.04
	4/21/2015		(a)	59.61	(a)	3,537.19
	11/3/2015		(a)	61.03	(a)	3,535.77
	4/28/2016		(a)	59.44	(a)	3,537.36
	11/16/2016		(a)	61.59	(a)	3,535.21
	5/22/2017		(a)	61.03	(a)	3,535.77
	11/13/2017		(a)	62.67	(a)	3,534.13
	6/1/2018		(a)	62.9	(a)	3,533.90
	11/6/2018		(a)	62.78	(a)	3,534.02
	6/24/2019		(a)	61.91	(a)	3,534.89
	1/6/2020		(a)	61.90	(a)	3,534.90
	5/13/2020		(a)	63.05	(a)	3,533.75
	11/10/2020		(a)	66.20	(a)	3,530.60

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-26	3/10/2009	3597.75 (c)	(a)	50.11	(a)	3,547.64
	10/8/2009		(a)	52.35	(a)	3,545.40
	3/22/2010		(a)	50.52	(a)	3,547.23
	4/17/2011		(a)	50.45	(a)	3,547.30
	12/22/2011		(a)	51.70	(a)	3,546.05
	4/17/2012		(a)	51.24	(a)	3,546.51
	10/15/2012		(a)	52.55	(a)	3,545.20
	1/22/2013		(a)	51.95	(a)	3,545.80
	4/15/2013		(a)	51.70	(a)	3,546.05
	11/3/2013	3598.43 (h)	(a)	52.22	(a)	3,546.21
	4/30/2014		(a)	51.86	(a)	3,546.57
	11/19/2014		(a)	52.21	(a)	3,546.22
	4/21/2015		(a)	50.91	(a)	3,547.52
	11/3/2015		(a)	50.61	(a)	3,547.82
	4/28/2016		(a)	50.73	(a)	3,547.70
	11/16/2016		(a)	51.62	(a)	3,546.81
	5/22/2017		(a)	51.03	(a)	3,547.40
	11/13/2017		(a)	52.42	(a)	3,546.01
	6/1/2018		(a)	51.52	(a)	3,546.91
	11/6/2018		(a)	49.89	(a)	3,548.54
	6/24/2019		(a)	49.77	(a)	3,548.66
	1/6/2020		(a)	50.10	(a)	3,548.33
	5/13/2020		(a)	50.43	(a)	3,548.00
	11/9/2020		(a)	51.40	(a)	3,547.03
MW-27	3/10/2009	3615.11 (d)	67.85	68.18	0.33	3,547.18
	10/8/2009		68.38	68.89	0.51	3,546.61
	1/26/2010		68.48	68.88	0.40	3,546.53
	3/22/2010		68.31	68.73	0.42	3,546.70
	4/17/2011		68.10	68.26	0.16	3,546.97
	12/22/2011		68.21	68.35	0.14	3,546.87
	4/17/2012		67.38	67.52	0.14	3,547.70
	10/15/2012		68.31	68.54	0.23	3,546.74
	1/22/2013		68.45	68.67	0.22	3,546.61
	4/15/2013		65.92	67.07	1.15	3,548.91
	5/16/2013		68.47	69.77	1.30	3,546.33
	11/3/2013	3615.76 (h)	(a)	68.19	(a)	3,547.57
	11/13/2013		68.29	68.30	0.01	3,547.47
	4/30/2014		68.61	68.63	0.02	3,547.15
	11/19/2014		68.96	68.97	0.01	3,546.80
	4/20/2015		68.96	68.97	0.01	3,546.80
	11/3/2015		(a)	69.07	(a)	3,546.69
	4/27/2016		(a)	69.18	(a)	3,546.58
	11/15/2016		(a)	69.23	(a)	3,546.53
	5/22/2017		(a)	69.19	(a)	3,546.57
	11/13/2017		(a)	69.55	(a)	3,546.21
	5/30/2018		(a)	69.55	(a)	3,546.21
	11/6/2018		(a)	69.57	(a)	3,546.19
	6/23/2019		(a)	69.43	(a)	3,546.33
	11/19/2019		(a)	69.47	(a)	3,546.29
	5/12/2020		(a)	69.69	(a)	3,546.07
	11/9/2020		(a)	69.72	(a)	3,546.04

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-28	3/10/2009	3615.90 (d)	(a)	68.70	(a)	3,547.20
	10/8/2009		(a)	68.94	(a)	3,546.96
	3/22/2010		(a)	68.71	(a)	3,547.19
	4/17/2011		(a)	68.95	(a)	3,546.95
	12/22/2011		(a)	69.01	(a)	3,546.89
	4/17/2012		(a)	69.20	(a)	3,546.70
	10/15/2012		(a)	69.30	(a)	3,546.60
	1/22/2013		(a)	69.48	(a)	3,546.42
	4/15/2013		(a)	69.57	(a)	3,546.33
	11/3/2013	3616.62 (h)	(a)	69.61	(a)	3,547.01
	4/30/2014		(a)	69.78	(a)	3,546.84
	11/19/2014		(a)	69.82	(a)	3,546.80
	4/20/2015		(a)	70.21	(a)	3,546.41
	11/3/2015		(a)	70.40	(a)	3,546.22
	4/27/2016		(a)	70.42	(a)	3,546.20
	11/15/2016		(a)	70.47	(a)	3,546.15
	5/22/2017		(a)	70.44	(a)	3,546.18
	11/13/2017		(a)	70.45	(a)	3,546.17
	5/30/2018		(a)	71.72	(a)	3,544.90
	11/6/2018		(a)	70.81	(a)	3,545.81
	6/23/2019		(a)	70.68	(a)	3,545.94
	11/19/2019		(a)	70.53	(a)	3,546.09
	5/12/2020		(a)	71.47	(a)	3,545.15
	11/9/2020		(a)	71.80	(a)	3,544.82
MW-29	3/10/2009	3613.54 (d)	(a)	67.86	(a)	3,545.68
	10/8/2009		(a)	68.82	(a)	3,544.72
	3/22/2010		(a)	68.04	(a)	3,545.50
	4/17/2011		(a)	67.78	(a)	3,545.76
	12/22/2011		(a)	68.15	(a)	3,545.39
	4/17/2012		(a)	68.41	(a)	3,545.13
	10/15/2012		(a)	68.10	(a)	3,545.44
	1/22/2013		(a)	68.33	(a)	3,545.21
	4/15/2013		(a)	68.34	(a)	3,545.20
	11/3/2013	3614.22 (h)	(a)	69.47	(a)	3,544.75
	4/30/2014		(a)	69.53	(a)	3,544.69
	11/19/2014		(a)	69.67	(a)	3,544.55
	4/20/2015		(a)	69.65	(a)	3,544.57
	11/3/2015		(a)	69.90	(a)	3,544.32
	4/27/2016		(a)	69.78	(a)	3,544.44
	11/15/2016		(a)	70.13	(a)	3,544.09
	5/22/2017		(a)	70.03	(a)	3,544.19
	11/13/2017		(a)	70.45	(a)	3,543.77
	5/30/2018		(a)	72.00	(a)	3,542.22
	11/6/2018		(a)	67.53	(a)	3,546.69
	6/23/2019		(a)	69.99	(a)	3,544.23
	11/19/2019		(a)	70.00	(a)	3,544.22
	5/12/2020		(a)	70.55	(a)	3,543.67
	11/9/2020		(a)	70.95	(a)	3,543.27

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-30	3/10/2009	3612.63 (d)	(a)	65.83	(a)	3,546.80
	10/8/2009		(a)	65.97	(a)	3,546.66
	3/22/2010		(a)	65.81	(a)	3,546.82
	4/17/2011		(a)	66.13	(a)	3,546.50
	12/22/2011		(a)	66.20	(a)	3,546.43
	4/17/2012		(a)	66.30	(a)	3,546.33
	10/15/2012		(a)	66.48	(a)	3,546.15
	1/22/2013		(a)	66.61	(a)	3,546.02
	4/15/2013		(a)	66.57	(a)	3,546.06
	11/3/2013	3613.33 (h)	(a)	66.84	(a)	3,546.49
	4/30/2014		(a)	66.86	(a)	3,546.47
	11/19/2014		(a)	66.97	(a)	3,546.36
	4/20/2015		(a)	70.23	(a)	3,543.10
	11/3/2015		(a)	67.22	(a)	3,546.11
	4/27/2016		(a)	67.21	(a)	3,546.12
	11/15/2016		(a)	67.32	(a)	3,546.01
	5/22/2017		(a)	67.34	(a)	3,545.99
	11/13/2017		(a)	67.59	(a)	3,545.74
	5/30/2018		(a)	67.41	(a)	3,545.92
	11/6/2018		(a)	67.50	(a)	3,545.83
	6/23/2019		(a)	67.62	(a)	3,545.71
	11/19/2019		(a)	67.59	(a)	3,545.74
	5/12/2020		(a)	67.87	(a)	3,545.46
	11/9/2020		(a)	67.90	(a)	3,545.43
MW-32	3/10/2009	3608.73 (e)	(a)	65.01	(a)	3,543.72
	10/8/2009		(a)	66.29	(a)	3,542.44
	3/22/2010		(a)	65.44	(a)	3,543.29
	4/17/2011		(a)	65.15	(a)	3,543.58
	12/22/2011		(a)	65.42	(a)	3,543.31
	4/17/2012		(a)	66.03	(a)	3,542.70
	10/15/2012		(a)	65.59	(a)	3,543.14
	1/22/2013		(a)	65.94	(a)	3,542.79
	4/15/2013		(a)	66.33	(a)	3,542.40
	11/3/2013	3609.49 (h)	(a)	66.95	(a)	3,542.54
	4/30/2014		(a)	67.41	(a)	3,542.08
	11/19/2014		(a)	67.34	(a)	3,542.15
	4/20/2015		(a)	67.08	(a)	3,542.41
	11/3/2015		(a)	67.51	(a)	3,541.98
	4/27/2016		(a)	67.16	(a)	3,542.33
	11/15/2016		(a)	67.46	(a)	3,542.03
	5/22/2017		(a)	67.50	(a)	3,541.99
	11/13/2017		(a)	67.77	(a)	3,541.72
	5/30/2018		(a)	67.62	(a)	3,541.87
	11/6/2018		(a)	67.87	(a)	3,541.62
	6/23/2019		(a)	67.84	(a)	3,541.65
	11/19/2019		(a)	67.76	(a)	3,541.73
	5/12/2020		(a)	68.33	(a)	3,541.16
	11/9/2020		(a)	68.55	(a)	3,540.94

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-33	3/10/2009	3610.55 (e)	(a)	63.81	(a)	3,546.74
	10/8/2009		(a)	63.95	(a)	3,546.60
	3/22/2010		(a)	63.94	(a)	3,546.61
	4/17/2011		(a)	64.28	(a)	3,546.27
	12/22/2011		(a)	64.42	(a)	3,546.13
	4/17/2012		(a)	64.57	(a)	3,545.98
	10/15/2012		(a)	64.63	(a)	3,545.92
	1/22/2013		(a)	64.76	(a)	3,545.79
	4/15/2013		(a)	64.82	(a)	3,545.73
	11/3/2013	3611.37 (h)	(a)	64.86	(a)	3,546.51
	4/30/2014		(a)	65.05	(a)	3,546.32
	11/19/2014		(a)	65.08	(a)	3,546.29
	4/20/2015		(a)	65.20	(a)	3,546.17
	11/3/2015		(a)	65.38	(a)	3,545.99
	4/27/2016		(a)	65.45	(a)	3,545.92
	11/15/2016		(a)	65.55	(a)	3,545.82
	5/22/2017		(a)	65.69	(a)	3,545.68
	11/13/2017		(a)	65.88	(a)	3,545.49
	5/30/2018		(a)	65.75	(a)	3,545.62
	11/6/2018		(a)	65.86	(a)	3,545.51
	6/23/2019		(a)	65.95	(a)	3,545.42
	11/19/2019		(a)	65.95	(a)	3,545.42
	5/12/2020		(a)	66.27	(a)	3,545.10
	11/9/2020		(a)	66.34	(a)	3,545.03
MW-34	3/10/2009	3605.05 (f)	(a)	61.57	(a)	3,543.48
	10/8/2009		(a)	62.61	(a)	3,542.44
	3/22/2010		(a)	61.93	(a)	3,543.12
	4/17/2011		(a)	61.98	(a)	3,543.07
	12/22/2011		(a)	62.49	(a)	3,542.56
	4/17/2012		(a)	62.77	(a)	3,542.28
	10/15/2012		(a)	62.80	(a)	3,542.25
	1/22/2013		(a)	63.14	(a)	3,541.91
	4/15/2013		(a)	63.25	(a)	3,541.80
	11/3/2013	3605.76 (h)	(a)	63.81	(a)	3,541.95
	4/30/2014		(a)	63.99	(a)	3,541.77
	11/19/2014		(a)	64.08	(a)	3,541.68
	4/20/2015		(a)	63.82	(a)	3,541.94
	11/3/2015		(a)	64.20	(a)	3,541.56
	4/27/2016		(a)	63.73	(a)	3,542.03
	11/15/2016		(a)	64.20	(a)	3,541.56
	5/22/2017		(a)	64.09	(a)	3,541.67
	11/13/2017		(a)	64.51	(a)	3,541.25
	5/30/2018		(a)	64.35	(a)	3,541.41
	11/6/2018		(a)	64.63	(a)	3,541.13
	6/23/2019		(a)	64.51	(a)	3,541.25
	11/19/2019		(a)	64.69	(a)	3,541.07
	5/12/2020		(a)	65.01	(a)	3,540.75
	11/9/2020		(a)	65.30	(a)	3,540.46

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-35	3/10/2009	3601.87 (f)	(a)	58.40	(a)	3,543.47
	10/8/2009		(a)	59.42	(a)	3,542.45
	3/22/2010		(a)	58.85	(a)	3,543.02
	4/17/2011		(a)	58.89	(a)	3,542.98
	12/22/2011		(a)	59.60	(a)	3,542.27
	4/17/2012		(a)	59.76	(a)	3,542.11
	10/15/2012		(a)	59.91	(a)	3,541.96
	1/22/2013		(a)	60.14	(a)	3,541.73
	4/15/2013		(a)	60.28	(a)	3,541.59
	11/3/2013	3602.61 (h)	(a)	60.81	(a)	3,541.80
	4/30/2014		(a)	61.17	(a)	3,541.44
	11/19/2014		(a)	61.01	(a)	3,541.60
	4/20/2015		(a)	60.80	(a)	3,541.81
	11/3/2015		(a)	61.17	(a)	3,541.44
	4/27/2016		(a)	60.71	(a)	3,541.90
	11/15/2016		(a)	61.17	(a)	3,541.44
	5/22/2017		(a)	61.05	(a)	3,541.56
	11/13/2017		(a)	61.51	(a)	3,541.10
	5/30/2018		(a)	61.72	(a)	3,540.89
	11/6/2018		(a)	61.99	(a)	3,540.62
	6/23/2019		(a)	61.63	(a)	3,540.98
	11/19/2019		(a)	62.21	(a)	3,540.40
	5/12/2020		(a)	62.3	(a)	3,540.31
	11/9/2020		(a)	62.67	(a)	3,539.94
MW-37	3/10/2009	3599.86 (g)	(a)	56.53	(a)	3,543.33
	10/8/2009		(a)	57.46	(a)	3,542.40
	3/22/2010		(a)	56.98	(a)	3,542.88
	4/17/2011		(a)	57.06	(a)	3,542.80
	12/22/2011		(a)	57.58	(a)	3,542.28
	4/17/2012		(a)	57.88	(a)	3,541.98
	10/15/2012		(a)	58.18	(a)	3,541.68
	1/22/2013		(a)	58.43	(a)	3,541.43
	4/15/2013		(a)	58.47	(a)	3,541.39
	11/3/2013	3600.58 (h)	(a)	58.99	(a)	3,541.59
	11/13/2013		(a)	58.96	(a)	3,541.62
	4/30/2014		(a)	59.2	(a)	3,541.38
	11/19/2014		(a)	59.20	(a)	3,541.38
	4/20/2015		(a)	58.95	(a)	3,541.63
	11/3/2015		(a)	59.31	(a)	3,541.27
	4/27/2016		(a)	58.78	(a)	3,541.80
	11/15/2016		(a)	59.31	(a)	3,541.27
	5/22/2017		(a)	59.13	(a)	3,541.45
	11/13/2017		(a)	59.61	(a)	3,540.97
	5/30/2018		(a)	59.43	(a)	3,541.15
	11/6/2018		(a)	59.76	(a)	3,540.82
	6/23/2019		(a)	59.54	(a)	3,541.04
	11/19/2019		(a)	59.85	(a)	3,540.73
	5/12/2020		(a)	60.08	(a)	3,540.50
	11/9/2020		(a)	60.47	(a)	3,540.11

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-39	8/16/2013	3597.38 (h)	(a)	51.64	(a)	3,545.74
	11/3/2013		(a)	51.08	(a)	3,546.30
	4/30/2014		(a)	50.74	(a)	3,546.64
	11/19/2014		(a)	50.69	(a)	3,546.69
	4/21/2015		(a)	49.97	(a)	3,547.41
	11/3/2015		(a)	49.81	(a)	3,547.57
	4/28/2016		(a)	49.96	(a)	3,547.42
	11/16/2016		(a)	50.43	(a)	3,546.95
	5/22/2017		(a)	49.99	(a)	3,547.39
	11/13/2017		(a)	50.82	(a)	3,546.56
	6/1/2018		(a)	50.40	(a)	3,546.98
	11/6/2018		(a)	49.42	(a)	3,547.96
	6/24/2019		(a)	48.97	(a)	3,548.41
	1/6/2020		(a)	49.4	(a)	3,547.98
	5/13/2020		(a)	49.54	(a)	3,547.84
	11/10/2020		(a)	50.5	(a)	3,546.88
MW-40	8/16/2013	3596.48 (h)	(a)	54.25	(a)	3,542.23
	11/3/2013		(a)	54.21	(a)	3,542.27
	4/30/2014		(a)	53.78	(a)	3,542.70
	11/19/2014		(a)	54.23	(a)	3,542.25
	4/21/2015		(a)	52.91	(a)	3,543.57
	11/3/2015		(a)	53.21	(a)	3,543.27
	4/28/2016		(a)	52.56	(a)	3,543.92
	11/16/2016		(a)	53.55	(a)	3,542.93
	5/22/2017		(a)	52.98	(a)	3,543.50
	11/13/2017		(a)	54.11	(a)	3,542.37
	6/1/2018		(a)	53.6	(a)	3,542.88
	11/6/2018		(a)	54.24	(a)	3,542.24
	6/24/2019		(a)	53.20	(a)	3,543.28
	1/6/2020		(a)	54.30	(a)	3,542.18
	5/13/2020		(a)	54.25	(a)	3,542.23
	11/10/2020		(a)	54.90	(a)	3,541.58
MW-41	8/16/2013	3601.73 (h)	(a)	56.57	(a)	3,545.16
	11/3/2013		(a)	56.63	(a)	3,545.10
	4/30/2014		(a)	56.76	(a)	3,544.97
	11/19/2014		(a)	56.96	(a)	3,544.77
	4/21/2015		(a)	56.58	(a)	3,545.15
	11/3/2015		(a)	56.61	(a)	3,545.12
	4/28/2016		(a)	56.36	(a)	3,545.37
	11/16/2016		(a)	56.72	(a)	3,545.01
	5/22/2017		(a)	56.58	(a)	3,545.15
	11/13/2017		(a)	57.12	(a)	3,544.61
	6/1/2018		(a)	56.90	(a)	3,544.83
	11/6/2018		(a)	57.15	(a)	3,544.58
	6/24/2019		(a)	56.85	(a)	3,544.88
	1/6/2020		(a)	57.20	(a)	3,544.53
	5/13/2020		(a)	57.00	(a)	3,544.73
	11/10/2020		(a)	57.65	(a)	3,544.08

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MW-42	8/16/2013	3595.21 (h)	(a)	56.42	(a)	3,538.79
	11/3/2013		(a)	56.28	(a)	3,538.93
	4/30/2014		(a)	55.16	(a)	3,540.05
	11/19/2014		(a)	55.25	(a)	3,539.96
	4/21/2015		(a)	53.18	(a)	3,542.03
	11/3/2015		(a)	54.27	(a)	3,540.94
	4/28/2016		(a)	52.95	(a)	3,542.26
	5/22/2017		(a)	53.71	(a)	3,541.50
	11/13/2017		(a)	55.46	(a)	3,539.75
	6/1/2018		(a)	54.55	(a)	3,540.66
	11/6/2018		(a)	55.83	(a)	3,539.38
	6/24/2019		(a)	54.29	(a)	3,540.92
	1/6/2020		(a)	55.58	(a)	3,539.63
	5/13/2020		(a)	54.81	(a)	3,540.40
	11/10/2020		(a)	57	(a)	3,538.21
MPE-7	3/10/2009	NA	(a)	67.79	(a)	NA
	10/8/2009		(a)	69.75	(a)	NA
	3/22/2010		(a)	67.62	(a)	NA
	4/17/2011		(a)	67.15	(a)	NA
	12/22/2011		(a)	67.07	(a)	NA
	4/17/2012		(a)	67.50	(a)	NA
	10/15/2012		(a)	67.44	(a)	NA
	4/15/2013		(a)	67.63	(a)	NA
	11/3/2013	3614.16 (h)	(a)	67.93	(a)	3,546.23
	5/1/2014		(a)	68.07	(a)	3,546.09
	11/20/2014		(a)	68.21	(a)	3,545.95
	11/3/2015		(a)	68.29	(a)	3,545.87
	4/27/2016		(a)	68.36	(a)	3,545.80
	11/15/2016		(a)	68.46	(a)	3,545.70
	2/2/2017		(a)	68.15	(a)	3,546.01
	2/15/2017		(a)	67.50	(a)	3,546.66
	2/25/2017		(a)	65.67	(a)	3,548.49
	3/20/2017		(a)	66.15	(a)	3,548.01
	5/22/2017		(a)	68.53	(a)	3,545.63
	11/13/2017		(a)	68.87	(a)	3,545.29
	5/30/2018		(a)	68.96	(a)	3,545.20
	11/6/2018		(a)	69.06	(a)	3,545.10
	6/23/2019		(a)	68.53	(a)	3,545.63
	11/18/2019		(a)	68.40	(a)	3,545.76
	5/12/2020		(a)	68.78	(a)	3,545.38
	11/9/2020		(a)	68.85	(a)	3,545.31

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-8	3/10/2009	NA	(a)	65.06	(a)	NA
	10/8/2009		(a)	65.79	(a)	NA
	3/22/2010		(a)	65.53	(a)	NA
	4/17/2011		(a)	65.30	(a)	NA
	12/22/2011		(a)	65.58	(a)	NA
	4/17/2012		(a)	65.71	(a)	NA
	10/15/2012		(a)	65.62	(a)	NA
	4/15/2013		(a)	65.41	(a)	NA
	11/3/2013	3612.35 (h)	(a)	66.55	(a)	3,545.80
	5/1/2014		(a)	66.47	(a)	3,545.88
	11/20/2014		(a)	66.76	(a)	3,545.59
	11/3/2015		(a)	66.89	(a)	3,545.46
	4/27/2016		(a)	66.65	(a)	3,545.70
	11/15/2016		(a)	67.28	(a)	3,545.07
	2/2/2017		(a)	66.61	(a)	3,545.74
	2/15/2017		(a)	64.57	(a)	3,547.78
	2/25/2017		(a)	63.55	(a)	3,548.80
	3/20/2017		(a)	64.15	(a)	3,548.20
	5/22/2017		(a)	66.87	(a)	3,545.48
	11/13/2017		(a)	67.78	(a)	3,544.57
	5/30/2018		(a)	67.35	(a)	3,545.00
	11/6/2018		(a)	67.70	(a)	3,544.65
	7/24/2019		(a)	66.30	(a)	3,546.05
	11/19/2019		(a)	67.10	(a)	3,545.25
	5/12/2020		(a)	67.55	(a)	3,544.80
	11/9/2020		(a)	67.80	(a)	3,544.55
MPE-9	3/10/2009	NA	(a)	67.24	(a)	NA
	10/8/2009		(a)	67.79	(a)	NA
	1/26/2010		67.92	67.93	0.01	NA
	3/22/2010		(a)	67.82	(a)	NA
	4/17/2011		(a)	67.49	(a)	NA
	12/22/2011		(a)	67.61	(a)	NA
	4/17/2012		(a)	67.87	(a)	NA
	10/15/2012		(a)	67.70	(a)	NA
	4/15/2013		(a)	67.92	(a)	NA
	11/3/2013	3615.40 (h)	(a)	67.32	(a)	3,548.08
	5/1/2014		(a)	68.11	(a)	3,547.29
	11/20/2014		(a)	68.34	(a)	3,547.06
	11/3/2015		(a)	68.48	(a)	3,546.92
	4/27/2016		(a)	68.61	(a)	3,546.79
	11/15/2016		(a)	68.61	(a)	3,546.79
	2/2/2017		(a)	68.77	(a)	3,546.63
	2/15/2017		(a)	66.90	(a)	3,548.50
	2/25/2017		(a)	66.68	(a)	3,548.72
	3/20/2017		(a)	66.95	(a)	3,548.45
	5/22/2017		(a)	68.60	(a)	3,546.80
	11/13/2017		(a)	68.95	(a)	3,546.45
	5/30/2018		(a)	68.91	(a)	3,546.49
	11/6/2018		(a)	69.02	(a)	3,546.38
	6/23/2019		(a)	68.75	(a)	3,546.65
	11/19/2019		(a)	68.84	(a)	3,546.56
	5/12/2020		(a)	69.06	(a)	3,546.34
	11/9/2020		(a)	69.00	(a)	3,546.40

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-10	3/10/2009	NA	65.58	66.45	0.87	NA
	3/22/2010		(a)	66.20	(a)	NA
	4/17/2011		65.41	66.85	1.44	NA
	12/22/2011		65.74	66.48	0.74	NA
	4/17/2012		66.05	66.22	0.17	NA
	10/15/2012		66.03	66.88	0.85	NA
	4/15/2013		65.96	66.95	0.99	NA
	11/3/2013	3613.85 (h)	65.71	67.08	1.37	3,547.81
	5/1/2014		66.35	66.36	0.01	3,547.50
	11/20/2014		66.64	67.39	0.75	3,547.03
	4/20/2015		66.48	67.09	0.61	3,547.22
	11/3/2015		66.64	67.21	0.57	3,547.07
	4/27/2016		66.73	67.27	0.54	3,546.99
	11/15/2016		(a)	66.76	(a)	3,547.09
	2/2/2017		66.98	67.95	0.97	3,546.64
	2/15/2017		64.48	66.20	1.72	3,548.96
	2/25/2017		64.4	66.05	1.65	3,549.05
	3/20/2017		64.5	66.65	2.15	3,548.83
	5/22/2017		66.73	67.63	0.9	3,546.90
	11/13/2017		67.04	68.05	1.01	3,546.57
	5/30/2018		67.05	68.11	1.06	3,546.55
	11/6/2018		67.1	68.45	1.35	3,546.43
	6/23/2019		66.50	68.90	2.4	3,546.77
	11/19/2019		66.91	66.92	0.01	3,546.94
	5/12/2020		67.05	67.35	0.3	3,546.50
	11/9/2020		67.1	68.32	1.22	3,546.46
	1/18/2021		66.58	67.70	1.12	3,547.00
	2/10/2021		66.55	67.32	0.77	3,547.12
	3/8/2021		66.52	67.03	0.51	3,547.21
	4/5/2021		66.4	67.22	0.82	3,547.25
MPE-11	3/10/2009	NA	(a)	63.02	(a)	NA
	10/8/2009		(a)	63.81	(a)	NA
	4/17/2011		(a)	62.92	(a)	NA
	12/22/2011		(a)	63.21	(a)	NA
	4/17/2012		(a)	63.44	(a)	NA
	10/15/2012		(a)	63.73	(a)	NA
	4/15/2013		(a)	63.63	(a)	NA
	11/3/2013	3610.37 (h)	(a)	64.11	(a)	3,546.26
	5/1/2014		(a)	64.06	(a)	3,546.31
	11/20/2014		(a)	64.35	(a)	3,546.02
	4/20/2015		(a)	64.11	(a)	3,546.26
	11/3/2015		(a)	64.65	(a)	3,545.72
	4/27/2016		(a)	64.51	(a)	3,545.86
	11/15/2016		(a)	65.17	(a)	3,545.20
	2/2/2017		(a)	64.29	(a)	3,546.08
	2/15/2017		(a)	61.40	(a)	3,548.97
	2/25/2017		(a)	60.84	(a)	3,549.53
	3/20/2017		(a)	61.45	(a)	3,548.92
	5/22/2017		(a)	64.54	(a)	3,545.83
	11/13/2017		(a)	65.51	(a)	3,544.86
	5/30/2018		(a)	64.92	(a)	3,545.45
	11/6/2018		(a)	65.34	(a)	3,545.03
	6/23/2019		(a)	64.48	(a)	3,545.89
	11/19/2019		(a)	64.89	(a)	3,545.48
	5/12/2020		(a)	65.05	(a)	3,545.32
	11/9/2020		(a)	65.25	(a)	3,545.12

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-12	3/10/2009	NA	64.30	64.60	0.30	NA
	10/8/2009		65.24	65.45	0.21	NA
	1/26/2010		64.75	65.12	0.37	NA
	3/22/2010		64.55	64.60	0.05	NA
	4/17/2011		64.32	64.47	0.15	NA
	12/22/2011		(a)	64.61	(a)	NA
	4/17/2012		(a)	64.78	(a)	NA
	10/15/2012		(a)	65.11	(a)	NA
	4/15/2013		64.81	64.83	0.02	NA
	11/3/2013	3612.51 (h)	(a)	64.81	(a)	3,547.70
	5/1/2014		65.14	65.15	0.01	3,547.36
	11/20/2014		67.07	67.27	0.20	3,545.24
	4/20/2015		(a)	65.32	(a)	3,547.19
	11/3/2015		(a)	65.41	(a)	3,547.10
	4/27/2016		65.50	65.80	0.3	3,548.28
	11/15/2016		65.69	66.38	0.69	3,547.99
	5/22/2017		(a)	65.60	(a)	3,546.91
	7/14/2017		63.72	63.90	0.18	3,548.75
	7/28/2017		63.58	64.40	0.82	3,548.73
	8/7/2017		(a)	65.59	(a)	3,546.92
	9/9/2017		62.78	63.83	1.05	3,549.48
	11/13/2017		65.83	66.85	1.02	3,546.44
	5/31/2018		65.90	66.71	0.81	3,546.42
	11/6/2018		66.00	67.15	1.15	3,546.23
	6/23/2019		65.75	66.17	0.42	3,546.66
	1/6/2020		65.71	66.38	0.67	3,546.64
	5/12/2020		(a)	65.81	(a)	3,546.70
	11/9/2020		(a)	65.91	(a)	3,546.60
MPE-13	3/10/2009	NA	62.93	63.90	0.97	NA
	10/8/2009		63.65	64.00	0.35	NA
	1/26/2010		63.44	63.75	0.31	NA
	3/22/2010		62.93	63.15	0.22	NA
	4/17/2011		63.08	63.27	0.19	NA
	12/22/2011		(a)	63.32	(a)	NA
	4/17/2012		63.51	63.93	0.42	NA
	10/15/2012		63.91	64.27	0.36	NA
	4/15/2013		63.93	64.19	0.26	NA
	11/3/2013	3610.91 (h)	64.07	64.21	0.14	3,546.81
	5/1/2014		64.15	64.45	0.30	3,546.69
	11/20/2014		64.55	64.66	0.11	3,546.33
	4/20/2015		64.81	65.20	0.39	3,546.01
	11/3/2015		(a)	64.95	(a)	3,545.96
	4/27/2016		(a)	64.73	(a)	3,546.18
	8/28/2016		(a)	NA	(a)	NA
	11/15/2016		(a)	65.61	(a)	3,545.30
	5/22/2017		(a)	64.83	(a)	3,546.08
	7/14/2017		(a)	63.95	(a)	3,546.96
	7/28/2017		(a)	64.25	(a)	3,546.66
	8/7/2017		(a)	66.04	(a)	3,544.87
	9/9/2017		(a)	64.57	(a)	3,546.34
	11/13/2017		(a)	66.42	(a)	3,544.49
	5/31/2018		(a)	65.81	(a)	3,545.10
	11/6/2018		(a)	66.27	(a)	3,544.64
	6/23/2019		(a)	65.95	(a)	3,544.96
	1/6/2020		(a)	65.65	(a)	3,545.26
	5/12/2020		(a)	66.15	(a)	3,544.76
	11/9/2020		(a)	66.50	(a)	3,544.41

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-14	3/10/2009	NA	63.70	63.83	0.13	NA
	10/8/2009		(a)	64.27	(a)	NA
	1/26/2010		(a)	64.08	(a)	NA
	3/22/2010		(a)	63.57	(a)	NA
	4/17/2011		(a)	63.70	(a)	NA
	12/22/2011		(a)	64.05	(a)	NA
	4/17/2012		(a)	64.12	(a)	NA
	10/15/2012		(a)	64.75	(a)	NA
	4/15/2013		64.40	64.94	0.54	NA
	11/3/2013	3611.31 (h)	64.40	65.87	1.47	3,546.56
	5/1/2014		64.54	65.49	0.95	3,546.54
	11/21/2014		65.20	65.48	0.28	3,546.04
	4/20/2015		64.21	64.26	0.05	3,547.09
	11/3/2015		(a)	65.37	(a)	3,545.94
	4/27/2016		65.34	65.65	0.31	3,545.90
	8/28/2016		(a)	NA	(a)	NA
	11/15/2016		66.35	66.38	0.03	3,544.95
	5/22/2017		65.28	65.67	0.39	3,545.94
	7/14/2017		(a)	71.40	(a)	3,539.91
	7/28/2017		(a)	70.45	(a)	3,540.86
	8/7/2017		(a)	71.75	(a)	3,539.56
	9/9/2017		(a)	72.80	(a)	3,538.51
	11/13/2017		(a)	66.45	(a)	3,544.86
	5/31/2018		65.47	66.30	0.83	3,545.64
	11/6/2018		66.02	66.50	0.48	3,545.17
	6/23/2019		65.42	66.08	0.66	3,545.73
	1/6/2020		65.48	66.30	0.82	3,545.63
	5/12/2020		(a)	65.75	(a)	3,545.56
	11/9/2020		(a)	66.00	(a)	3,545.31
MPE-15	3/10/2009	NA	(a)	62.40	(a)	NA
	10/8/2009		(a)	62.59	(a)	NA
	3/22/2010		(a)	62.36	(a)	NA
	4/17/2011		(a)	62.20	(a)	NA
	12/22/2011		(a)	62.75	(a)	NA
	4/17/2012		(a)	63.05	(a)	NA
	10/15/2012		(a)	63.05	(a)	NA
	4/15/2013		(a)	63.19	(a)	NA
	11/3/2013	3612.40 (h)	(a)	63.45	(a)	3,548.95
	5/1/2014		(a)	63.70	(a)	3,548.70
	11/21/2014		(a)	63.73	(a)	3,548.67
	4/20/2015		(a)	63.74	(a)	3,548.66
	11/3/2015		(a)	63.96	(a)	3,548.44
	4/27/2016		(a)	64.14	(a)	3,548.26
	11/15/2016		(a)	64.26	(a)	3,548.14
	5/22/2017		(a)	64.28	(a)	3,548.12
	7/14/2017		(a)	62.12	(a)	3,550.28
	7/28/2017		(a)	62.03	(a)	3,550.37
	8/7/2017		(a)	64.17	(a)	3,548.23
	9/9/2017		(a)	64.58	(a)	3,547.82
	11/13/2017		(a)	64.83	(a)	3,547.57
	5/31/2018		(a)	64.53	(a)	3,547.87
	11/6/2018		(a)	64.77	(a)	3,547.63
	6/23/2019		(a)	64.50	(a)	3,547.90
	1/6/2020		(a)	64.58	(a)	3,547.82
	5/12/2020		(a)	64.63	(a)	3,547.77
	11/9/2020		(a)	65.00	(a)	3,547.40

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-16	3/10/2009	NA	64.32	65.75	1.43	NA
	10/8/2009		65.63	Tagged pump	NA	NA
	1/26/2010		64.64	66.30	1.66	NA
	3/22/2010		64.27	66.21	1.94	NA
	4/17/2011		64.25	65.18	0.93	NA
	12/22/2011		64.61	65.79	1.18	NA
	4/17/2012		64.74	67.17	2.43	NA
	10/15/2012		64.89	67.41	2.52	NA
	4/15/2013		64.80	66.55	1.75	NA
	11/3/2013	3613.14 (h)	64.65	67.06	2.41	3,547.91
	5/1/2014		65.27	67.19	1.92	3,547.41
	11/20/2014		65.96	67.84	1.88	3,546.73
	4/20/2015		65.23	66.56	1.33	3,547.59
	11/3/2015		(a)	66.59	(a)	3,546.55
	4/27/2016		66.28	67.03	0.75	3,546.68
	8/28/2016		67.24	67.66	0.42	3,545.80
	11/15/2016		67.17	67.90	0.73	3,545.79
	5/22/2017		66.21	67.10	0.89	3,546.72
	7/14/2017		71.94	71.95	0.01	3,541.20
	7/28/2017		70.60	70.61	0.01	3,542.54
	8/7/2017		(a)	71.85	(a)	3,541.29
	9/9/2017		(a)	71.92	(a)	3,541.22
	11/13/2017		67.80	67.90	0.10	3,545.32
	5/31/2018		67.85	69.46	1.61	3,544.90
	11/6/2018		67.38	67.95	0.57	3,545.62
	6/23/2019		67.84	68.85	1.01	3,545.06
	1/6/2020		67.75	69.75	2.00	3,544.91
	5/12/2020		66.72	67.80	1.08	3,546.16
	11/9/2020		68.54	70.13	1.59	3,544.22
	1/18/2021		67.57	69.35	1.78	3,545.14
	2/10/2021		67.25	68.47	1.22	3,545.60
	3/8/2021		67.30	68.59	1.29	3,545.53
	4/5/2021		65.36	66.37	1.01	3,547.54

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-17	3/10/2009	NA	64.80	65.07	0.27	NA
	10/8/2009		65.48	65.55	0.07	NA
	1/26/2010		65.19	65.22	0.03	NA
	3/22/2010		(a)	64.77	(a)	(a)
	4/17/2011		(a)	64.93	(a)	(a)
	12/22/2011		(a)	65.37	(a)	(a)
	4/17/2012		65.22	65.37	0.15	(a)
	10/15/2012		65.95	66.81	0.86	(a)
	4/15/2013		65.62	66.06	0.44	(a)
	11/3/2013	3612.75 (h)	65.63	67.49	1.86	3,546.67
	5/1/2014		65.75	66.45	0.70	3,546.83
	11/21/2014		66.15	66.64	0.49	3,546.48
	4/20/2015		66.08	67.38	1.30	3,546.36
	11/3/2015		(a)	66.88	(a)	3,545.87
	4/27/2016		66.71	66.72	0.01	3,546.04
	8/28/2016		(a)	67.81	(a)	3,544.94
	11/16/2016		67.84	67.90	0.06	3,544.90
	5/22/2017		66.60	66.95	0.35	3,546.07
	7/14/2017		(a)	71.15	(a)	3,541.60
	7/28/2017		(a)	71.11	(a)	3,541.64
	8/7/2017		(a)	71.12	(a)	3,541.63
	9/9/2017		(a)	71.15	(a)	3,541.60
	11/13/2017		68.20	68.35	0.15	3,544.51
	5/31/2018		67.15	67.30	0.15	3,545.56
	11/6/2018		67.68	67.75	0.07	3,545.05
	6/24/2019		66.90	67.10	0.20	3,545.80
	1/6/2020		67.00	67.15	0.15	3,545.71
	5/12/2020		(a)	67.30	(a)	3,545.45
	11/9/2020		70.28	70.35	0.07	3,542.45
	1/18/2021		(a)	71.30	(a)	3,541.45
	2/10/2021		67.43	67.75	0.32	3,545.24
	3/8/2021		67.55	67.80	0.25	3,545.14
	4/5/2021		(a)	78.28	(a)	3,534.47
MPE-18	3/10/2009	NA	(a)	61.65	(a)	NA
	10/8/2009		(a)	61.93	(a)	NA
	3/22/2010		(a)	61.44	(a)	NA
	4/17/2011		(a)	61.70	(a)	NA
	12/22/2011		(a)	62.19	(a)	NA
	4/17/2012		(a)	62.39	(a)	NA
	10/15/2012		(a)	62.78	(a)	NA
	4/15/2013		(a)	62.64	(a)	NA
	11/3/2013	3611.12 (h)	(a)	62.93	(a)	3,548.19
	5/1/2014		(a)	63.07	(a)	3,548.05
	11/21/2014		(a)	63.04	(a)	3,548.08
	4/20/2015		(a)	62.97	(a)	3,548.15
	11/3/2015		(a)	63.28	(a)	3,547.84
	4/27/2016		(a)	63.45	(a)	3,547.67
	11/16/2016		(a)	63.61	(a)	3,547.51
	5/22/2017		(a)	63.43	(a)	3,547.69
	7/14/2017		(a)	62.28	(a)	3,548.84
	7/28/2017		(a)	62.43	(a)	3,548.69
	8/7/2017		(a)	64.21	(a)	3,546.91
	9/9/2017		(a)	64.53	(a)	3,546.59
	11/13/2017		(a)	64.32	(a)	3,546.80
	5/30/2018		(a)	63.58	(a)	3,547.54
	11/6/2018		(a)	64.03	(a)	3,547.09
	6/24/2019		(a)	63.42	(a)	3,547.70
	1/6/2020		(a)	63.51	(a)	3,547.61
	5/12/2020		(a)	63.65	(a)	3,547.47
	11/9/2020		(a)	64.27	(a)	3,546.85

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-19	3/10/2009	NA	(a)	65.02	(a)	NA
	10/8/2009		(a)	65.54	(a)	NA
	3/22/2010		(a)	65.14	(a)	NA
	4/17/2011		(a)	65.11	(a)	NA
	12/22/2011		(a)	65.54	(a)	NA
	4/17/2012		(a)	65.53	(a)	NA
	10/15/2012		(a)	65.91	(a)	NA
	4/15/2013		(a)	66.03	(a)	NA
	11/3/2013	3614.46 (h)	(a)	66.05	(a)	3,548.41
	5/1/2014		(a)	66.08	(a)	3,548.38
	11/21/2014		(a)	66.62	(a)	3,547.84
	4/20/2015		(a)	66.16	(a)	3,548.30
	11/3/2015		(a)	66.50	(a)	3,547.96
	4/27/2016		(a)	66.31	(a)	3,548.15
	11/16/2016		(a)	66.77	(a)	3,547.69
	5/22/2017		(a)	66.40	(a)	3,548.06
	7/14/2017		(a)	63.95	(a)	3,550.51
	7/28/2017		(a)	64.17	(a)	3,550.29
	8/7/2017		(a)	62.26	(a)	3,552.20
	9/9/2017		(a)	63.82	(a)	3,550.64
	11/13/2017		(a)	67.37	(a)	3,547.09
	5/31/2018		(a)	66.88	(a)	3,547.58
	11/6/2018		(a)	67.04	(a)	3,547.42
	6/24/2019		(a)	66.33	(a)	3,548.13
	1/6/2020		(a)	66.40	(a)	3,548.06
	5/12/2020		(a)	66.48	(a)	3,547.98
	11/9/2020		(a)	67.12	(a)	3,547.34
MPE-20	3/10/2009	NA	62.58	64.52	1.94	NA
	10/8/2009		62.45	65.34	2.89	NA
	1/26/2010		62.28	65.10	2.82	NA
	3/22/2010		61.58	64.81	3.23	NA
	4/17/2011		62.10	64.45	2.35	NA
	12/22/2011		62.70	64.58	1.88	NA
	4/17/2012		63.09	64.86	1.77	NA
	10/15/2012		64.41	65.23	0.82	NA
	4/15/2013		63.52	64.98	1.46	NA
	11/3/2013	3611.40 (h)	63.37	64.28	0.91	3,547.81
	5/1/2014		63.64	65.23	1.59	3,547.38
	11/21/2014		65.59	66.47	0.88	3,545.60
	4/21/2015		63.75	64.77	1.02	3,547.41
	11/3/2015		64.81	66.00	1.19	3,546.30
	4/27/2016		64.73	65.91	1.18	3,546.39
	8/28/2016		66.07	66.09	0.02	3,545.33
	11/16/2016		65.75	67.05	1.30	3,545.34
	5/22/2017		64.57	65.60	1.03	3,546.58
	7/14/2017		(a)	70.20	(a)	3,541.20
	7/28/2017		(a)	71.99	(a)	3,539.41
	8/7/2017		(a)	70.27	(a)	3,541.13
	9/9/2017		(a)	70.35	(a)	3,541.05
	11/13/2017		66.13	67.27	1.14	3,544.13
	5/31/2018		(a)	65.75	(a)	3,545.65
	6/24/2019		(a)	69.23	(a)	3,542.17
	1/6/2020		64.38	64.50	0.12	3,546.90
	5/12/2020		(a)	64.50	(a)	3,546.90
	11/9/2020		(a)	67.26	(a)	3544.14

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-21	3/10/2009	NA	(a)	56.57	(a)	NA
	10/8/2009		(a)	57.13	(a)	NA
	1/26/2010		(a)	57.71	(a)	NA
	3/22/2010		(a)	57.68	(a)	NA
	4/17/2011		(a)	57.30	(a)	NA
	12/22/2011		(a)	57.82	(a)	NA
	4/17/2012		58.20	58.31	0.11	NA
	10/15/2012		58.02	58.07	0.05	NA
	4/15/2013		57.73	59.11	1.38	NA
	11/3/2013	3607.52 (h)	56.94	57.82	0.88	3,550.37
	5/1/2014		58.32	58.75	0.43	3,549.10
	11/21/2014		58.71	59.97	1.26	3,548.51
	4/21/2015		56.73	57.95	1.22	3,550.50
	11/3/2015		(a)	59.13	(a)	3,548.39
	4/27/2016		(a)	59.50	(a)	3,548.02
	8/28/2016		(a)	59.24	(a)	3,548.28
	11/16/2016		(a)	59.38	(a)	3,548.14
	5/22/2017		(a)	59.45	(a)	3,548.07
	7/14/2017		(a)	65.99	(a)	3,541.53
	7/28/2017		(a)	65.95	(a)	3,541.57
	8/7/2017		(a)	66.08	(a)	3,541.44
	9/9/2017		(a)	66.95	(a)	3,540.57
	11/13/2017		(a)	60.90	(a)	3,546.62
	5/30/2018		(a)	59.60	(a)	3,547.92
	11/6/2018		(a)	60.08	(a)	3,547.44
	6/24/2019		(a)	60.95	(a)	3,546.57
	1/6/2020		(a)	66.90	(a)	3,540.62
	5/12/2020		(a)	60.10	(a)	3,547.42
	11/9/2020		(a)	61.55	(a)	3,545.97
MPE-22	3/10/2009	NA	(a)	67.17	(a)	NA
	10/8/2009		(a)	67.68	(a)	NA
	1/26/2010		(a)	67.33	(a)	NA
	3/22/2010		(a)	66.99	(a)	NA
	4/17/2011		(a)	67.25	(a)	NA
	12/22/2011		(a)	67.61	(a)	NA
	4/17/2012		(a)	67.44	(a)	NA
	10/18/2012		(a)	68.20	(a)	NA
	4/15/2013		(a)	67.87	(a)	NA
	11/3/2013	3616.80 (h)	(a)	68.28	(a)	3,548.52
	5/1/2014		(a)	68.12	(a)	3,548.68
	11/21/2014		(a)	68.59	(a)	3,548.21
	4/21/2015		(a)	68.23	(a)	3,548.57
	11/3/2015		(a)	68.24	(a)	3,548.56
	4/29/2016		(a)	68.14	(a)	3,548.66
	11/16/2016		(a)	69.13	(a)	3,547.67
	5/22/2017		(a)	68.50	(a)	3,548.30
	11/6/2017		(a)	68.68	(a)	3,548.12
	11/13/2017		(a)	68.78	(a)	3,548.02
	6/1/2018		(a)	68.42	(a)	3,548.38
	11/6/2018		(a)	68.80	(a)	3,548.00
	6/24/2019		(a)	68.16	(a)	3,548.64
	1/5/2020		(a)	68.19	(a)	3,548.61
	5/13/2020		(a)	68.23	(a)	3,548.57
	11/10/2020		(a)	68.70	(a)	3,548.10

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-23	3/10/2009	NA	62.85	64.00	1.15	NA
	10/8/2009		62.58	64.90	2.32	NA
	1/26/2010		62.84	63.98	1.14	NA
	3/22/2010		61.94	62.58	0.64	NA
	4/17/2011		62.31	62.78	0.47	NA
	12/22/2011		62.45	64.70	2.25	NA
	4/17/2012		62.57	64.58	2.01	NA
	10/18/2012		63.35	65.36	2.01	NA
	4/15/2013		62.78	65.30	2.52	NA
	11/3/2013	3612.44 (h)	63.45	65.52	2.07	3,548.49
	5/1/2014		63.41	64.65	1.24	3,548.73
	11/21/2014		63.97	65.57	1.6	3,548.09
	4/21/2015		63.29	65.43	2.14	3,548.64
	11/3/2015		(a)	64.07	(a)	3,548.37
	4/29/2016		63.97	64.00	0.03	3,548.46
	8/28/2016		63.74	66.05	2.31	3,548.15
	11/16/2016		63.97	66.00	2.03	3,547.98
	5/22/2017		63.62	65.03	1.41	3,548.48
	11/6/2017		(a)	72.45	(a)	3,539.99
	11/13/2017		(a)	72.45	(a)	3,539.99
	6/1/2018		64	64.75	0.75	3,547.69
	11/6/2018		(a)	65.11	(a)	3,547.33
	6/24/2019		63.55	63.56	0.01	3,548.88
	1/5/2020		(a)	63.55	(a)	3,548.89
	5/13/2020		(a)	63.81	(a)	3,548.63
	11/10/2020		(a)	64.85	(a)	3,547.59
MPE-24	3/10/2009	NA	57.55	58.93	1.38	3,547.33
	10/8/2009		57.20	59.52	2.32	NA
	1/26/2010		57.65	59.92	2.27	NA
	3/22/2010		57.41	59.75	2.34	NA
	4/17/2011		57.57	59.57	2.00	NA
	12/22/2011		58.27	60.95	2.68	NA
	4/17/2012		58.43	61.11	2.68	NA
	10/15/2012		58.10	64.85	6.75	NA
	4/15/2013		58.08	63.22	5.14	NA
	11/3/2013	3608.45 (h)	58.33	62.96	4.63	3,549.01
	5/1/2014		58.61	63.91	5.30	3,548.57
	11/21/2014		58.58	65.93	7.35	3,548.11
	4/21/2015		58.49	63.30	4.81	3,548.81
	11/3/2015		60.03	60.10	0.07	3,548.40
	4/29/2016		60.12	60.20	0.08	3,548.31
	11/16/2016		59.46	63.22	3.76	3,548.09
	5/22/2017		59.80	61.40	1.60	3,548.27
	11/6/2017		(a)	71.71	(a)	3,536.74
	11/13/2017		61.21	61.23	0.02	3,547.24
	5/31/2018		(a)	59.71	(a)	3,548.74
	11/6/2018		(a)	59.88	(a)	3,548.57
	6/24/2019		(a)	59.27	(a)	3,549.18
	1/6/2020		(a)	59.60	(a)	3,548.85
	5/12/2020		(a)	59.60	(a)	3,548.85
	11/9/2020		(a)	60.55	(a)	3,547.90

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-25	3/10/2009	NA	(a)	67.13	(a)	NA
	10/8/2009		(a)	67.79	(a)	NA
	1/26/2010		(a)	67.40	(a)	NA
	3/22/2010		(a)	67.07	(a)	NA
	4/17/2011		(a)	67.32	(a)	NA
	12/22/2011		(a)	67.79	(a)	NA
	4/17/2012		(a)	67.50	(a)	NA
	10/18/2012		(a)	68.32	(a)	NA
	4/15/2013		(a)	68.03	(a)	NA
	11/3/2013	3616.99 (h)	(a)	68.46	(a)	3,548.53
	5/1/2014		(a)	68.20	(a)	3,548.79
	11/21/2014		(a)	68.74	(a)	3,548.25
	4/21/2015		(a)	68.35	(a)	3,548.64
	11/3/2015		(a)	68.27	(a)	3,548.72
	4/29/2016		(a)	68.20	(a)	3,548.79
	11/16/2016		(a)	69.15	(a)	3,547.84
	5/22/2017		(a)	68.27	(a)	3,548.72
	11/6/2017		(a)	65.10	(a)	3,551.89
	11/13/2017		(a)	69.10	(a)	3,547.89
	6/1/2018		(a)	68.65	(a)	3,548.34
	11/6/2018		(a)	68.82	(a)	3,548.17
	6/24/2019		(a)	67.40	(a)	3,549.59
	1/5/2020		(a)	68.05	(a)	3,548.94
	5/13/2020		(a)	68.25	(a)	3,548.74
	11/10/2020		(a)	68.87	(a)	3,548.12
MPE-26	3/10/2009	NA	64.54	64.86	0.32	NA
	10/8/2009		65.30	65.70	0.40	NA
	1/26/2010		64.84	65.32	0.48	NA
	3/22/2010		64.46	65.04	0.58	NA
	4/17/2011		(a)	64.70	(a)	NA
	12/22/2011		65.19	65.63	0.44	NA
	4/17/2012		64.92	65.48	0.56	NA
	10/15/2012		65.60	66.10	0.50	NA
	4/15/2013		65.54	66.05	0.51	NA
	11/3/2013	3614.30 (h)	65.78	65.82	0.04	3,548.51
	5/1/2014		65.71	65.96	0.25	3,548.53
	11/21/2014		66.28	66.63	0.35	3,547.94
	4/21/2015		65.75	66.04	0.29	3,548.48
	11/3/2015		65.66	66.02	0.36	3,548.55
	4/29/2016		65.62	65.98	0.36	3,548.59
	11/16/2016		66.63	67.05	0.42	3,547.57
	5/22/2017		65.98	66.30	0.32	3,548.24
	11/6/2017		(a)	62.57	(a)	3,551.73
	11/13/2017		66.64	66.67	0.03	3,547.65
	6/1/2018		66.1	66.12	0.02	3,548.20
	11/6/2018		(a)	66.18	(a)	3,548.12
	6/24/2019		(a)	66.49	(a)	3,547.81
	1/5/2020		(a)	65.53	(a)	3,548.77
	5/13/2020		(a)	65.70	(a)	3,548.60
	11/10/2020		(a)	66.28	(a)	3548.02

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-27	3/10/2009	NA	62.65	64.96	2.31	NA
	10/8/2009		63.05	69.05	6.00	NA
	1/26/2010		(a)	62.92	(a)	NA
	3/22/2010		62.60	64.38	1.78	NA
	4/17/2011		62.54	tag top of pump	NA	NA
	12/22/2011		(a)	62.81	(a)	NA
	4/17/2012		63.34	63.63	0.29	NA
	10/15/2012		64.62	65.38	0.76	NA
	4/15/2013		(a)	tag top of pump	NA	NA
	11/3/2013	3612.96 (h)	62.92	65.70	2.78	3,549.37
	5/1/2014		63.75	67.31	3.56	3,548.36
	11/21/2014		(a)	65.48	(a)	3,547.48
	4/21/2015		63.85	65.70	1.85	3,548.67
	11/3/2015		64.37	64.40	0.03	3,548.58
	4/29/2016		64.35	64.37	0.02	3,548.61
	8/28/2016		(a)	65.45	(a)	3,547.51
	11/16/2016		(a)	65.41	(a)	3,547.55
	5/22/2017		64.58	64.70	0.12	3,548.35
	11/6/2017		(a)	75.10	(a)	3,537.86
	11/13/2017		67.95	68.27	0.32	3,544.93
	6/1/2018		64.4	65.21	0.81	3,547.75
	11/6/2018		(a)	64.35	(a)	3,548.61
	6/24/2019		(a)	62.95	(a)	3,550.01
	1/5/2020		63.61	64.85	1.24	3,549.05
	5/13/2020		63.58	65.55	1.97	3,548.91
	11/10/2020		65.12	65.17	0.05	3,547.83
	1/18/2021		(a)	64.00	(a)	3,548.96
	2/10/2021		62.12	64.00	1.88	3,550.39
	3/8/2021		62.55	64.29	1.74	3,549.99
	4/5/2021		(a)	75.15	(a)	3,537.81
MPE-28	3/10/2009	NA	55.01	59.20	4.19	NA
	10/8/2009		56.72	60.21	3.49	NA
	1/26/2010		56.12	59.78	3.66	NA
	3/22/2010		55.50	59.20	3.70	NA
	4/17/2011		(a)	56.78	(a)	NA
	12/22/2011		(a)	58.61	(a)	NA
	4/17/2012		(a)	57.45	(a)	NA
	10/15/2012		(a)	58.30	(a)	NA
	4/15/2013		57.85	57.88	0.03	NA
	11/3/2013	3607.49 (h)	(a)	58.39	(a)	3,549.10
	5/1/2014		58.32	58.40	0.08	3,554.62
	11/21/2014		(a)	60.74	(a)	3,546.75
	4/21/2015		(a)	57.72	(a)	3,549.77
	11/3/2015		57.60	57.61	0.01	3,555.36
	4/28/2016		57.38	57.44	0.06	3,555.57
	11/16/2016		NA	NA	NA	NA
	5/22/2017		57.65	57.80	0.15	3555.27
	11/6/2017		(a)	56.80	(a)	3550.69
	11/13/2017		(a)	58.33	(a)	3,549.16
	6/1/2018		(a)	57.74	(a)	3,549.75
	11/6/2018		(a)	58.12	(a)	3,549.37
	6/24/2019		(a)	56.68	(a)	3,550.81
	1/6/2020		(a)	56.90	(a)	3,550.59
	5/13/2020		(a)	57.11	(a)	3,550.38
	11/10/2020		(a)	58.07	(a)	3,549.42

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-29	3/10/2009	NA	(a)	67.35	(a)	NA
	10/8/2009		(a)	68.38	(a)	NA
	3/22/2010		(a)	67.58	(a)	NA
	4/17/2011		(a)	67.73	(a)	NA
	12/22/2011		(a)	68.38	(a)	NA
	4/17/2012		(a)	67.98	(a)	NA
	10/18/2012		(a)	68.95	(a)	NA
	4/15/2013		(a)	68.44	(a)	NA
	11/3/2013	3617.10 (h)	(a)	69.00	(a)	3,548.10
	5/1/2014		(a)	68.68	(a)	3,548.42
	11/21/2014		(a)	69.41	(a)	3,547.69
	4/21/2015		(a)	68.75	(a)	3,548.35
	11/3/2015		(a)	68.65	(a)	3,548.45
	4/29/2016		(a)	68.57	(a)	3,548.53
	11/16/2016		(a)	69.62	(a)	3,547.48
	5/22/2017		(a)	68.65	(a)	3,548.45
	11/6/2017		(a)	69.75	(a)	3,547.35
	11/13/2017		(a)	69.77	(a)	3,547.33
	6/1/2018		(a)	69.10	(a)	3,548.00
	11/6/2018		(a)	69.12	(a)	3,547.98
	6/24/2019		(a)	68.30	(a)	3,548.80
	1/5/2020		(a)	68.31	(a)	3,548.79
	5/13/2020		(a)	68.55	(a)	3,548.55
	11/10/2020		(a)	69.30	(a)	3,547.80
MPE-30	3/10/2009	NA	(a)	64.92	(a)	NA
	10/8/2009		(a)	66.20	(a)	NA
	3/22/2010		(a)	65.41	(a)	NA
	4/17/2011		(a)	65.25	(a)	NA
	12/22/2011		(a)	65.91	(a)	NA
	4/17/2012		(a)	65.78	(a)	NA
	10/18/2012		(a)	66.46	(a)	NA
	4/15/2013		(a)	66.35	(a)	NA
	11/3/2013	3616.01 (h)	(a)	66.93	(a)	3,549.08
	5/1/2014		(a)	66.97	(a)	3,549.04
	11/21/2014		(a)	67.36	(a)	3,548.65
	4/21/2015		(a)	66.56	(a)	3,549.45
	11/3/2015		(a)	66.26	(a)	3,549.75
	4/28/2016		(a)	66.08	(a)	3,549.93
	11/16/2016		(a)	67.38	(a)	3,548.63
	5/22/2017		NA	NA	NA	NA
	11/13/2017		(a)	67.95	(a)	3,548.06
	6/1/2018		(a)	67.37	(a)	3,548.64
	11/6/2018		(a)	67.32	(a)	3,548.69
	6/24/2019		(a)	66.03	(a)	3,549.98
	1/5/2020		(a)	66.08	(a)	3,549.93
	5/13/2020		(a)	65.90	(a)	3,550.11
	11/10/2020		(a)	67.50	(a)	3,548.51

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-31	3/10/2009	NA	63.22	63.24	0.02	NA
	10/8/2009		(a)	65.28	(a)	NA
	1/26/2010		(a)	63.99	(a)	NA
	3/22/2010		63.46	63.47	0.01	NA
	4/17/2011		(a)	63.41	(a)	NA
	12/22/2011		64.22	64.69	0.47	NA
	4/17/2012		64.04	64.45	0.41	NA
	10/18/2012		65.28	65.82	0.54	NA
	4/15/2013		64.16	65.16	1.00	NA
	11/3/2013	3613.18 (h)	64.64	65.11	0.47	3,548.43
	5/1/1994		64.62	65.64	1.02	3,548.32
	11/21/2014		65.79	66.39	0.60	3,547.25
	4/21/2015		64.36	64.98	0.62	3,548.67
	11/3/2015		64.14	64.68	0.54	3,548.91
	4/28/2016		64.98	65.46	0.48	3,548.08
	8/28/2016		(a)	65.89	(a)	3,547.29
	11/16/2016		(a)	65.75	(a)	3,547.43
	5/22/2017		(a)	64.81	(a)	3,548.37
	11/13/2017		(a)	66.45	(a)	3,546.73
	6/1/2018		(a)	65.02	(a)	3,548.16
	11/6/2018		(a)	63.95	(a)	3,549.23
	6/24/2019		(a)	63.98	(a)	3,549.20
	1/5/2020		(a)	64.00	(a)	3,549.18
	5/13/2020		(a)	64.15	(a)	3,549.03
	11/10/2020		(a)	65.32	(a)	3,547.86
MPE-32	3/10/2009	NA	57.01	59.81	2.80	NA
	10/8/2009		(a)	62.21	(a)	NA
	1/26/2010		57.90	61.23	3.33	NA
	3/22/2010		(a)	57.30	(a)	NA
	4/17/2011		(a)	57.32	(a)	NA
	12/22/2011		(a)	56.62	(a)	NA
	4/17/2012		58.55	61.08	2.53	NA
	10/15/2012		NA	Tag top of pump	NA	NA
	4/15/2013		59.16	59.35	0.19	NA
	11/3/2013	3607.41 (h)	(a)	60.03	(a)	3,547.38
	5/1/2014		59.65	60.53	0.88	3,547.55
	11/21/2014		(a)	62.50	(a)	3,544.91
	4/21/2015		58.27	61.3	3.03	3,548.41
	11/3/2015		58.66	59.08	0.42	3,548.65
	4/28/2016		59.11	59.65	0.54	3,548.17
	8/28/2016		(a)	61.96	(a)	3,545.45
	11/16/2016		61.22	61.39	0.17	3,546.15
	5/22/2017		58.62	60.75	2.13	3,548.28
	11/13/2017		(a)	62.93	(a)	3,544.48
	6/1/2018		59.82	60.01	0.19	3,547.54
	11/6/2018		(a)	57.15	(a)	3,550.26
	6/24/2019		57.03	59.30	2.27	3,549.84
	1/6/2020		57.70	59.20	1.50	3,549.35
	5/12/2020		58.58	58.62	0.04	3,548.82
	11/9/2020		(a)	59.98	(a)	3,550.26

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-33	3/10/2009	NA	(a)	53.82	(a)	NA
	10/8/2009		(a)	56.63	(a)	NA
	3/22/2010		(a)	54.56	(a)	NA
	4/17/2011		(a)	54.73	(a)	NA
	12/22/2011		(a)	56.65	(a)	NA
	4/17/2012		(a)	55.85	(a)	NA
	10/15/2012		(a)	58.43	(a)	NA
	4/15/2013		(a)	56.43	(a)	NA
	11/3/2013	3603.22 (h)	(a)	57.14	(a)	3,546.08
	5/1/2014		(a)	56.65	(a)	3,546.57
	11/21/2014		(a)	58.46	(a)	3,544.76
	4/21/2015		(a)	54.22	(a)	3,549.00
	11/3/2015		(a)	54.31	(a)	3,548.91
	4/28/2016		(a)	54.47	(a)	3,548.75
	11/16/2016		(a)	57.72	(a)	3,545.50
	5/22/2017		(a)	55.02	(a)	3,548.20
	11/13/2017		(a)	57.40	(a)	3,545.82
	6/1/2018		(a)	56.00	(a)	3,547.22
	11/6/2018		(a)	54.44	(a)	3,548.78
	6/24/2019		(a)	52.67	(a)	3,550.55
	1/6/2020		(a)	53.05	(a)	3,550.17
	5/13/2020		(a)	53.83	(a)	3,549.39
	11/9/2020		(a)	55.30	(a)	3,547.92
MPE-34	3/10/2009	NA	(a)	65.24	(a)	NA
	10/8/2009		(a)	65.78	(a)	NA
	3/22/2010		(a)	65.56	(a)	NA
	4/17/2011		(a)	65.40	(a)	NA
	12/22/2011		(a)	65.76	(a)	NA
	4/17/2012		(a)	65.79	(a)	NA
	10/18/2012		(a)	66.15	(a)	NA
	4/15/2013		(a)	66.20	(a)	NA
	11/3/2013	3616.24 (h)	(a)	66.28	(a)	3,549.96
	5/1/2014		(a)	66.23	(a)	3,550.01
	11/21/2014		(a)	65.89	(a)	3,550.35
	4/21/2015		(a)	65.57	(a)	3,550.67
	11/3/2015		(a)	65.27	(a)	3,550.97
	4/28/2016		(a)	65.10	(a)	3,551.14
	11/16/2016		(a)	65.68	(a)	3,550.56
	5/22/2017		(a)	65.38	(a)	3,550.86
	11/13/2017		(a)	65.70	(a)	3,550.54
	6/1/2018		(a)	65.47	(a)	3,550.77
	11/6/2018		(a)	65.46	(a)	3,550.78
	6/24/2019		(a)	64.75	(a)	3,551.49
	1/5/2020		(a)	64.70	(a)	3,551.54
	5/13/2020		(a)	64.91	(a)	3,551.33
	11/10/2020		(a)	66.32	(a)	3,549.92

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-35	3/10/2009	NA	(a)	59.29	(a)	NA
	10/8/2009		(a)	59.96	(a)	NA
	3/22/2010		(a)	59.36	(a)	NA
	4/17/2011		(a)	59.16	(a)	NA
	12/22/2011		(a)	59.67	(a)	NA
	4/17/2012		(a)	59.80	(a)	NA
	10/15/2012		(a)	60.00	(a)	NA
	4/15/2013		(a)	60.08	(a)	NA
	11/3/2013	3609.95 (h)	59.96	60.32	0.36	3,549.90
	11/13/2013		60.04	60.35	0.31	3,549.84
	5/1/2014		60.08	60.30	0.22	3,549.82
	11/21/2014		59.51	60.04	0.53	3,550.31
	4/21/2015		59.22	60.07	0.85	3,550.53
	11/3/2015		58.45	59.91	1.46	3,551.15
	4/28/2016		58.45	60.85	2.40	3,550.92
	11/16/2016		58.58	61.38	2.80	3,550.70
	5/22/2017		58.70	61.45	2.75	3,550.59
	11/13/2017		59.19	62.05	2.86	3,550.07
	6/1/2018		59.24	61.30	2.06	3,550.22
	11/6/2018		58.75	60.50	1.75	3,550.78
	6/24/2019		58.14	59.15	1.01	3,551.57
	1/6/2020		58.50	60.22	1.72	3,551.04
	5/12/2020		58.73	60.40	1.67	3,550.82
	11/9/2020		(a)	60.23	(a)	3,549.72
MPE-36	3/10/2009	NA	(a)	54.45	(a)	NA
	10/8/2009		(a)	57.35	(a)	NA
	3/22/2010		(a)	55.09	(a)	NA
	4/17/2011		(a)	54.78	(a)	NA
	12/22/2011		(a)	56.05	(a)	NA
	4/17/2012		(a)	55.99	(a)	NA
	10/15/2012		(a)	57.20	(a)	NA
	4/15/2013		(a)	56.35	(a)	NA
	11/3/2013	3604.60 (h)	(a)	56.58	(a)	3,548.02
	5/1/2014		(a)	56.78	(a)	3,547.82
	11/21/2014		(a)	53.13	(a)	3,551.47
	4/21/2015		(a)	55.71	(a)	3,548.89
	11/3/2015		(a)	50.73	(a)	3,553.87
	4/28/2016		(a)	55.56	(a)	3,549.04
	11/16/2016		(a)	56.90	(a)	3,547.70
	5/22/2017		(a)	56.13	(a)	3,548.47
	11/13/2017		(a)	58.35	(a)	3,546.25
	6/1/2018		(a)	56.52	(a)	3,548.08
	11/6/2018		(a)	40.74	(a)	3,563.86
	6/24/2019		(a)	53.97	(a)	3,550.63
	1/6/2020		(a)	54.62	(a)	3,549.98
	5/13/2020		(a)	54.79	(a)	3,549.81
	11/9/2020		(a)	56.47	(a)	3,548.13

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-37	3/10/2009	NA	(a)	51.90	(a)	NA
	10/8/2009		(a)	56.51	(a)	NA
	3/22/2010		(a)	52.40	(a)	NA
	4/17/2011		(a)	52.22	(a)	NA
	12/22/2011		(a)	53.48	(a)	NA
	4/17/2012		(a)	53.26	(a)	NA
	10/15/2012		(a)	54.68	(a)	NA
	4/15/2013		(a)	53.63	(a)	NA
	11/3/2013	3601.20 (h)	(a)	54.05	(a)	3,547.15
	5/1/2014		(a)	54.03	(a)	3,547.17
	11/21/2014		(a)	56.17	(a)	3,545.03
	4/21/2015		(a)	53.00	(a)	3,548.20
	11/3/2015		(a)	52.02	(a)	3,549.18
	4/28/2016		(a)	52.61	(a)	3,548.59
	11/16/2016		(a)	54.17	(a)	3,547.03
	5/22/2017		(a)	53.26	(a)	3,547.94
	11/13/2017		(a)	55.83	(a)	3,545.37
	6/1/2018		(a)	53.80	(a)	3,547.40
	11/6/2018		(a)	49.91	(a)	3,551.29
	6/24/2019		(a)	51.55	(a)	3,549.65
	1/6/2020		(a)	52.22	(a)	3,548.98
	5/13/2020		(a)	52.47	(a)	3,548.73
	11/9/2020		(a)	53.77	(a)	3,547.43
MPE-38	8/16/2013	3613.81 (h)	63.85	68.88	5.03	3,548.75
	11/3/2013		65.89	68.62	2.73	3,547.26
	5/1/2014		66.14	69.00	2.86	3,546.98
	11/21/2014		67.31	69.85	2.54	3,545.89
	4/21/2015		66.44	68.75	2.31	3,546.82
	11/3/2015		67.25	69.96	2.71	3,545.91
	4/27/2016		66.98	69.80	2.82	3,546.15
	8/28/2016		67.93	70.05	2.12	3,545.37
	11/16/2016		67.87	70.47	2.6	3,545.32
	5/22/2017		67.05	70.05	3.0	3,546.04
	7/14/2017		71.19	71.20	0.01	3,542.62
	7/28/2017		(a)	71.22	(a)	3,542.59
	8/7/2017		(a)	71.1	(a)	3,542.71
	9/9/2017		71.03	71.05	0.02	3,542.78
	11/13/2017		68.90	71.45	2.55	3,544.30
	5/31/2018		67.62	72.40	4.78	3,545.04
	11/6/2018		68.39	70.65	2.26	3,544.88
	6/24/2019		67.58	69.54	1.96	3,545.76
	1/6/2020		67.68	69.41	1.73	3,545.71
	5/12/2020		68.08	69.80	1.72	3,545.32
	11/9/2020		68.55	70.54	1.99	3,544.78
	1/18/2021		67.78	69.53	1.75	3,545.61
	2/10/2021		67.79	69.50	1.71	3,545.61
	3/8/2021		67.30	68.38	1.08	3,546.25
	4/5/2021		(a)	71.48	(a)	3,542.33

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-39	8/16/2013	3608.26 (h)	(a)	60.45	(a)	3,547.81
	11/3/2013		(a)	60.21	(a)	3,548.05
	5/1/2014		60.35	60.48	0.13	3,547.78
	11/21/2014		61	61.26	0.26	3,547.20
	4/21/2015		59.99	62.39	2.40	3,547.69
	11/3/2015		61.17	61.18	0.01	3,547.09
	4/27/2016		61.20	61.21	0.01	3,547.06
	8/28/2016		61.90	62.02	0.12	3,546.33
	11/16/2016		61.77	61.85	0.08	3,546.47
	5/22/2017		61.0	62.30	1.30	3546.95
	11/13/2017		(a)	62.50	(a)	3,545.76
	5/31/2018		61.00	61.02	0.02	3,547.26
	11/6/2018		(a)	61.64	(a)	3,546.62
	6/24/2019		60.78	60.85	0.07	3,547.46
	1/6/2020		61.10	61.25	0.15	3,547.12
	5/13/2020		61.24	61.30	0.06	3,547.01
	11/9/2020		(a)	62.15	(a)	3,546.11
MPE-40	8/16/2013	3610.84 (h)	61.52	61.95	0.43	3,549.22
	11/3/2013		61.95	62.25	0.30	3,548.82
	5/1/2014		61.80	62.15	0.35	3,548.96
	11/21/2014		62.81	63.21	0.40	3,547.93
	4/21/2015		61.35	64.74	3.39	3,548.68
	11/3/2015		61.52	66.91	5.39	3,548.03
	4/29/2016		61.48	66.68	5.20	3,548.11
	11/16/2016		61.85	69.95	8.10	3,547.05
	5/22/2017		61.87	67.35	5.48	3,547.65
	11/6/2017		63.72	70.58	6.86	3,545.47
	11/13/2017		63.72	70.58	6.86	3,545.47
	6/1/2018		61.2	62.53	1.33	3,549.32
	11/6/2018		62.59	63.14	0.55	3,548.12
	6/24/2019		61.37	63.35	1.98	3,548.99
	1/5/2020		61.65	64.45	2.80	3,548.52
	5/13/2020		61.34	62.07	0.73	3,549.32
	11/10/2020		64.06	64.16	0.10	3,546.76
	1/18/2021		62.6	64.27	1.67	3,547.84
	2/10/2021		62.75	64.50	1.75	3,547.67
	3/8/2021		61.09	65.61	4.52	3,548.67
	4/5/2021		65	65.15	0.15	3,545.80

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
MPE-41	8/16/2013	3605.49 (h)	60.40	60.90	0.50	3,544.97
	11/3/2013		56.19	62.74	6.55	3,547.73
	11/13/2013		56.58	62.72	6.14	3,547.44
	5/1/2014		56.35	62.85	6.50	3,547.58
	11/21/2014		60.87	61.23	0.36	3,544.53
	4/21/2015		56.03	61.1	5.07	3,548.24
	11/3/2015		55.78	59.07	3.29	3,548.92
	4/28/2016		56.51	60.44	3.93	3,548.04
	8/28/2016		58.98	61.17	2.19	3,545.98
	11/16/2016		58.21	61.02	2.81	3,546.61
	5/22/2017		56.48	61.47	4.99	3,547.81
	11/6/2017		(a)	71.05	(a)	3,534.44
	11/13/2017		(a)	61.20	(a)	3,544.29
	6/1/2018		57.8	59.18	1.38	3,546.31
	6/24/2019	Not Gauged due to Pump Interference				
	1/7/2020		56.5	57.75	1.25	3,548.69
	5/13/2020		57.16	57.26	0.10	3,548.31
	11/9/2020		57.97	58.62	0.65	3,547.36
	1/18/2021		56.39	58.50	2.11	3,548.59
	2/10/2021		56.45	59.75	3.30	3,548.25
	3/8/2021		56.49	59.78	3.29	3,548.21
	4/5/2021		(a)	68.80	(a)	3,536.69
SVE-1A	6/24/2019	NA	(a)	dry	(a)	NA
	1/5/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/10/2020		(a)	dry	(a)	NA
SVE-2A	6/24/2019	NA	(a)	dry	(a)	NA
	1/5/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/10/2020		(a)	dry	(a)	NA
SVE-3	6/24/2019	NA	(a)	dry	(a)	NA
	1/5/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/10/2020		(a)	dry	(a)	NA

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
SVE-22	3/10/2009	NA	33.00	33.20	0.20	NA
	10/8/2009		32.92	33.10	0.18	NA
	1/26/2010		33.05	33.05 (TD)	0.00	NA
	3/22/2010		33.02	33.02 (TD)	0.00	NA
	4/17/2011		32.90	33.00 (TD)	0.10	NA
	12/22/2011		(a)	33.04	(a)	NA
	4/17/2012		(a)	33.00 (TD)	(a)	NA
	10/18/2012		(a)	33.00 (TD)	(a)	NA
	4/15/2013		(a)	32.98	(a)	NA
	11/3/2013	3616.76 (h)	(a)	33.08	(a)	3,583.68
	5/1/2014		(a)	dry	(a)	NA
	11/21/2014		(a)	dry	(a)	NA
	4/21/2015		(a)	dry	(a)	NA
	11/3/2015		33.00	33.11	0.11	3,583.73
	4/29/2016		32.94	33.09	0.15	3,583.78
	11/16/2016		32.78	32.95	0.17	3,583.94
	5/22/2017		33.00	33.10	0.10	3,583.74
	11/13/2017		33.14	33.19	0.05	3,583.61
	6/1/2018		33.02	33.10	0.08	3,583.72
	11/6/2018		(a)	33.05	(a)	3,583.71
	6/24/2019		32.74	32.75	0.01	3,584.02
	1/5/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/10/2020		(a)	dry	(a)	NA
SVE-23	3/10/2009	NA	32.78	36.75	3.97	NA
	10/8/2009		33.01	33.79	0.78	NA
	1/26/2010		33.12	36.98 (TD)	3.86	NA
	3/22/2010		32.09	33.65	1.56	NA
	4/17/2011		33.00	33.30	0.30	NA
	12/22/2011		33.60	34.05	0.45	NA
	4/17/2012		33.62	34.10	0.48	NA
	10/18/2012		34.11	34.68	0.57	NA
	4/15/2013		33.65	33.92	0.27	NA
	11/3/2013	3612.45 (h)	33.73	36.52	2.79	3,578.05
	5/1/2014		33.78	36.80	3.02	3,577.95
	11/21/2014		32.15	32.84	0.69	3,580.13
	4/21/2015		32.75	33.4	0.65	3,579.54
	11/3/2015		32.74	33.07	0.33	3,579.63
	4/29/2016		33.01	33.33	0.32	3,579.36
	11/16/2016		33.37	33.82	0.45	3,578.97
	5/22/2017		33.60	34.15	0.55	3,578.72
	11/13/2017		32.64	33.28	0.64	3,579.66
	6/1/2018		33.27	33.95	0.68	3,579.02
	11/6/2018		32.55	35.70	3.15	3,579.14
	6/24/2019		Not Gauged - Snake Hazard Exist in Vault			
	1/5/2020		33.10	33.75	0.65	3,579.19
	5/13/2020		33.52	36.50	2.98	3,578.21
	11/10/2020		33.70	34.87	1.17	3,578.47
	1/18/2021		33.80	34.88	1.08	3,578.39
	2/10/2021		33.78	34.87	1.09	3,578.41
	3/8/2021		33.85	34.88	1.03	3,578.35
	4/5/2021		34.00	37.00	3.00	3,577.73

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
SVE-24	3/10/2009	NA	(a)	dry	(a)	NA
	10/8/2009		(a)	dry	(a)	NA
	1/26/2010		(a)	dry	(a)	NA
	3/22/2010		(a)	dry	(a)	NA
	4/17/2011		(a)	dry	(a)	NA
	12/22/2011		(a)	dry	(a)	NA
	4/17/2012		(a)	dry	(a)	NA
	10/18/2012		(a)	dry	(a)	NA
	4/15/2013		(a)	dry	(a)	NA
	11/3/2013	3608.97 (h)	(a)	dry	(a)	NA
	5/1/2014		(a)	dry	(a)	NA
	11/21/2014		(a)	dry	(a)	NA
	4/21/2015		(a)	28.61	(a)	3,580.36
	11/3/2015		(a)	dry	(a)	NA
	4/27/2016		(a)	dry	(a)	NA
	11/16/2016		(a)	dry	(a)	NA
	5/22/2017		(a)	dry	(a)	NA
	11/13/2017		(a)	dry	(a)	NA
	5/31/2018		(a)	dry	(a)	NA
	11/6/2018		(a)	dry	(a)	NA
	6/24/2019		(a	dry	(a)	NA
	1/6/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/9/2020		(a)	dry	(a)	NA
SVE-25	3/10/2009	NA	(a)	32.70	(a)	NA
	10/8/2009		(a)	31.40	(a)	NA
	1/26/2010		(a)	dry	(a)	NA
	3/22/2010		(a)	32.80	(a)	NA
	4/17/2011		(a)	32.23	(a)	NA
	12/22/2011		(a)	32.65	(a)	NA
	4/17/2012		(a)	dry	(a)	NA
	10/18/2012		(a)	32.70	(a)	NA
	4/15/2013		(a)	dry	(a)	NA
	11/3/2013	3617.02 (h)	(a)	32.72	(a)	3,584.30
	5/1/2014		(a)	32.70	(a)	3,584.32
	11/21/2014		(a)	dry	(a)	NA
	4/21/2015		(a)	32.73	(a)	3,584.29
	11/3/2015		(a)	dry	(a)	NA
	4/29/2016		(a)	dry	(a)	NA
	11/16/2016		(a)	dry	(a)	NA
	5/22/2017		(a)	dry	(a)	NA
	11/13/2017		(a)	31.88	(a)	3,585.14
	6/1/2018		(a)	32.6	(a)	3,584.42
	11/6/2018		(a)	31.75	(a)	3,585.27
	6/24/2019		(a)	dry	(a)	NA
	1/5/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/10/2020		32.5	32.69	0.19	3,584.47
	1/18/2021		32.6	32.71	0.11	3,584.39
	2/10/2021		32.57	32.7	0.13	3,584.42
	3/8/2021		32.55	32.82	0.27	3,584.41
	4/5/2021		32.65	32.75	0.1	3,584.35

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
SVE-26	3/10/2009	NA	(a)	dry	(a)	NA
	10/8/2009		(a)	dry	(a)	NA
	1/26/2010		(a)	dry	(a)	NA
	3/22/2010		(a)	dry	(a)	NA
	4/17/2011		(a)	dry	(a)	NA
	12/22/2011		(a)	dry	(a)	NA
	4/17/2012		(a)	dry	(a)	NA
	10/18/2012		(a)	dry	(a)	NA
	4/15/2013		(a)	dry	(a)	NA
	11/3/2013	3614.43 (h)	(a)	dry	(a)	NA
	5/1/2014		(a)	dry	(a)	NA
	11/21/2014		(a)	dry	(a)	NA
	4/21/2015		(a)	32.6	(a)	3,581.83
	11/3/2015		(a)	dry	(a)	NA
	4/29/2016		(a)	dry	(a)	NA
	11/16/2016		(a)	dry	(a)	NA
	5/22/2017		(a)	dry	(a)	NA
	11/13/2017		(a)	dry	(a)	NA
	6/1/2018		(a)	dry	(a)	NA
	11/6/2018		(a)	dry	(a)	NA
	6/24/2019		(a)	dry	(a)	NA
	1/5/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/10/2020		(a)	dry	(a)	NA
SVE-27	3/10/2009	NA	(a)	32.92	(a)	NA
	10/8/2009		(a)	33.63	(a)	NA
	1/26/2010		(a)	dry	(a)	NA
	3/22/2010		(a)	33.70	(a)	NA
	4/17/2011		(a)	33.70	(a)	NA
	12/22/2011		(a)	33.83	(a)	NA
	4/17/2012		(a)	dry	(a)	NA
	10/18/2012		(a)	dry	(a)	NA
	4/15/2013		(a)	33.82	(a)	NA
	11/3/2013	3613.19 (h)	(a)	dry	(a)	NA
	5/1/2014		(a)	dry	(a)	NA
	11/21/2014		(a)	33.01	(a)	3,580.18
	4/21/2015		(a)	33.58	(a)	3,579.61
	11/3/2015		(a)	33.54	(a)	3,579.65
	4/29/2016		(a)	33.82	(a)	3,579.37
	11/16/2016		(a)	34.15	(a)	3,579.04
	5/22/2017		(a)	dry	(a)	NA
	11/13/2017		(a)	33.48	(a)	3,579.71
	6/1/2018		(a)	34.00	(a)	3,579.19
	11/6/2018		(a)	33.31	(a)	3,579.88
	6/24/2019		Not Gauged - Snake Hazard Exist in Vault			
	1/5/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/10/2020		(a)	dry	(a)	NA

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
SVE-28	3/10/2009	NA	(a)	28.60	(a)	NA
	10/8/2009		(a)	28.95	(a)	NA
	1/26/2010		(a)	dry	(a)	NA
	3/22/2010		(a)	29.07	(a)	NA
	4/17/2011		(a)	29.17	(a)	NA
	12/22/2011		(a)	29.65	(a)	NA
	4/17/2012		(a)	dry	(a)	NA
	10/18/2012		(a)	dry	(a)	NA
	4/15/2013		(a)	33.58	(a)	NA
	11/3/2013	3607.84 (h)	(a)	dry	(a)	NA
	5/1/2014		(a)	dry	(a)	NA
	11/21/2014		(a)	28.59	(a)	3,579.25
	4/21/2015		(a)	28.86	(a)	3,578.98
	11/3/2015		(a)	28.75	(a)	3,579.09
	4/27/2016		(a)	28.97	(a)	3,578.87
	11/16/2016		(a)	29.18	(a)	3,578.66
	5/22/2017		(a)	29.44	(a)	3,578.40
	11/13/2017		(a)	28.76	(a)	3,579.08
	6/1/2018		(a)	29.15	(a)	3,578.69
	11/6/2018		(a)	28.53	(a)	3,579.31
	6/24/2019		(a)	28.97	(a)	3,578.87
	1/5/2020		(a)	28.81	(a)	3,579.03
	5/13/2020		(a)	29.05	(a)	3,578.79
	11/10/2020		(a)	29.73	(a)	3,578.11
SVE-30	3/10/2009	NA	(a)	39.32	(a)	NA
	10/8/2009		(a)	39.29	(a)	NA
	3/22/2010		(a)	40.28	(a)	NA
	4/17/2011		(a)	40.11	(a)	NA
	12/22/2011		(a)	41.11	(a)	NA
	4/17/2012		(a)	41.65	(a)	NA
	10/18/2012		(a)	41.42	(a)	NA
	4/15/2013		(a)	41.67	(a)	NA
	11/3/2013	3616.00 (h)	(a)	43.02	(a)	3,572.98
	5/1/2014		(a)	43.35	(a)	3,572.65
	11/21/2014		(a)	43.30	(a)	3,572.70
	4/21/2015		(a)	41.80	(a)	3,574.20
	11/3/2015		(a)	41.60	(a)	3,574.40
	4/28/2016		(a)	41.56	(a)	3,574.44
	11/16/2016		(a)	41.23	(a)	3,574.77
	5/22/2017		NA	NA	NA	NA
	11/13/2017		(a)	42.00	(a)	3,574.00
	6/1/2018		(a)	42.02	(a)	3,573.98
	11/6/2018		(a)	42.46	(a)	3,573.54
	6/24/2019		(a)	42.52	(a)	3,573.48
	1/5/2020		(a)	42.45	(a)	3,573.55
	5/13/2020		(a)	42.55	(a)	3,573.45
	11/10/2020		(a)	43.05	(a)	3,572.95

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
SVE-31	3/10/2009	NA	(a)	30.45	(a)	NA
	10/8/2009		(a)	30.43	(a)	NA
	1/26/2010		(a)	30.55	(a)	NA
	3/22/2010		(a)	31.49	(a)	NA
	4/17/2011		(a)	dry	(a)	NA
	12/22/2011		(a)	28.50	(a)	NA
	4/17/2012		(a)	dry	(a)	NA
	10/18/2012		(a)	dry	(a)	NA
	4/15/2013		(a)	dry	(a)	NA
	11/3/2013	3612.67 (h)	(a)	dry	(a)	NA
	5/1/2014		(a)	dry	(a)	NA
	11/21/2014		(a)	30.27	(a)	3,582.40
	4/21/2015		(a)	30.97	(a)	3,581.70
	11/3/2015		(a)	30.200	(a)	3,582.47
	4/28/2016		(a)	30.35	(a)	3,582.32
	11/16/2016		(a)	30.73	(a)	3,581.94
	5/22/2017		(a)	dry	(a)	NA
	11/13/2017		(a)	30.48	(a)	3,582.19
	6/1/2018		(a)	dry	(a)	NA
	11/6/2018		(a)	30.24	(a)	3,582.43
	6/24/2019		(a)	dry	(a)	NA
	1/5/2020		(a)	dry	(a)	NA
	5/13/2020		(a)	dry	(a)	NA
	11/10/2020		(a)	31.65	(a)	3,581.02

Table 3-2. Summary of Groundwater Surface Elevations
Transwestern Compressor Station No. 9 - Roswell, NM

Well ID	Date	TOC elevation (ft)	Depth to PSH (ft below TOC)	Depth to Groundwater (ft below TOC)	PSH (ft)	Groundwater Surface Elevation (ft)
RW-1	3/10/2009	NA	(a)	33.17	(a)	NA
	10/8/2009		(a)	33.48	(a)	NA
	3/22/2010		(a)	33.62	(a)	NA
	4/17/2011		(a)	33.80	(a)	NA
	12/22/2011		(a)	34.26	(a)	NA
	4/17/2012		(a)	34.57	(a)	NA
	10/18/2012		(a)	35.16	(a)	NA
	4/15/2013		(a)	35.77	(a)	NA
	11/3/2013	3612.72 (h)	(a)	34.95	(a)	3,577.77
	4/30/2014		(a)	35.48	(a)	3,577.24
	11/19/2014		(a)	32.46	(a)	3,580.26
	4/21/2015		(a)	33.08	(a)	3,579.64
	11/3/2015		(a)	33.00	(a)	3,579.72
	4/28/2016		(a)	33.32	(a)	3,579.40
	11/16/2016		(a)	33.70	(a)	3,579.02
	5/22/2017		(a)	34.03	(a)	3,578.69
	11/13/2017		(a)	32.96	(a)	3,579.76
	6/1/2018		(a)	33.62	(a)	3,579.10
	11/6/2018		(a)	32.82	(a)	3,579.90
	6/24/2019		(a)	33.57	(a)	3,579.15
	1/5/2020		(a)	33.38	(a)	3,579.34
	5/13/2020		(a)	33.68	(a)	3,579.04
	11/10/2020		(a)	34.55	(a)	3,578.17

Notes:
PSH - Phase separated hydrocarbon
ft - feet
TOC - Top of Casing
Corrections to ground water surface elevation for PSH is calculated assuming a specific gravity of 0.76

Prepared by: SWS 4/6/21
Checked by: HRB 4/6/21

(NA) Information not available
(a) Not applicable since no measurable thickness of PSH is present
(b) Elevation based on survey by Wagener Engineering dated 5/6/98
(c) Elevation based on survey by Wagener Engineering dated 9/17/98
(d) Elevation based on survey by Wagener Engineering dated 11/29/00
(e) Elevation based on survey by Wagener Engineering dated 10/03/01
(f) Elevation based on survey by Cypress Engineering dated 03/14/03
(g) Elevation based on survey by Cypress Engineering dated 06/23/07
(h) Elevation based on survey by PR Patton & Associates dated 10/01/13
Historical data before 2009 is presented in previous reports
Historical data for wells that were plugged and abandoned is not shown.

Table 3-3. Summary of Field Parameters
Transwestern Compressor Station No. 9 - Roswell, NM

Monitoring Well	Sample Date	Sample Time	Purge Volume Gallons	Temperature °C	pH Standard Units	Dissolved Oxygen mg/L	ORP mV	Conductivity µs/cm
MW-10	9/10/20	7:53	1.25	17.72	6.92	2.93	137.7	3.662
	11/23/20	8:15	1.00	18.03	6.73	1.37	30.2	3.505
MW-11	9/10/20	8:29	1.50	16.74	6.83	3.77	133.8	3.778
	11/23/20	7:50	1.50	17.65	6.17	3.03	28.9	3.632
MW-13	11/23/20	8:40	2.75	19.71	6.37	0.63	-111.1	3.618
MW-14	11/23/20	13:10	3.75	19.84	6.92	2.19	-188.2	3.548
MW-16	5/17/20	**Not Sampled due to PSH in Well**						
	11/9/20	**Not Sampled due to PSH in Well**						
MW-17	9/9/20	16:17	1.75	17.23	6.72	5.22	-96.7	4.029
	11/19/20	11:10	2.00	18.86	6.18	4.6	-9.9	3.833
MW-20	5/17/20	9:48	5.50	18.85	7.09	7.68	-102.2	3.706
	11/20/20	14:30	5.00	18.20	6.82	6.09	32.0	3.584
MW-21	5/15/20	11:31	4.00	20.85	6.99	1.89	6.9	3.155
	11/18/20	14:27	4.00	19.63	6.73	5.88	-106.5	2.985
MW-22	5/17/20	7:56	3.50	18.67	6.98	7.79	167.9	3.617
	11/20/20	13:30	3.00	18.65	7.04	4.95	6.5	3.526
MW-24D	11/30/20	10:35	35.0	17.15	7.23	2.96	-178.3	3.131
MW-26	5/17/20	9:02	7.00	18.47	6.99	7.9	167.2	3.657
	11/20/20	15:01	6.50	18.21	6.31	4.43	42.5	3.569
MW-27	5/14/20	15:38	3.25	19.90	7.02	6.55	-82.2	3.646
	11/18/20	14:20	2.50	19.17	6.69	1.6	238.1	3.646
MW-29	5/14/20	11:06	1.75	21.62	7.03	5.74	-21.9	3.338
	11/12/20	15:00	1.75	18.58	6.14	1.48	-137.1	3.289
MW-32	11/12/20	13:46	3.00	19.07	6.21	2.51	-12.5	3.081
MW-34	5/14/20	8:47	5.25	19.88	7.03	6.57	49.3	3.376
	11/12/20	11:30	5.00	18.56	6.77	0.84	-49.3	3.332
MW-35	11/12/20	12:15	7.00	18.55	6.81	5.04	3.30	3.752
MW-37	11/12/20	10:35	4.50	18.49	6.69	4.28	147.5	3.610
MW-39	5/17/20	14:05	10.00	19.04	7.05	7.58	164.1	3.654
	11/30/20	12:40	9.50	18.32	7.04	2.85	17.50	3.526
MW-40	5/17/20	12:05	7.75	18.78	7.02	7.00	141.0	3.640
	11/30/20	11:48	7.50	18.19	6.46	2.20	-6.5	3.541
MW-41	5/17/20	13:10	6.5	19.71	7.03	7.17	158.8	3.566
	11/30/20	12:10	6.00	18.63	7.03	2.57	8.5	3.463
MW-42	5/17/20	11:17	10.50	18.73	6.99	7.74	160.0	3.667
	11/30/20	11:20	9.0	18.03	6.75	3.18	-24.4	3.574
SVE-28	9/10/20	11:42	3.00	19.16	6.61	2.24	-206.5	2.741
	11/23/20	9:30	2.50	19.66	6.09	0.31	-199.8	2.633
SVE-30	9/10/20	9:00	0.75	NA	NA	NA	NA	NA
	11/23/20	**Not Sampled due to PSH in Well**						
SVE-31	11/23/20	9:50	0.25	18.96	6.41	1.22	-130.1	2.008
RW-1	9/10/20	11:10	16.25	19.24	6.49	0.09	-288.9	3.028
	11/23/20	**Not Sampled due to PSH in Well**						

Notes

mg/L - milligrams per liter
mV - millivolts
µs/cm - microsiemens per centimeter
NS - Not Analyzed
Note: Field parameters are only shown for wells sampled

^{o}C - Degrees Celsius

Prepared by: SWS 2/23/21
Checked by: HRB 3/2/21

Table 3-4. Summary of Historical Field Parameters
Transwestern Compressor Station No. 9 - Roswell, NM

Monitoring Well	Sample Date	Sample Time	Purge Volume Gallons	Temperature °C	pH Standard Units	Dissolved Oxygen mg/L	ORP mV	Conductivity µs/cm
MW-10	2/13/2020	14:20	1.25	18.73	6.22	3.39	-121.2	3.793
MW-11	2/13/2020	14:55	1.75	18.17	6.05	5.06	-80.3	3.912
MW-13	11/17/16	13:05	2.0	22.49	7.20	2.08	-19.2	2.937
	11/16/17	12:10	2.5	21.54	7.15	2.43	-9.2	3.484
	11/12/18	14:30	2.0	18.71	7.03	3.34	-62.5	3.616
	1/8/20	16:20	3.5	19.53	6.93	3.12	-138.2	3.724
MW-14	11/16/16	11:10	4.0	19.82	7.10	1.27	-14.8	2.859
	11/15/17	11:39	3.75	19.26	7.01	4.86	-3.4	3.281
	11/8/18	14:25	4.0	19.10	6.88	3.87	-66.2	3.658
	1/7/20	9:41	4.3	18.52	6.96	2.58	-188.7	3.589
MW-16	6/24/19	Not sampled due to PSH in well						
	1/6/20	Not sampled due to PSH in well						
MW-17	2/13/20	15:35	2.00	18.06	6.26	3.82	-140.00	4.13
	9/9/20	16:00	1.75	17.23	6.72	5.22	7.4	4.029
MW-20	11/16/16	13:21	4.75	18.82	7.21	3.81	-20.4	2.964
	5/24/17	14:02	5.25	19.79	6.95	3.54	-10.6	3.679
	11/15/17	13:42	4.0	18.89	7.01	7.88	-3.2	3.555
	6/1/18	9:20	5.0	19.14	7.02	7.25	-14.9	3.800
	11/9/18	10:35	6.50	17.61	6.90	3.20	73.2	3.757
	6/25/19	9:17	6.00	20.17	6.85	6.48	100.9	3.717
	1/6/20	15:21	5.75	17.55	6.92	5.20	97.5	3.757
MW-21	11/16/16	9:45	4.25	18.68	7.15	1.98	-17.0	2.528
	11/14/17	15:01	3.0	20.45	7.09	1.37	-6.7	2.988
	11/8/18	11:26	3.0	18.79	6.94	1.54	-139.1	3.135
	6/24/19	11:40	4.00	20.75	6.68	1.66	-110.8	3.168
	11/26/19	11:00	4.00	18.32	6.18	1.96	-128.3	3.248
MW-22	11/16/16	12:30	2.75	19.07	7.15	4.47	-17.2	2.840
	5/24/17	10:35	3.0	19.38	6.90	4.84	-8.5	3.538
	11/15/17	14:11	2.75	18.69	7.03	7.18	-4.1	3.439
	6/1/18	11:05	3.0	19.46	6.91	1.08	-8.8	3.686
	11/9/18	10:58	3.0	18.31	6.98	3.62	79.7	3.654
	6/25/19	8:45	3.5	18.96	6.94	6.71	96.6	3.684
	1/6/20	14:31	3.5	18.35	7.32	5.86	61.9	3.914
MW-24D	11/17/16	11:55	55	19.67	7.11	0.10	-15.5	2.818
	11/16/17	13:11	55	19.44	6.82	0.31	4.2	3.425
	11/12/18	13:20	50	17.67	7.07	2.78	-143.0	3.360
	1/7/20	10:35	55	18.81	7.1	0.51	60.2	3.225
MW-26	11/16/16	13:57	6.50	18.73	6.94	3.07	-7.6	2.917
	5/24/17	11:09	6.75	19.03	6.78	0.38	-1.8	3.596
	11/15/17	12:40	6.25	18.87	7.02	5.98	-1.2	3.588
	6/1/18	10:07	6.50	19.22	6.84	4.46	-5.3	3.742
	11/9/18	9:47	7.25	18.35	6.92	3.46	60.9	3.740
	6/25/19	10:03	7.50	18.90	6.76	6.76	104.4	3.741
	1/6/20	16:21	7.25	18.24	6.89	5.46	72.1	3.627

Table 3-4. Summary of Historical Field Parameters
Transwestern Compressor Station No. 9 - Roswell, NM

Monitoring Well	Sample Date	Sample Time	Purge Volume Gallons	Temperature °C	pH Standard Units	Dissolved Oxygen mg/L	ORP mV	Conductivity µs/cm
MW-27	11/15/16	14:49	4.50	19.69	6.83	1.62	-3.0	2.512
	5/23/17	13:53	3.0	--	--	--	--	--
	11/14/17	13:41	2.75	19.52	6.81	2.25	4.3	3.194
	5/31/18	8:05	2.75	19.69	6.57	3.25	8.8	3.473
	11/6/18	14:45	2.75	19.25	6.72	0.90	-319.5	3.424
	11/26/19	9:50	2.75	19.26	6.47	1.32	-308.4	3.737
MW-29	11/15/16	14:30	2.0	20.13	7.08	1.08	-14.1	2.319
	5/23/17	13:46	2.25	21.35	6.88	0.35	-7.1	2.857
	11/14/17	12:55	2.0	18.99	7.07	3.19	-6.2	2.854
	5/30/18	15:31	1.0	20.49	6.85	1.08	-5.8	3.065
	11/7/18	14:30	3.0	18.74	7.07	7.36	93.1	3.621
	6/24/19	11:00	2.00	21.02	6.7	0.79	-142.4	3.209
	11/25/19	16:05	2.00	20.69	6.7	2.33	-116.1	3.412
MW-32	11/15/16	13:11	3.25	19.79	7.13	1.11	-16.4	2.369
	5/23/17	12:58	3.25	20.27	6.88	1.19	-6.9	2.937
	11/14/17	12:30	3.25	19.75	7.10	2.00	-7.0	2.899
	5/30/18	14:51	3.25	20.87	6.95	2.21	-11.5	3.164
	11/6/18	13:56	3.0	20.14	6.93	2.57	13.7	3.131
	11/25/19	14:02	3.3	19.41	6.08	2.23	39	3.308
MW-34	11/15/16	11:25	5.50	19.48	7.16	0.20	-17.7	2.798
	5/23/17	10:31	5.75	19.67	6.93	0.55	-9.6	3.447
	11/14/17	10:09	5.40	19.18	7.09	0.28	-6.4	3.312
	5/30/18	12:45	5.50	21.75	7.04	0.95	-15.7	3.504
	11/6/18	11:40	5.50	19.94	6.96	0.87	-32.9	3.435
	6/24/19	9:37	5.50	19.92	6.79	0.47	-30.1	3.426
	11/20/19	15:00	5.50	19.15	6.08	0.59	-52.2	3.549
MW-35	11/15/16	12:31	2.50	19.86	7.25	4.39	-21.7	3.037
	5/23/17	11:15	7.50	19.25	7.04	2.88	-15.5	3.754
	11/14/17	11:42	7.30	19.30	7.19	6.35	-10.4	3.672
	5/30/18	13:41	7.25	19.70	7.12	5.86	-19.7	3.924
	11/6/18	12:45	7.0	19.30	7.02	6.18	8.9	3.857
	11/21/19	12:11	7.0	18.85	6.21	5.77	60.6	4.046
MW-37	11/15/16	10:29	5.0	18.90	7.18	2.13	-18.6	2.917
	5/23/17	9:42	5.0	19.09	6.95	3.44	-10.5	3.626
	11/14/17	9:23	5.0	18.82	7.06	3.30	-5.4	3.515
	11/6/18	10:50	5.0	19.13	6.97	4.52	79.3	3.693
	11/20/19	13:47	4.8	18.79	6.82	5.44	61	3.872

Table 3-4. Summary of Historical Field Parameters
Transwestern Compressor Station No. 9 - Roswell, NM

Monitoring Well	Sample Date	Sample Time	Purge Volume Gallons	Temperature °C	pH Standard Units	Dissolved Oxygen mg/L	ORP mV	Conductivity µs/cm
MW-39	11/17/16	10:54	10.0	18.83	7.07	5.33	-13.7	2.905
	6/16/17	11:15	12.0	19.04	6.79	5.11	-10.7	3.662
	11/16/17	11:05	9.25	18.76	7.01	5.22	-3.41	3.500
	6/4/18	13:45	10.0	19.11	6.92	3.64	-9.4	3.716
	11/9/18	15:55	10.0	18.60	6.91	2.79	121.0	3.695
	6/26/19	11:16	10.25	19.03	6.67	4.64	101.3	3.715
	1/7/20	11:45	10.00	18.65	6.99	2.65	136	3.619
MW-40	11/17/16	9:05	8.0	18.72	7.02	3.99	-11.7	2.864
	6/16/17	10:30	8.25	18.98	6.66	5.45	-4.1	3.636
	11/16/17	8:45	7.75	18.65	6.93	4.23	0.0	3.465
	6/4/18	10:45	8.0	19.06	7.03	6.58	-15.3	3.710
	11/9/18	14:40	7.75	18.63	6.89	2.65	114.8	3.670
	6/25/19	15:37	8.25	19.62	6.73	4.99	84.0	3.718
	1/8/20	10:15	7.75	18.60	6.89	3.62	147.9	3.465
MW-41	11/17/16	10:20	6.50	19.25	7.19	6.37	-16.2	2.805
	11/16/17	9:36	6.25	18.92	7.03	6.74	-4.1	3.396
	6/4/18	13:02	6.50	19.72	6.99	7.03	-13.2	3.621
	11/9/18	15:28	6.25	18.72	6.92	3.16	114.3	3.601
	6/25/19	16:25	6.5	20.02	6.74	7.14	83.2	3.635
	1/8/20	10:41	6.3	18.90	7.08	7.4	115.0	3.397
MW-42	11/17/16	8:30	10.25	18.46	7.02	4.07	-11.2	2.892
	6/16/17	10:35	10.0	18.62	6.55	5.11	1.2	3.672
	11/16/17	10:18	10.0	18.49	6.99	4.22	-2.6	3.514
	6/4/18	10:05	10.0	18.82	6.98	5.64	-12.8	3.745
	11/9/18	14:18	9.75	18.28	6.92	2.72	114.9	3.710
	6/25/19	10:56	10.50	19.05	6.78	4.12	105.7	3.738
	1/8/20	9:50	10.00	18.51	6.88	4.9	121.0	3.615
SVE-28	11/12/18	10:35	3.03	--	--	--	--	--
	1/8/20	14:22	3.00	19.72	6.73	2.35	-177.8	2.881
SVE-30	11/12/18	9:45	0.69	--	--	--	--	--
	1/8/20	15:40	1.00	19.88	5.04	0.63	-255.5	5.842
SVE-31	11/12/18	10:15	1.39	--	--	--	--	--
RW-1	11/12/18	15:05	18.00	--	--	--	--	--
	6/26/19	12:11	16.0	21.91	6.83	0.65	-329.2	3.439
	1/8/20	15:22	28.00	20.38	6.92	0.82	-387.0	1.452

Notes
mg/L - milligrams per liter
mV - millivolts
µs/cm - microsiemens per centimeter
-- No field parameters gathered
^{o}C - Degrees Celsius
Note: Field parameters are only shown for wells sampled

Prepared by: SWS 2/23/21
Checked by: HRB 3/2/21

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MW-1B	05/24/17	**380**	< 20	< 20	**1,600**	NA	NA	NA
MW-10	02/13/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	09/10/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/23/20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-11	02/13/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	09/10/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/23/20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-12	05/24/17	**1,100**	**1,400**	150	**2,300**	NA	NA	NA
MW-13	03/11/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	09/24/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	01/02/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/19/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/18/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	12/01/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/17/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/16/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/06/18	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	01/08/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	11/23/20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-14	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	09/23/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	01/02/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/19/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/18/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	12/01/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/16/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/15/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/08/18	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	01/07/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/19/20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
MW-16	10/21/12	**1,000**	< 50	270	**2,300**	NA	NA	NA
	04/17/13	**650**	< 50	210	**2,400**	NA	NA	NA
	11/18/13	**320**	50	210	**1,900**	NA	NA	NA
	05/04/14	**400**	< 10	310	**2,300**	NA	NA	NA
	12/02/14	**610**	16	180	**2,100**	NA	NA	NA
	04/24/15	**260**	11	230	**2,500**	NA	NA	NA
	11/05/15	**Not Sampled - PSH in well**						
	05/05/16*	**94**	< 10	120	**2,300**	NA	NA	NA
	11/16/16*	**90**	< 20	46	**1,700**	NA	NA	NA
	5/23/17*	**110**	< 10	66	**1,500**	NA	NA	NA
	11/15/17*	**87**	12	95	**1,500**	NA	NA	NA
	5/31/2018*	**320**	< 10	220	**1,700**	NA	NA	NA
	11/08/18	**Not Sampled - PSH in well**						
	06/24/19	**Not Sampled - PSH in well**						
	01/06/20	**Not Sampled - PSH in well**						
	05/16/20	**Not Sampled - PSH in well**						
	11/09/20	**Not Sampled - PSH in well**						
MW-17	02/13/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	09/09/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/19/20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MW-20	03/12/09	< 1.0	< 1.0	< 1.0	< 1.5	14	**35**	< 1.0
	10/07/09	2.8	< 1.0	< 1.0	< 1.5	7.2	**13**	< 1.0
	03/30/10	< 1.0	< 1.0	< 1.0	< 1.5	13	**28**	< 1.0
	09/24/10	< 1.0	< 1.0	< 1.0	< 1.5	4.6	**9.7**	< 1.0
	04/19/11	< 1.0	< 1.0	< 1.0	< 1.5	14	**22**	< 1.0
	01/03/12	< 1.0	< 1.0	< 1.0	< 1.5	5.1	**6.4**	< 1.0
	04/18/12	< 1.0	< 1.0	< 1.0	< 1.5	6.4	**8.6**	--
	10/19/12	< 1.0	< 1.0	< 1.0	< 1.5	2.9	**8.1**	--
	04/17/13	< 1.0	< 1.0	< 1.0	< 1.5	3.2	4.5	< 1.0
	11/18/13	< 1.0	< 1.0	< 1.0	< 1.5	1.8	1.6	< 1.0
	05/02/14	< 1.0	< 1.0	< 1.0	< 3.0	4.8	3.9	< 1.0
	12/01/14	< 1.0	< 1.0	< 1.0	< 3.0	8.0	**6.7**	< 1.0
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	12.0	**8.0**	< 1.0
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	16.0	**8.6**	< 1.0
	05/03/16	< 1.0	< 1.0	< 1.0	< 3.0	15.0	**5.6**	< 1.0
	11/16/16	< 1.0	< 1.0	< 1.0	< 1.5	12.0	**6.0**	< 1.0
	05/24/17	< 1.0	< 1.0	< 1.0	< 1.5	9.5	4.6	< 1.0
	11/15/17	< 1.0	< 1.0	< 1.0	< 1.5	5.5	**7.3**	< 1.0
	06/01/18	< 1.0	< 1.0	< 1.0	< 1.5	6.4	4.7	< 1.0
	11/09/18	< 1.0	< 1.0	< 1.0	< 1.5	5.6	**11**	< 1.0
	06/25/19	< 1.0	< 1.0	< 1.0	< 1.5	7.8	3.4	< 1.0
	01/06/20	< 1.0	< 1.0	< 1.0	< 1.5	7.4	2.5	< 1.0
	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	6.1	3.0	< 1.0
	11/20/20	<1.0	<1.0	<1.0	<1.5	5.9	3.0	<1.0
MW-21	03/11/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	09/23/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	01/03/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/25/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/18/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	12/01/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/16/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/14/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/08/18	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	06/24/19	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	11/26/19	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	05/15/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	11/18/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MW-22	03/12/09	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.2	< 1.0
	10/07/09	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	03/30/10	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.1	< 1.0
	09/23/10	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	04/19/11	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	1.6	< 1.0
	01/03/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	04/18/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.1	--
	10/21/12	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	--
	04/17/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	2.2	< 1.0
	11/18/13	< 2.0	< 2.0	< 2.0	< 3.0	< 2.0	< 2.0	< 2.0
	05/02/14	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	2.5	< 1.0
	12/02/14	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	1.5	< 1.0
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	2.5	< 1.0
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	2.2	< 1.0
	05/03/16	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	2.3	< 1.0
	11/16/16	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	2.6	< 1.0
	05/24/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	3.0	< 1.0
	11/15/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	2.6	< 1.0
	06/01/18	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.7	< 1.0
	11/09/18	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.8	< 1.0
	06/25/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	2.0	< 1.0
	01/06/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.1	< 1.0
	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	<1.0	2.4	<1.0
	11/20/20	< 1.0	< 1.0	< 1.0	< 1.5	<1.0	1.4	<1.0
MW-23D	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	09/26/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	01/03/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/21/12	1.6	8.1	2.8	10	NA	NA	NA
	12/14/12	< 1.0	1.4	< 1.0	< 2.0	NA	NA	NA
	01/21/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/16/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
MW-24D	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	09/26/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	01/03/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/21/12	< 1.0	2.1	1.0	3.5	NA	NA	NA
	12/14/12	**9.6**	17	4.9	14	NA	NA	NA
	01/21/13	< 1.0	< 1.0	3.3	6.0	NA	NA	NA
	04/16/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/18/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/26/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/06/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/17/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/16/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/06/18	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	01/07/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	11/30/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MW-25D	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	09/26/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	01/03/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/21/12	< 1.0	1.2	< 1.0	2.2	NA	NA	NA
	12/14/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	01/21/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/17/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
MW-26	03/11/09	< 1.0	< 1.0	< 1.0	< 3.0	4.2	**43**	< 1.0
	10/07/09	< 1.0	< 1.0	< 1.0	< 1.5	5.5	**42**	< 1.0
	03/30/10	< 1.0	< 1.0	< 1.0	< 1.5	5.5	**60**	< 1.0
	09/24/10	< 1.0	< 1.0	< 1.0	< 1.5	6.2	**50**	< 1.0
	04/19/11	< 1.0	< 1.0	< 1.0	< 1.5	5.9	**60**	< 1.0
	01/03/12	< 1.0	< 1.0	< 1.0	< 1.5	7.8	**57**	< 1.0
	04/18/12	< 1.0	< 1.0	< 1.0	< 1.5	6.7	**53**	--
	10/19/12	< 1.0	< 1.0	< 1.0	< 1.5	5.6	**54**	--
	04/17/13	< 1.0	< 1.0	< 1.0	< 1.5	6.2	**53**	< 1.0
	11/15/13	< 1.0	< 1.0	< 1.0	< 1.5	6.0	**45**	< 1.0
	05/04/14	< 1.0	< 1.0	< 1.0	< 3.0	10.0	**65**	< 1.0
	12/01/14	< 1.0	< 1.0	< 1.0	< 3.0	7.6	**52**	< 1.0
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	6.9	**50**	< 1.0
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	11.0	**71**	< 1.0
	05/03/16	< 1.0	< 1.0	< 1.0	< 3.0	11.0	**63**	< 1.0
	11/16/16	< 1.0	< 1.0	< 1.0	< 1.5	11.0	**58**	< 1.0
	05/24/17	< 1.0	< 1.0	< 1.0	< 1.5	9.1	**58**	< 1.0
	11/15/17	< 1.0	< 1.0	< 1.0	< 1.5	8.3	**44**	< 1.0
	06/01/18	< 1.0	< 1.0	< 1.0	< 1.5	8.4	**46**	< 1.0
	11/09/18	< 1.0	< 1.0	< 1.0	< 1.5	9.3	**43**	< 1.0
	06/25/19	< 1.0	< 1.0	< 1.0	< 1.5	7.8	**42**	< 1.0
	01/06/20	< 1.0	< 1.0	< 1.0	< 1.5	9.1	**45**	< 1.0
	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	8.5	**45**	< 1.0
	11/20/20	< 1.0	< 1.0	< 1.0	< 1.5	8.8	**41**	< 1.0
MW-27	05/14/14	< 20.0	< 20.0	36	72	NA	NA	NA
	12/29/14	< 100	< 100	< 100	< 300	NA	NA	NA
	04/24/15*	< 10	< 10	< 10	< 30	NA	NA	NA
	11/05/15	< 10	< 10	19	54	NA	NA	NA
	05/02/16	< 10	< 10	< 10	< 30	NA	NA	NA
	11/15/16	< 5.0	< 5.0	< 5.0	< 7.5	NA	NA	NA
	05/23/17	< 5.0	< 5.0	< 5.0	< 7.5	NA	NA	NA
	11/14/17	**82**	< 25	< 25	91	NA	NA	NA
	05/31/18	< 2.0	< 2.0	< 2.0	< 3.0	NA	NA	NA
	11/06/18	< 2.0	6.1	< 2.0	< 4.0	NA	NA	NA
	06/29/19	< 2.0	<2.0	< 2.0	< 3.0	NA	NA	NA
	11/26/19	< 2.0	< 2.0	< 2.0	< 3.0	NA	NA	NA
	05/14/20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	11/16/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MW-29	03/11/09	4.1	< 1.0	< 1.0	< 3.0	NA	NA	NA
	10/07/09	**8.4**	< 1.0	< 1.0	< 3.0	NA	NA	NA
	03/30/10	1.4	< 1.0	< 1.0	< 2.0	NA	NA	NA
	09/23/10	1.3	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/19/11	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	01/02/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/18/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/21/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/16/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/14/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/02/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	12/01/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	05/02/16	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/15/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	05/23/17	1.1	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/14/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/30/18	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/07/18	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	06/24/19	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	11/25/19	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	05/14/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	11/12/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
MW-32	03/11/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	03/30/10	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	09/23/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/19/11	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	01/02/12	1.8	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/18/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/19/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/16/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/14/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/02/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/25/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/29/16	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/15/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	05/23/17	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/14/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/30/18	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/06/18	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/25/19	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/12/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MW-34	03/11/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	03/30/10	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	09/23/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/19/11	**20**	< 1.0	< 1.0	< 2.0	NA	NA	NA
	01/02/12	**210**	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/18/12	**210**	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/19/12	**140**	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/16/13	**60**	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/14/13	**7.2**	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/02/14	**5.0**	< 1.0	< 1.0	< 3.0	NA	NA	NA
	12/01/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/27/16	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/15/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	05/23/17	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/14/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/30/18	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/06/18	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	06/24/19	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	11/20/19	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	05/14/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA
	11/12/20	< 1.0	< 1.0	< 1.0	<1.5	NA	NA	NA

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MW-35	03/11/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	10/07/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	03/30/10	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	09/23/10	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/19/11	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	01/02/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/18/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	10/21/12	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	04/16/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/14/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/02/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/25/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/29/16	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/15/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	05/23/17	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/14/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/06/18	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/21/19	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/12/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
MW-37	03/11/09	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/14/13	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/02/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/25/14	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/05/15	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	04/27/16	< 1.0	< 1.0	< 1.0	< 3.0	NA	NA	NA
	11/15/16	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	05/23/17	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/14/17	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	05/30/18	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/06/18	< 1.0	< 1.0	< 1.0	< 2.0	NA	NA	NA
	11/20/19	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
	11/12/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA	NA
MW-39	08/16/13	2.8	< 1.0	< 1.0	< 1.5	2.0	**19**	--
	11/15/13	< 1.0	< 1.0	< 1.0	< 1.5	1.6	**15**	< 1.0
	12/01/14	< 1.0	< 1.0	< 1.0	< 3.0	3.0	**27**	
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	2.5	**22**	< 1.0
	11/06/15	< 1.0	< 1.0	< 1.0	< 3.0	3.1	**27**	< 1.0
	05/03/16	< 1.0	< 1.0	< 1.0	< 3.0	2.9	**24**	< 1.0
	11/17/16	< 1.0	< 1.0	< 1.0	< 1.5	3.1	**22**	< 1.0
	06/16/17	< 1.0	< 1.0	< 1.0	< 1.5	3.3	**29**	< 1.0
	11/16/17	< 1.0	< 1.0	< 1.0	< 1.5	3.8	**31**	< 1.0
	06/04/18	< 1.0	< 1.0	< 1.0	< 1.5	3.3	**23**	< 1.0
	11/06/18	< 1.0	< 1.0	< 1.0	< 1.5	3.8	**25**	< 1.0
	06/26/19	< 1.0	< 1.0	< 1.0	< 1.5	3.1	**18**	< 1.0
	01/07/20	< 1.0	< 1.0	< 1.0	< 1.5	3.7	**24**	< 1.0
	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	3.1	**19**	< 1.0
	11/30/20	< 1.0	< 1.0	< 1.0	< 1.5	3.7	**22**	< 1.0

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MW-40	08/16/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	--
	11/15/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	11/25/14	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	04/24/15	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	11/06/15	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	05/03/16	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	11/17/16	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	06/16/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	11/16/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	06/04/18	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	11/09/18	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	06/25/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	01/08/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	11/30/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
MW-41	08/16/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.1	<1.0
	11/15/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	11/24/14	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	1.1	< 1.0
	05/19/15	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	11/06/15	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	1.4	< 1.0
	05/03/16	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	1.4	< 1.0
	11/17/16	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.2	< 1.0
	06/16/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.2	< 1.0
	11/16/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.3	< 1.0
	06/04/18	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.2	< 1.0
	11/09/18	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.2	< 1.0
	06/25/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.1	< 1.0
	01/08/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.1	< 1.0
	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.2	< 1.0
	11/30/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.1	< 1.0
MW-42	08/16/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	--
	11/15/13	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	11/25/14	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	05/19/15	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	11/06/15	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	05/03/16	< 1.0	< 1.0	< 1.0	< 3.0	< 1.0	< 1.0	< 1.0
	11/17/16	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	06/16/17	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	11/16/17	< 1.0	< 1.0	< 1.0	< 1.5	<1.0	1.1	< 1.0
	06/04/18	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	11/09/18	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0	< 1.0
	06/25/19	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.0	< 1.0
	01/08/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.4	< 1.0
	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.5	< 1.0
	11/30/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	1.9	< 1.0
MPE-13	05/14/14*	**5.2**	< 2.0	10	35	NA	NA	NA
	05/05/16	**770**	240	70	**740**	NA	NA	NA
	11/17/16	1.3	< 2.0	< 2.0	< 3.0	NA	NA	NA
	05/24/17	< 5.0	< 5.0	< 5.0	< 7.5	NA	NA	NA
MPE-27	11/16/16	**760**	650	60	460	NA	NA	NA
	11/16/17*	**3,900**	**7,400**	390	**3,400**	NA	NA	NA
	6/4/2018*	**4,400**	**9,400**	510	**4,100**	NA	NA	NA

Table 3-5. Summary of Groundwater Analytical Results
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene	Vinyl Chloride
NMWQCC Human Health Standard		10	750	750	620	25	5	1
USEPA MCL		5	1,000	700	10,000	--	7	2
Tap Water (2012)		4.13	2280	14.8	-	24.2	340	0.16
Groundwater Cleanup Level (GCL)		5	750	700	620	25	5	1
MPE-31	05/14/14*	**130**	< 20.0	370	460	NA	NA	NA
	12/29/14	< 100	150	< 100	< 300	NA	NA	NA
	04/24/15*	**260**	46	200	440	NA	NA	NA
	11/06/15	**120**	15	230	340	NA	NA	NA
	05/05/16*	**140**	16	250	400	NA	NA	NA
	11/16/16	**7.8**	11	< 2.0	28	NA	NA	NA
MPE-39	12/29/14	**4,700**	**1,400**	240	**1,900**	NA	NA	NA
	04/24/15	**3,300**	**3,300**	430	**2,700**	NA	NA	NA
	11/06/15	**1,800**	**4,500**	280	**2,900**	NA	NA	NA
	05/05/16	**620**	570	70	**1,500**	NA	NA	NA
	11/17/16*	**160**	130	< 20	160	NA	NA	NA
	6/16/17*	**2,600**	**1,500**	120	**1,100**	NA	NA	NA
	6/4/2018*	**1,600**	**1,300**	90	**1,300**	NA	NA	NA
SVE-28	11/12/18	**14**	<1.0	<1.0	<1.5	NA	NA	NA
	06/26/19	1.5	<1.0	<1.0	<1.5	2.2	<1.0	<1.0
	01/08/20	1.5	<1.0	<1.0	<1.5	2.2	<1.0	<1.0
	11/23/20	1.3	<1.0	<1.0	<1.5	1.3	<1.0	<1.0
SVE-30	11/12/18	**15**	<5.0	41	<7.5	NA	NA	NA
	06/26/19	**10**	<5.0	24	<7.5	**30**	<5.0	<5.0
	01/08/20	**8.9**	<5.0	29	<7.5	**32**	<5.0	<5.0
	09/10/20	**8.6**	<5.0	20	<7.5	**25**	<5.0	<5.0
	11/23/20	**5.7**	<1.0	8	<1.5	**33**	NA	NA
SVE-31	11/12/18	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
	11/23/20	<1.0	<1.0	<1.0	<1.5	NA	NA	NA
RW-1	11/12/18	**32**	<1.0	1.4	<1.5	NA	NA	NA
	06/26/19	**51**	<1.0	1.4	<1.5	12	<1.0	<1.0
	01/08/20	**26**	<1.0	1.5	<1.5	4.3	<1.0	<1.0
	09/10/20	**25**	<1.0	6.2	<1.5	3.1	<1.0	<1.0
	11/23/20	**38**	<1.0	13	7.9	3.5	<1.0	<1.0

Notes:

Bold indicates that the analytical result exceeds the applicable regulatory limits.

* - Phase separated hydrocarbons (PSH) present in well. Sample collected below PSH.

-- Data not available.

Only constituents detected in one or more groundwater samples are shown in this table

All results reported above the applicable standard are shown in bold type

(a) Analyte present in method blank

(b) Total Naphthalene = Naphthalene + 1-Methylnapthalene + 2-Methylnapthalene

Historical data before 2009 is presented in previous reports

Results reported in micrograms per liter (µg/L)

NA - Not analyzed; constituent is not part of the sampling plan

NMWQCC - New Mexico Water Quality Control Commission

Prepared by: SWS 3/2/21
Checked by: HRB 3/2/21

NMWQCC Human Health Standards - from New Mexico Administrative Code (NMAC) 20.6.2, Part A, Human Health Standards. Used as GCL for target cleanup if lower than the MCL.

USEPA MCL - United States Environmental Protection Agency's Maximum Concentration Limit. Used as GCL for target cleanup if lower than the NMWQCC Human Health Standard.

Tap Water (2012) - From Table A-1 for the 2012 NMED Risk Assessment Guidance for Site Investigation and Remediation. Used as GCL for target cleanup if WQCC standard nor MCL has been established.

Table 3-5a. Summary of Groundwater Analytical Results - Other Constituents Detected
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Chloroethane	Isopropyl benzene	n-Propylbenzene	1,2,4-Trichlorobenzene	Napthalene	cis-1,2-Dichloroethene	Acetone	1,4-Dioxane
NMWQCC Human Health Standard		--	--	--	70	-	70	--	-
USEPA MCL		--	--	--	70	--	70	--	--
Tap Water (2012)		-	679	-	4.12	1.43	73	21800	6.72
Groundwater Cleanup Level (GCL)		-	679	-	70	1.43	70	21800	6.72
MW-20	05/17/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
	11/20/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
MW-22	05/17/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
	11/20/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
MW-26	05/17/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
	11/20/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
MW-39	05/17/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
	11/30/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
MW-40	05/17/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
	11/30/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
MW-41	05/17/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
	11/30/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
MW-42	05/17/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
	11/30/20	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<10	<1.0
SVE-28	09/10/20	NA	NA	NA	NA	NA	NA	NA	<1.0
SVE-30	09/10/20	**10**	**6**	**2**	<1.0	**6.0**	**1.0**	<50	**5.9**
	11/23/20	**4**	**4.1**	**3.1**	**3.3**	<2.0	<1.0	<10	**6**
RW-1	09/10/20	<2.0	**3**	<5.0	<5.0	<10	<5.0	<10	<1.0
	11/23/20	<2.0	**3.9**	**3.2**	<1.0	**4.0**	**3.6**	<10	<25

Prepared by: SWS 2/23/21
Checked by: HRB 3/2/21

Notes:

Results only shown for other detected constituents in wells. All other constiutents for wells not shown are below laboratory detection limits.

-- data not available or established

Results reported in micrograms per liter (µg/L)

NMWQCC - New Mexico Water Quality Control Commission Standard

NMWQCC Human Health Standards - from New Mexico Administrative Code (NMAC) 20.6.2, Part A, Human Health Standards. Used as GCL for target cleanup if lower than the MCL.

USEPA MCL - United States Environmental Protection Agency's Maximum Concentration Limit. Used as GCL for target cleanup if lower than the NMWQCC Human Health Standard.

Tap Water (2012) - From Table A-1 for the 2012 NMED Risk Assessment Guidance for Site Investigation and Remediation. Used as GCL for target cleanup if WQCC standard nor MCL has been established.

Table 3-6. Summary of Well Completion Details
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Date of Completion	Total Depth of Boring (ft bgs)	Measured Depth of Well (ft from TOC)	Surface Completion Type	Casing Diameter (in.)	Screen Interval (ft bgs)	Top of Sand Pack (ft bgs)
MW-1B	04/21/93	65.5	64.65	Flush Mount	2	55-65	53
MW-2	04/21/93	65	61.61	Flush Mount	2	55-65	53
MW-3	04/26/93	72.5	na	Flush Mount	2	60-70	58
MW-5	04/28/93	70	69.35	Flush Mount	2	60-70	58
RW-1	06/13/93	42.5	41.47	Flush Mount	4	36.8 - 41.7	34.75
MW-6	12/01/94	79	na	Flush Mount	2	59.9-74.9	57.1
MW-7	08/22/95	70.5	na	Flush Mount	2	50-70	48.1
MW-8	08/16/95	76.8	73.80	Flush Mount	2	59-74	57.2
MW-9	08/18/95	70	69.75	Flush Mount	2	50-70	47.9
MW-10	09/10/96	74.5	72.15	Flush Mount	2	57-72	55.3
MW-11	09/16/96	72	68.30	Flush Mount	2	54-69	51.5
MW-12	09/11/96	64	na	Flush Mount	2	44-64	42
MW-13	09/13/96	72	na	Flush Mount	2	57-72	55
MW-14	09/10/96	64.5	na	Flush Mount	2	49.5-64.5	48
MW-15	09/20/96	68.5	na	Flush Mount	2	38.5-68.5	37
MW-16	09/19/96	71.4	71.46	Flush Mount	2	46.4-71.4	45.5
MW-17	09/21/96	70	na	Flush Mount	2	53-68	50.9
MW-18	09/25/96	71	na	Flush Mount	2	54-69	51.6
MW-19	09/26/96	69.5	na	Flush Mount	2	54.5-69.5	51
MW-20	08/04/97	64	na	Flush Mount	2	46.8-61.8	43.9
MW-21	08/06/97	75	na	Flush Mount	2	54-74	51.7
MW-22	08/04/97	68	na	Flush Mount	2	50-65	49
MW-26	09/01/98	65	na	Flush Mount	2	43-63	41
MW-27	09/02/98	75	na	Flush Mount	2	55-75	53
MW-28	11/14/00	75	74.81	Flush Mount	2	60-75	58
MW-29	11/18/00	75	74.45	Flush Mount	2	60-75	58
MW-30	11/16/00	75	74.70	Flush Mount	2	60-75	58
MW-31	09/21/01	75	74.55	Flush Mount	2	60-75	58
MW-32	09/23/01	75	74.20	Flush Mount	2	60-75	58
MW-33	09/22/01	75	74.60	Flush Mount	2	60-75	58
MW-34	01/06/03	79	75.75	Flush Mount	2	49-79	46
MW-35	01/07/03	79	76.71	Flush Mount	2	49-79	46
MW-36	09/29/03	75	74.35	Flush Mount	2	55-75	53
MW-37	09/29/03	70	69.61	Flush Mount	2	50-70	48
MW-38	09/30/03	68	67.76	Flush Mount	2	48-68	46
MW-39	08/06/13	70	70.00	Flush Mount	2	50-70	48
MW-40	08/05/13	70	70.25	Flush Mount	2	50-70	48

Table 3-6. Summary of Well Completion Details
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Date of Completion	Total Depth of Boring (ft bgs)	Measured Depth of Well (ft from TOC)	Surface Completion Type	Casing Diameter (in.)	Screen Interval (ft bgs)	Top of Sand Pack (ft bgs)
MW-41	08/05/13	70	70.20	Flush Mount	2	50-70	48
MW-42	08/06/13	75	75.93	Flush Mount	2	55-75	51
MW-23D	07/29/97	194	na	Flush Mount	4	167-187	164
MW-24D	09/10/98	180	na	Flush Mount	4	146-176	143
MW-25D	09/09/98	150	na	Flush Mount	4	119-149	117
SVE-1A	09/21/96	30	29.65	Flush Mount	2	20-30	19
SVE-2A	09/20/96	30	29.83	Flush Mount	2	20-30	17.5
SVE-3	09/16/96	62.3	61.90	Flush Mount	2	32.0-62.3	29.5
SVE-22	11/07/02	35	33.20	Flush Mount	2	25-35	23
SVE-23	11/07/02	39	36.70	Flush Mount	2	25-35	22
SVE-24	11/13/02	30	28.85	Flush Mount	2	20-30	18
SVE-25	11/04/02	34	53.30	Flush Mount	2	24-34	21.6
SVE-26	11/05/02	35	32.45	Flush Mount	2	24-34	22
SVE-27	11/01/02	35	33.90	Flush Mount	2	20-35	18
SVE-28	10/29/02	35	36.00	Flush Mount	2	25-35	23
SVE-30	10/25/02	45	44.00	Flush Mount	2	20-45	18
SVE-31	10/28/02	35	33.95	Flush Mount	2	25-35	23
MPE-1	12/06/02	79	75.60	Flush Mount	4	54-74	49
MPE-2	12/24/02	79	71.75	Flush Mount	4	54-79	51
MPE-3	12/21/02	79	75.95	Flush Mount	4	54-79	51
MPE-4	12/19/12	79	78.30	Flush Mount	4	54-79	51
MPE-5	12/16/02	79	77.70	Flush Mount	4	59-79	56
MPE-6	12/17/02	79	75.00	Flush Mount	4	54-79	51
MPE-7	12/13/02	79	78.41	Flush Mount	4	54-74	51
MPE-8	12/14/02	79	77.55	Flush Mount	4	59-79	50
MPE-9	12/18/02	79	73.60	Flush Mount	4	54-74	51
MPE-10	12/09/02	79	75.30	Flush Mount	4	54-74	50
MPE-11	12/07/02	79	79.05	Flush Mount	4	54-74	50
MPE-12	12/06/02	79	75.40	Flush Mount	4	54-74	51
MPE-13	12/03/02	79	77.60	Flush Mount	4	54-74	50.7
MPE-14	11/25/02	79	76.80	Flush Mount	4	54-74	51
MPE-15	11/22/02	79	79.25	Flush Mount	4	59-74	54
MPE-16	11/27/02	79	78.20	Flush Mount	4	54-74	49

Table 3-6. Summary of Well Completion Details
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Date of Completion	Total Depth of Boring (ft bgs)	Measured Depth of Well (ft from TOC)	Surface Completion Type	Casing Diameter (in.)	Screen Interval (ft bgs)	Top of Sand Pack (ft bgs)
MPE-17	11/20/02	75	76.10	Flush Mount	4	55-70	49
MPE-18	11/21/02	79	78.68	Flush Mount	4	58-73	55
MPE-19	11/26/02	79	74.12	Flush Mount	4	49-74	46
MPE-20	11/20/02	78	77.60	Flush Mount	4	48-73	42
MPE-21	11/19/02	69	68.90	Flush Mount	4	44-64	41.9
MPE-22	11/07/02	80	77.52	Flush Mount	4	55-80	52
MPE-23	11/06/02	80	78.41	Flush Mount	4	55-80	52
MPE-24	11/13/02	74	73.77	Flush Mount	4	49-74	46
MPE-25	11/04/02	80	77.45	Flush Mount	4	54-79	51
MPE-26	11/06/02	84	77.35	Flush Mount	4	54-84	49
MPE-27	10/31/02	79	79.40	Flush Mount	4	54-79	48
MPE-28	10/31/02	82	77.67	Flush Mount	4	46-76	43
MPE-29	11/02/02	79	78.35	Flush Mount	4	54-79	51
MPE-30	10/25/02	80	77.96	Flush Mount	4	59-79	56
MPE-31	10/28/02	80	78.80	Flush Mount	4	59-79	58
MPE-32	11/19/02	79	78.30	Flush Mount	4	44-74	39.2
MPE-33	11/18/02	79	78.00	Flush Mount	4	44-79	41.6
MPE-34	10/24/02	80	77.52	Flush Mount	4	59-79	56
MPE-35	11/15/02	79	79.21	Flush Mount	4	54-74	51
MPE-36	11/14/02	74	71.31	Flush Mount	4	44-74	41
MPE-37	11/15/02	74	73.60	Flush Mount	4	44-74	41
MPE-38	08/07/13	75	75.00	Flush Mount	4	55-75	53
MPE-39	08/08/13	75	74.30	Flush Mount	4	55-75	53
MPE-40	08/08/13	75	72.60	Flush Mount	4	55-75	53
MPE-41	08/07/13	75	74.95	Flush Mount	4	55-75	53

Note:
Light blue denote well plugged and abandoned (P&A) in August 2013
ft bgs - feet below ground surface
TOC - top of casing
in. - inches
na - not applicable
Pipeline through Circuit A is buried at a depth of approximately 5 feet and backfilled with native materials.

Prepared by: HRB 3/2/21
Checked by: SWS 3/2/21

Table 4-1. SVE System Mass Removal Calculations for Total Volatile Organic Compounds Transwestern Compressor Station No. 9 - Roswell, NM

	West Thermal Oxidizer Unit				East Thermal Oxidizer Unit				Total				
Date	Total VOC (ug/m^3)	Flow Rate Q(scfm)	Mass Removal Rate M(lb/hr)	Mass Removal Rate M(tons/yr)	Total VOC Conc (ug/m^3)	Flow Rate Q(scfm)	Mass Removal Rate M(lb/hr)	Mass Removal Rate M(tons/yr)	Flow Rate Q(scfm)	Mass Removal Rate M(lb/hr)	Mass Removal Rate M(tons/yr)	Approximate 2020 Mass Removal Rate (gal/yr)	Approximate 2020 Mass Removal Rate (lbs/yr)
03/23/20	730,049	160	0.44	1.917	312,619	160	0.19	0.821	320	0.6	2.74	864	5,475
07/16/20	NA	NA	NA	NA	249,549	160	0.15	0.655	160	0.1	0.66	207	1,310
08/06/20	618,794	160	0.37	1.625	NA	NA	NA	NA	160	0.4	1.62	513	3,249
09/23/20	242,545	160	0.15	0.637	306,002	160	0.18	0.803	320	0.3	1.44	454	2,880
01/22/21	393001	160	0.24	1.032	236036	160	0.14	0.620	160	0.4	1.65	521	3,303
										General Average:	1.62	512	3,243
										Total Potential Criteria Pollutant Emissions*	1.46	461	2921

*Actual Average at 90% Runtime

Notes:

1) Specific gravity of VOC is 0.76 based on Fingerprinting Analytical performed by Core Laboratories in October 2012.

VOC = Volatile Organic Compounds
TPY = Tons per year
ug/m^3 = micrograms per cubic meter
scfm = standard cubic feet per minute
lb/hr = pound per hour
gal/yr = gallons per year

Prepared by: HRB 2/23/21
Checked by: SWS 3/3/21

Table 4-2. Summary of Treated Water Irrigation Rates
Transwestern Compressor Station No. 9 - Roswell, NM

Date	Time	Inspector	Meter Reading (gallons)	Irrigated Volume (gallons)	Cummulative Irrigated Volume (gallons)	Elapsed Time (days)	Cummulative Elapsed Time (days)	Average Recovery Rate (GPD)	Average Recovery Rate (GPM)	Year Total (gallons)
12/31/03										**2003-2008**
11/18/08					1,241,140					1,241,140
05/01/09	1200	CB	964,480	15,180	15,180	164.0	164	93	0.06	
06/04/09	1200	CB	1,030,720	66,240	81,420	34.0	198	1,948	1.35	
07/04/09	1200	CB	1,074,550	43,830	125,250	30.0	228	1,461	1.01	
08/04/09	1200	CB	1,112,060	37,510	162,760	31.0	259	1,210	0.84	
09/01/09	1200	CB	1,158,960	46,900	209,660	28.0	287	1,675	1.16	
10/06/09	1200	CB	1,176,620	17,660	227,320	35.0	322	505	0.35	
11/05/09	1200	CB	1,196,570	19,950	247,270	30.0	352	665	0.46	**2009**
11/23/09	1200	CB	1,223,480	26,910	274,180	18.0	370	1,495	1.04	274,180
06/20/10	1200	CB	1,223,490	10	274,190	209.0	579	0	0.00	
07/07/10	1200	CB	1,232,290	8,800	282,990	17.0	596	518	0.36	
08/05/10	1200	CB	1,248,520	16,230	299,220	29.0	625	560	0.39	
09/06/10	1200	CB	1,274,270	25,750	324,970	32.0	657	805	0.56	
09/14/10	1200	CB	1,279,310	5,040	330,010	8.0	665	630	0.44	
09/28/10	1200	CB	1,288,380	9,070	339,080	14.0	679	648	0.45	
11/05/10	1200	CB	1,288,390	10	339,090	38.0	717	0	0.00	**2010**
11/10/10	1200	CB	1,292,380	3,990	343,080	5.0	722	798	0.55	68,900
06/28/11	1200	CB	1,292,590	210	343,290	230.0	952	1	0.00	
07/13/11	1200	CB	1,297,670	5,080	348,370	15.0	967	339	0.24	
08/01/11	1200	CB	1,304,610	6,940	355,310	19.0	986	365	0.25	
09/03/11	1200	CB	1,317,270	12,660	367,970	33.0	1,019	384	0.27	
10/04/11	1200	CB	1,336,700	19,430	387,400	31.0	1,050	627	0.44	
11/01/11	1200	CB	1,357,820	21,120	408,520	28.0	1,078	754	0.52	**2011**
11/30/11	1200	CB	1,390,930	33,110	441,630	29.0	1,107	1,142	0.79	98,550
04/20/12	1200	CB	1,390,930	0	441,630	142.0	1,249	0	0.00	
05/04/12	1200	CB	1,416,840	25,910	467,540	14.0	1,263	1,851	1.29	
06/06/12	1200	CB	1,450,860	34,020	501,560	33.0	1,296	1,031	0.72	
07/04/12	1200	CB	1,464,990	14,130	515,690	28.0	1,324	505	0.35	
08/06/12	1200	CB	1,482,850	17,860	533,550	33.0	1,357	541	0.38	
09/05/12	1200	CB	1,502,280	19,430	552,980	30.0	1,387	648	0.45	
10/03/12	1200	CB	1,520,950	18,670	571,650	28.0	1,415	667	0.46	
11/05/12	1200	CB	1,537,050	16,100	587,750	33.0	1,448	488	0.34	**2012**
11/30/12	1200	CB	1,541,170	4,120	591,870	25.0	1,473	165	0.11	150,240

Table 4-2. Summary of Treated Water Irrigation Rates
Transwestern Compressor Station No. 9 - Roswell, NM

Date	Time	Inspector	Meter Reading (gallons)	Irrigated Volume (gallons)	Cummulative Irrigated Volume (gallons)	Elapsed Time (days)	Cummulative Elapsed Time (days)	Average Recovery Rate (GPD)	Average Recovery Rate (GPM)	Year Total (gallons)
04/19/13	1200	CB	1,541,170	0	591,870	140.0	1,613	0	0.00	
04/30/13	1200	CB	1,553,090	11,920	603,790	11.0	1,624	1,084	0.75	
05/31/13	1200	CB	1,577,610	24,520	628,310	31.0	1,655	791	0.55	
06/30/13	1200	CB	1,614,920	37,310	665,620	30.0	1,685	1,244	0.86	**2013**
07/24/13	1200	CB	1,641,540	26,620	692,240	24.0	1,709	1,109	0.77	100,370
07/24/14	800	MB	1,641,550	10	692,250	364.8	2,074	0	0.00	
08/01/14	830	MB	1,646,660	5,110	697,360	8.0	2,082	1,143	0.79	
09/01/14	915	MB	1,673,410	26,750	724,110	31.0	2,113	821	0.57	
10/01/14	835	MB	1,693,890	20,480	744,590	30.0	2,143	1,887	1.31	
11/01/14	830	MB	1,744,480	50,590	795,180	31.0	2,174	1,632	0.99	**2014**
11/07/14	830	MB	1,753,390	8,910	804,090	6.0	2,180	1,473	1.02	111,840
06/25/15	630	CB	1,753,390	0	804,090	229.9	2,410	0	0.00	
06/26/15	900	CB	40,570	0	804,090	1.1	2,411	0	0.00	***New Meter**
07/01/15	-	CB	46,250	5,680	809,770	5.0	2,416	1,136	0.79	
08/06/15	-	CB	70,570	24,320	834,090	36.0	2,452	676	0.47	
10/03/15	745	CB	83,130	12,560	846,650	58.0	2,510	217	0.15	
11/04/15	-	CB	92,780	9,650	856,300	32.0	2,542	302	0.21	**2015**
11/30/15	-	CB	104,710	11,930	868,230	26.0	2,568	459	0.32	64,140
02/20/16	645	MB/CB	104,710	0	868,230	82.0	2,650	0	0.00	
03/14/16	830	MB/CB	109,930	5,220	873,450	23.1	2,591	226	0.16	
05/24/16	1120	MB/CB	127,415	22,705	890,935	71.1	2,721	319	0.22	
06/01/16	830	MB/CB	130,750	3,335	894,270	7.9	2,729	423	0.29	
07/01/16	600	MB/CB	150,680	19,930	914,200	29.9	2,759	666	0.46	
08/01/16	800	MB/CB	175,520	24,840	939,040	31.1	2,790	799	0.55	
09/01/16	700	MB/CB	192,820	17,300	956,340	31.0	2,821	559	0.39	
10/01/16	630	MB/CB	210,420	17,600	973,940	30.0	2,851	587	0.41	
11/01/16	700	MB/CB	232,570	22,150	996,090	31.0	2,882	714	0.50	**2016**
11/28/16	700	MB/CB	242,360	9,790	1,005,880	27.0	2,909	363	0.25	137,650

Table 4-2. Summary of Treated Water Irrigation Rates
Transwestern Compressor Station No. 9 - Roswell, NM

Date	Time	Inspector	Meter Reading (gallons)	Irrigated Volume (gallons)	Cummulative Irrigated Volume (gallons)	Elapsed Time (days)	Cummulative Elapsed Time (days)	Average Recovery Rate (GPD)	Average Recovery Rate (GPM)	Year Total (gallons)
07/05/17	730	MB/CB	242,360	0	1,005,880	219.0	3,128	0	0.00	
07/06/17	630	MB/CB	242,940	580	1,006,460	0.96	3,129	605	0.42	
08/08/17	830	MB/CB	269,770	26,830	1,033,290	33.1	3,162	811	0.56	
08/21/17	715	MB/CB	269,770	0	1,033,290	13.0	3,175	0	0.00	
08/23/17	1100	MB/CB	270,910	1,140	1,034,430	2.2	3,177	528	0.37	
09/30/17	700	MB/CB	298,720	27,810	1,062,240	37.8	3,215	735	0.51	
10/31/17	700	MB/CB	320,550	21,830	1,084,070	31.0	3,246	704	0.49	
11/10/17	630	MB/CB	327,480	6,930	1,091,000	10.0	3,256	695	0.48	
11/16/17	700	MB/CB	327,480	0	1,091,000	6.0	3,262	0	0.00	
11/30/17	830	MB/CB	332,720	5,240	1,096,240	14.1	3,276	373	0.26	**2017**
12/01/17	1300	MB/CB	332,910	190	1,096,430	1.2	3,277	159	0.11	90,550
04/24/18	715	MB/CB	332,910	0	1,096,430	143.8	3,421	0	0.00	
05/13/18	700	MB/CB	340,100	7,190	1,103,620	18.99	3,440	379	0.26	
06/11/18	700	MB/CB	340,100	0	1,103,620	29.0	3,469	0	0.00	
06/25/18	1100	MB/CB	342,410	2,310	1,105,930	14.2	3,483	163	0.11	
07/23/18	545	MB/CB	350,000	7,590	1,113,520	27.8	3,511	273	0.19	
08/06/18	600	MB/CB	354,640	4,640	1,118,160	14.0	3,525	331	0.23	
09/24/18	615	MB/CB	363,300	8,660	1,126,820	49.0	3,574	177	0.12	**2018**
10/22/18	715	MB/CB	374,330	11,030	1,137,850	28.0	3,602	393	0.27	41,420
01/01/19	800	MB/CB	374,330	0	1,137,850	71.0	3,673	0	0.00	
06/30/19	715	MB/CB	374,790	460	1,138,310	180.0	3,853	3	0.00	
07/25/19	700	MB/CB	375,480	690	1,139,000	24.99	3,878	28	0.02	
08/06/19	700	MB/CB	376,080	600	1,139,600	12.0	3,890	50	0.03	
08/20/19	1100	MB/CB	377,060	980	1,140,580	14.2	3,904	69	0.05	
09/05/19	545	MB/CB	383,000	5,940	1,146,520	15.8	3,920	377	0.26	
10/07/19	600	MB/CB	394,050	11,050	1,157,570	32.0	3,952	345	0.24	
10/16/19	615	MB/CB	394,680	630	1,158,200	9.0	3,961	70	0.05	**2019**
10/23/19	715	MB/CB	398,410	3,730	1,161,930	7.0	3,968	530	0.37	24,080

Table 4-2. Summary of Treated Water Irrigation Rates
Transwestern Compressor Station No. 9 - Roswell, NM

Date	Time	Inspector	Meter Reading (gallons)	Irrigated Volume (gallons)	Cummulative Irrigated Volume (gallons)	Elapsed Time (days)	Cummulative Elapsed Time (days)	Average Recovery Rate (GPD)	Average Recovery Rate (GPM)	Year Total (gallons)
04/10/20	700	MB/CB	900	0	1,161,930	170.0	4,138	0	0.00	
04/15/20	600	MB/CB	5,600	4,700	1,166,630	5.0	4,143	948	0.66	
04/21/20	630	MB/CB	10,600	5,000	1,171,630	6.0	4,149	832	0.58	
04/28/20	600	MB/CB	14,300	3,700	1,175,330	7.0	4,156	530	0.37	
05/22/20	600	MB/CB	19,400	5,100	1,180,430	24.0	4,180	213	0.15	
06/02/20	650	MB/CB	26,600	7,200	1,187,630	11.0	4,191	653	0.45	
06/12/20	650	MB/CB	30,000	3,400	1,191,030	10.0	4,201	340	0.24	
06/19/20	600	MB/CB	33,500	3,500	1,194,530	7.0	4,208	501	0.35	
06/26/20	750	MB/CB	36,200	2,700	1,197,230	7.1	4,215	382	0.27	
07/11/20	600	MB/CB	41,600	5,400	1,202,630	14.9	4,230	362	0.25	
07/23/20	640	MB/CB	44,600	3,000	1,205,630	12.0	4,242	250	0.17	
07/31/20	640	MB/CB	46,300	1,700	1,207,330	8.0	4,250	213	0.15	
08/07/20	640	MB/CB	48,300	2,000	1,209,330	7.0	4,257	286	0.20	
08/14/20	640	MB/CB	51,100	2,800	1,212,130	7.0	4,264	400	0.28	
08/27/20	650	MB/CB	53,300	2,200	1,214,330	13.0	4,277	169	0.12	
09/03/20	650	MB/CB	57,500	4,200	1,218,530	7.0	4,284	600	0.42	
09/19/20	650	MB/CB	58,300	800	1,219,330	16.0	4,300	50	0.03	
09/24/20	650	MB/CB	63,100	4,800	1,224,130	5.0	4,305	960	0.67	
10/01/20	650	MB/CB	74,100	11,000	1,235,130	7.0	4,312	1,571	1.09	
10/10/20	750	MB/CB	82,500	8,400	1,243,530	9.0	4,321	929	0.65	
10/17/20	760	MB/CB	88,600	6,100	1,249,630	7.0	4,328	871	0.60	
10/21/20	760	MB/CB	91,800	3,200	1,252,830	4.0	4,332	800	0.56	**2020**
10/31/20	850	MB/CB	95,700	3,900	1,256,730	10.0	4,342	389	0.27	94,800

NOTES:

Irrigated Volume (gallons) = Difference between prior meter reading and current meter reading (gallons)
Cummulative Irrigated Volume (gallons) = Cummulative sum of Irrigated Volume (gallons)
Elapsed Time (days) = Calculated number of days from the prior date and time
Cummulative Elapsed Time (days) = Cummulative sum of Elapsed Time (days)
Average Recovery Rate (GPD) = Irrigated Volume (gallons) / Elapsed Time (days)
Average Recovery Rate (GPM) = Average Recovery Rate (GPD) / 24 (hours/day) / 60 (minutes/hour)
Historical data before 2009 is presented in previous reports

Prepared by: HRB 2/23/21
Checked by: SWS 3/3/21

Table 4-3. Groundwater Treatment System
Mass Removal Calculations for Total BTEX
Transwestern Compressor Station No. 9 - Roswell, NM

Date	Water Totalizer Meter Reading (gals)	Water Volume (gals)	Elapsed Time (days)	Flow Rate (gals/day)	Total BTEX (ug/L)	Mass Removal Rate (lbs/day)	Mass Removed (lbs)	Mass Removed (equivalent gals)
05/01/09	964,480	NA	NA	NA	NA	NA	NA	NA
05/25/09	1,003,890	39,410	24	1,642	4,339	0.0595	1.4	0.225
06/22/09	1,064,810	60,920	28	2,176	9,810	0.1782	5.0	0.788
07/21/09	1,107,950	43,140	29	1,488	9,910	0.1231	3.6	0.564
08/24/09	1,145,780	37,830	34	1,113	9,400	0.0873	3.0	0.469
09/28/09	1,165,680	19,900	35	569	6,230	0.0296	1.0	0.164
10/29/09	1,180,920	15,240	31	492	10,080	0.0414	1.3	0.203
11/18/09	1,214,350	33,430	20	1,672	6,840	0.0955	1.9	0.302
06/20/10	1,223,490	NA	NA	NA	NA	NA	NA	NA
06/30/10	1,227,190	3,700	10	370	7,120	0.0220	0.2	0.035
07/31/10	1,248,140	20,950	31	676	5,340	0.0301	0.9	0.148
08/30/10	1,265,630	17,490	30	583	6,350	0.0309	0.9	0.147
11/10/10	1,292,380	26,750	72	372	8,260	0.0256	1.8	0.291
08/01/11	1,304,610	NA	NA	NA	NA	NA	NA	NA
08/10/11	1,312,240	7,630	9	848	4,400	0.0311	0.3	0.044
10/09/11	1,344,310	32,070	60	535	10,540	0.0470	2.8	0.446
11/03/11	1,357,820	13,510	25	540	10,540	0.0476	1.2	0.188
04/20/12	1,390,930	NA	NA	NA	NA	NA	NA	NA
04/30/12	1,413,930	23,000	10	2,300	8,800	0.1690	1.7	0.267
06/05/12	1,450,860	36,930	36	1,026	8,920	0.0764	2.8	0.435
06/28/12	1,459,530	8,670	23	377	10,050	0.0316	0.7	0.115
07/25/12	1,479,740	20,210	27	749	10,460	0.0654	1.8	0.279
08/15/12	1,486,280	6,540	21	311	8,970	0.0233	0.5	0.077
09/23/12	1,513,290	27,010	39	693	8,870	0.0513	2.0	0.316
10/25/12	1,524,400	11,110	32	347	10,480	0.0304	1.0	0.154
11/28/12	1,541,110	16,710	34	491	8,530	0.0350	1.2	0.188
04/30/13	1,553,090	NA	NA	NA	NA	NA	NA	NA
05/16/13	1,576,010	22,920	16	1,433	10,560	0.1263	2.0	0.319
06/17/13	1,614,920	38,910	32	1,216	9,760	0.0991	3.2	0.501
07/17/13	1,641,540	26,620	30	887	11,170	0.0828	2.5	0.392
07/24/14	1,641,550	NA	NA	NA	NA	NA	NA	NA
07/31/14	1,645,550	4,000	7	571	4,270	0.0204	0.1	0.023
08/25/14	1,667,720	22,170	25	887	4,410	0.0327	0.8	0.129
09/17/14	1,683,180	15,460	23	672	7,280	0.0409	0.9	0.148
10/15/14	1,714,440	31,260	28	1,116	8,500	0.0792	2.2	0.351
07/01/15	46,250	NA	NA	NA	NA	NA	NA	NA
07/15/15	56,930	10,680	14	763	7,360	0.0469	0.7	0.104
10/27/15	91,500	34,570	104	332	4,600	0.0128	1.3	0.210
11/20/15	104,710	13,210	24	550	8,660	0.0398	1.0	0.151

Table 4-3. Groundwater Treatment System
Mass Removal Calculations for Total BTEX
Transwestern Compressor Station No. 9 - Roswell, NM

Date	Water Totalizer Meter Reading (gals)	Water Volume (gals)	Elapsed Time (days)	Flow Rate (gals/day)	Total BTEX (ug/L)	Mass Removal Rate (lbs/day)	Mass Removed (lbs)	Mass Removed (equivalent gals)
03/23/16	114,640	NA	NA	NA	NA	NA	NA	NA
05/19/16	127,415	12,775	57	224	4,160	0.0078	0.4	0.070
06/28/16	148,810	21,395	40	535	3,720	0.0166	0.7	0.105
07/07/16	155,900	7,090	9	788	6,360	0.0418	0.4	0.059
08/24/16	190,170	34,270	48	714	6,370	0.0380	1.8	0.288
09/21/16	204,940	14,770	28	528	6,690	0.0295	0.8	0.130
10/24/16	225,540	20,600	33	624	4,040	0.0211	0.7	0.110
11/03/16	234,090	8,550	10	855	7,280	0.0520	0.5	0.082
07/05/17	242,360	NA	NA	NA	NA	NA	NA	NA
07/11/17	248,050	5,690	6	948	15,194	0.1203	0.7	0.114
08/24/17	272,050	24,000	44	545	9,100	0.0414	1.8	0.288
09/25/17	296,160	24,110	32	753	12,450	0.0783	2.5	0.396
10/23/17	316,010	19,850	28	709	12,100	0.0716	2.0	0.317
11/27/17	331,400	15,390	35	440	12,100	0.0444	1.6	0.246
06/11/18	332,910	NA	NA	NA	NA	NA	NA	NA
06/25/18	342,410	9,500	14	679	4,620	0.0262	0.4	0.058
07/23/18	350,000	7,590	28	271	7,300	0.0165	0.5	0.073
08/06/18	354,640	4,640	14	331	9,780	0.0271	0.4	0.060
09/24/18	363,300	8,660	49	177	10,850	0.0160	0.8	0.124
10/22/18	374,330	11,030	28	394	12,260	0.0403	1.1	0.178
01/01/19	374,330	0	71	0	NA	NA	NA	NA
06/30/19	374,790	460	180	3	NA	NA	NA	NA
08/20/19	377,060	980	14	70	NA	NA	NA	NA
09/16/19	383,000	10,017	27	371	12,540	0.0389	1.049	0.166
10/29/19	398,410	15,410	43	358	11,890	0.0355	1.528	0.241
04/14/20	5,600	4,700	6	783	11,750	0.0769	0.5	0.073
05/31/20	26,600	21,000	47	447	9,870	0.0368	1.7	0.273
06/25/20	36,200	9,600	25	384	8,780	0.0282	0.7	0.111
09/21/20	58,300	22,100	88	251	10,130	0.0212	1.869	0.295
10/26/20	95,700	37,400	35	1,069	10,570	0.0943	3.301	0.522
						Total	**79**	**12.551**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylenes
gals - gallons
ug/L - micrograms per liter
lbs - pounds
NA - not applicable, system deactivated during winter months
Total BTEX concentrations are reported from analytical results of monthly influent samples.
1) Specific gravity of VOC is 0.76 based on Fingerprinting Analytical performed by Core Laboratories in October 2012.
2) Between June and August 2019, system was deactivated due to semi-annual sampling delays and malfunctions with the system; therefore water treatment samples were not collected.
3) New water meter installed on 4/9/2020

Prepared by: SWS 2/1/21
Checked by: HRB 2/24/21

Table 4-6. Historical Hydrocarbon Removal Summary
Transwestern Compressor Station No. 9 - Roswell, NM

Year	Extracted Groundwater (gals)	PSH Recovered (lbs)	Dissolved-Phase Mass Removed (lbs)	Vapor-Phase Mass Removal (lbs)
2015	64,140	1,962	2.94	2,405
2016	137,650	2,216	5.35	2,026
2017	90,550	9,812	8.60	3,038
2018	41,420	8,419	3.12	8,356
2019	24,080	9,812	2.58	5,760
2020	97,400	5,950	8.07	2,918

Notes:
gals - gallons
PSH - phase separated hydrocarbons

Prepared by: HRB 3/2/21
Checked by: SWS 3/2/21

Table 4-4 Summary of Water Treatment System Analyses
Transwestern Compressor Station No. 9 - Roswell, NM

Sample Point	Sampling Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (total) (ug/L)	GRO (Gasoline Range)	Acetone (ug/L)	2-Butanone (ug/L)	Remaining VOCs	Phosphorus (As P) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (NO3 as N) (mg/L)	Fluoride (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium mg/L)	Sodium (mg/L)
NMWQCC Standard:		5	1,000	700	620	none	none	none	NA	none	250	600	10.0	1.6	none	none	none	none
Post-Treatment	05/25/09	< 1.0	< 1.0	< 1.0	< 1.5	< 0.05	49	< 10	ND	< 0.5	**430**	**1,600**	< 1.0	1.3	490	130	2.7	200
	06/22/09	< 1.0	< 1.0	< 1.0	< 1.5	--	70	< 10	ND	< 0.5	**440**	**1,200**	< 5.0	1.5	430	130	2.6	200
	07/21/09	< 1.0	< 1.0	< 1.0	< 1.5	--	13	< 10	ND	< 0.5	**480**	**1,500**	< 2.0	**1.7**	470	140	3.1	210
	08/24/09	< 1.0	< 1.0	< 1.0	< 1.5	--	13	16	ND	< 0.5	74	110	< 2.0	**2.1**	510	140	3.1	210
	09/28/09	< 1.0	< 1.0	< 1.0	< 1.5	--	19	14	ND	< 0.5	**430**	**1,200**	< 1.0	**1.6**	370	120	2.8	210
	10/29/09	< 1.0	< 1.0	< 1.0	< 1.5	--	20	15	ND	< 0.5	**440**	**1,500**	< 0.5	**1.8**	440	130	3.1	200
	11/18/09	4.8	1.3	< 1.0	< 1.5	--	24	18	ND	< 0.5	**430**	**1,600**	< 2.0	**2.1**	490	140	3.4	200
	06/30/10	**5.6**	< 1.0	< 1.0	< 1.5	--	110	17	ND	< 0.5	**420**	**910**	< 1.0	**1.7**	330	120	2.8	210
	07/31/10	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**410**	**1,100**	< 1.0	1.1	420	130	5.3	200
	08/30/10	< 1.0	< 1.0	< 1.0	< 1.5	--	60	< 10	ND	< 0.5	**460**	**1,600**	< 2.0	1.2	500	150	2.8	210
	11/10/10	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	1.1	**480**	**1,300**	< 2.0	1.0	430	130	3.1	220
	08/10/11	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 10	**490**	**1,600**	< 0.1	1.1	500	150	3.7	230
	10/09/11	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**430**	**1,400**	1.4	1.5	490	160	2.8	220
	11/03/11	< 1.0	< 1.0	< 1.0	< 1.5	--	41	< 10	ND	< 0.5	**400**	**1,500**	< 0.1	1.4	520	140	2.6	210
	04/30/12	< 1.0	< 1.0	< 1.0	< 1.5	--	70	20	ND	< 10 (H)	**390**	**1,300**	< 1.0	**11 ***	490	140	2.8	210
	06/05/12	1.2	< 1.0	< 1.0	< 1.5	--	43	24	ND	< 10	**370**	**1,300**	< 1.0	**5.5 ***	490	130	3.0	200
	06/28/12	1.7	< 1.0	< 1.0	< 1.5	--	62	31	ND	< 10	**440**	**1,500**	< 0.2	**12 ***	500	150	2.8	220
	07/25/12	< 1.0	< 1.0	< 1.0	< 1.5	--	28	< 10	ND	< 10	**430**	**1,200**	< 0.2	**14 ***	460	140	3.0	200
	08/15/12	< 1.0	< 1.0	< 1.0	< 1.5	--	37	< 10	ND	< 0.5	**370**	**700**	0.20	1.4	350	120	2.7	210
	09/23/12	< 1.0	< 1.0	< 1.0	< 1.5	--	71	< 10	ND	< 0.5	**420**	**660**	< 0.1	1.4	330	120	3.3	210
	10/25/12	< 1.0	< 1.0	< 1.0	< 1.5	--	55	< 10	ND	< 2.5	**420**	**1,200**	< 0.5	< 0.5	410	140	2.5	210
	11/28/12	< 1.0	< 1.0	< 1.0	< 1.5	--	44	< 10	ND	< 0.5	**440**	**1,200**	< 1.0	< 0.5	360	130	3.2	200
	05/16/13	< 1.0	< 1.0	< 1.0	< 1.5	--	59	< 10	ND	< 0.5	**380**	**1,300**	< 0.1	**7.8 ***	490	140	3.2	210
	06/17/13	< 1.0	< 1.0	< 1.0	< 1.5	--	66	< 10	ND	< 10	**340**	**1,000**	< 0.1	**5.4 ***	460	130	5.6	230
	07/17/13	< 1.0	< 1.0	< 1.0	< 1.5	--	74	17	ND	< 2.5 (H)	**380**	**1,100**	< 1.0	1.2	480	130	2.8	200
	07/31/14	< 1.0	< 1.0	< 1.0	< 3.0	--	6.2	< 2	ND	< 0.0 (H)	**430**	**1,320**	< 0.1	**4.64**	503	126	2.8	211
	08/25/14	< 1.0	< 1.0	< 1.0	< 3.0	--	14	< 2	ND	< 0	**372**	**983**	< 0.1	1.17	397	126	2.4	182
	09/17/14	< 1.0	< 1.0	< 1.0	< 3.0	--	< 2	< 2	ND	1.8	**359**	**939**	< 0.1	**2.55**	281	109	382	249
	10/15/14	< 1.0	< 1.0	< 1.0	< 3.0	--	10	< 2	ND	< 0	**315**	**1,730**	0.46	1.38	489	152	5.00	302
	07/15/15	< 1.0	< 1.0	< 1.0	< 3.0	--	25	< 2	ND	< 0.025	**395**	**617**	< 0.1	1.44	227	95.1	2.12	201
	10/27/15	< 1.0	< 1.0	< 1.0	< 3.0	--	11	0.22	ND	0.041	**382**	483	<0.1	**1.66**	242	107	1.77	190
	11/20/15	< 1.0	< 1.0	< 1.0	< 3.0	--	< 2	< 2	ND	0.111	**397**	429	0.242	**5.53**	244	88.4	1.48	189
	03/21/16	< 1.0	< 1.0	< 1.0	< 3.0	--	32	< 2	ND	0.195	**387**	411	< 0.1	1.48	232	101	1.45	204
	04/20/16	< 1.0	< 1.0	< 1.0	< 3.0	--	19	< 2	ND	0.195	**388**	358	< 0.1	1.37	197	97.1	1.42	215
	05/19/16	< 1.0	< 1.0	< 1.0	< 3.0	--	< 2	< 2	ND	< 0.025	**458**	415	< 0.1	**2.06**	258	104	1.69	227
	06/28/16	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**400**	**840**	< 0.1	**2.60**	280	110	2.6	200
	07/07/16	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**360**	**780**	< 0.1	< 0.1	290	120	2.1	210
	08/24/16	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 10	**350**	**850**	< 0.1	**1.9**	290	120	1.7	210
	09/21/16	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**370**	**890**	< 0.1	**1.9**	320	120	2.1	230
	10/24/16	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**360**	**900**	< 0.1	1.5	340	130	2.3	220
	11/03/16	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**330**	**910**	< 0.1	**1.9**	330	120	1.9	200
	07/11/17	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 2.5	**420**	560	< 0.1	< 0.5	220	92	1.7	170
	08/24/17	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**370**	520	< 0.1	1.5	220	110	1.7	210
	09/25/17	3.1	2.1	< 1.0	< 1.5	--	< 10	< 10	ND	< 2.5	**410**	**610**	< 0.5	< 0.5	260	110	2.2	120
	10/23/17	1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**400**	**740**	< 0.1	1.2	270	100	1.8	190
	11/27/17	1.7	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**400**	**810**	< 0.1	1.2	310	100	1.8	200
	06/28/18	< 2.5	< 2.5	< 2.5	< 3.8	--	< 25	< 25	ND	< 0.5	**420**	230	< 1.0	1.1	140	110	1.9	220
	07/23/18	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**410**	340	< 0.1	< 0.1	200	110	1.9	210
	08/13/18	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**400**	420	< 0.1	< 0.5	240	130	1.9	210
	09/19/18	< 1.0	< 1.0	< 1.0	< 1.5	--	< 10	< 10	ND	< 0.5	**440**	550	< 0.1	< 2.0	280	120	3.0	210
	10/18/18	< 1.0	< 1.0	< 1.0	< 1.5	--	17	< 10	ND	< 0.5	**400**	590	< 0.1	1.1	270	120	1.7	220
	09/16/19	< 1.0	< 1.0	< 1.0	< 1.5	--	<10	10	ND	<0.5	**440**	800	<0.1	0.98	290	110	2.2	220
	10/29/19	< 1.0	< 1.0	< 1.0	< 1.0	--	<10	< 10	ND	<0.5	**400**	NT	NT	NT	320	110	2.1	200
	05/31/20	<1.0	<1.0	<1.0	<1.5	--	<10	<10	ND	<0.5	**510**	790	<1.0	2.4	350	100	2.1	200
	06/25/20	<1	<1	<1	<1.5	--	<10	<10	ND	<0.5	**380**	760	<1.0	**1.6**	290	120	2.2	220
	09/21/20	<1.0	<1.0	<1.0	<1.5	--	<10	<10	ND	<0.5	**380**	1,100	<0.10	**0.6**	400	110	2.3	210
	10/26/20	<1.0	<1.0	<1.0	<1.5	--	11	<10	ND	<0.5	**450**	1,200	<1.0	1.3	440	120	3.9	220

Table 4-4 Summary of Water Treatment System Analyses
Transwestern Compressor Station No. 9 - Roswell, NM

Sample Point	Sampling Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (total) (ug/L)	GRO (Gasoline Range)	Acetone (ug/L)	2-Butanone (ug/L)	Remaining VOCs	Phosphorus (As P) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (NO3 as N) (mg/L)	Fluoride (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium mg/L)	Sodium (mg/L)
NMWQCC Standard:		5	1,000	700	620	none	none	none	NA	none	250	600	10.0	1.6	none	none	none	none
Between GACs	06/22/09	**350**	570	16	210	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/21/09	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/09	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/28/09	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/29/09	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/18/09	**9.3**	3.3	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/30/10	2.1	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/31/10	**200**	200	12	150	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/30/10	**300**	440	22	280	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/10/10	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/10/11	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/09/11	3.2	1.6	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/03/11	2.8	1.6	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	04/30/12	3.6	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/05/12	3.9	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/12	4.7	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/25/12	1.8	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/15/12	1.7	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/23/12	1.7	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/25/12	1.5	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/28/12	1.5	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	05/16/13	3.3	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/17/13	4.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/17/13	3.2	1.8	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/31/14	**5.5**	3.4	< 1.0	4	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/25/14	**6.4**	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/17/14	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/15/14	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/15/15	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/27/15	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/20/15	**12**	10.0	< 1.0	7.5	--	---	---	---	---	---	---	---	---	---	---	---	---
	03/21/16	**6.7**	9.9	< 1.0	20	--	---	---	---	---	---	---	---	---	---	---	---	---
	04/20/16	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	05/19/16	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/16	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/07/16	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/16	< 1.0	< 1.0	< 1.0	< 1.5	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/21/16	< 1.0	< 1.0	< 1.0	< 1.5	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/24/16	4.5	5	< 1.0	4.4	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/03/16	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/11/17	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/17	4	3.6	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/25/17	**600**	650	25	220	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/24/17	**16**	14	<1.0	7.7	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/27/17	**21**	19	< 1.0	8.7	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/18	**5.2**	2.6	< 1.0	1.5	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/23/18	**13**	7.1	< 1.0	5.6	---	---	---	---	---	---	---	---	---	---	---	---	---
	08/13/18	**11**	5	< 1.0	3.9	---	---	---	---	---	---	---	---	---	---	---	---	---
	09/19/18	**8.1**	4	< 1.0	< 1.5	---	---	---	---	---	---	---	---	---	---	---	---	---
	10/18/18	**47**	47	1.6	21	---	---	---	---	---	---	---	---	---	---	---	---	---
	09/16/19	**2.1**	<1.0	<1.0	<2.0	---	---	---	---	---	---	---	---	---	---	---	---	---
	10/29/19	**17**	18	<1.0	9.2	---	---	---	---	---	---	---	---	---	---	---	---	---
	05/31/20	<1.0	<1.0	<1.0	<1.5	---	---	---	---	---	---	---	---	---	---	---	---	---
	06/25/20	1.1	<1	<1	<1.5	---	---	---	---	---	---	---	---	---	---	---	---	---
	09/21/20	**170**	**140**	1.9	22	---	---	---	---	---	---	---	---	---	---	---	---	---
	10/26/20	1.4	3.8	<1.0	3.7													

Table 4-4 Summary of Water Treatment System Analyses
Transwestern Compressor Station No. 9 - Roswell, NM

Sample Point	Sampling Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (total) (ug/L)	GRO (Gasoline Range)	Acetone (ug/L)	2-Butanone (ug/L)	Remaining VOCs	Phosphorus (As P) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (NO3 as N) (mg/L)	Fluoride (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium mg/L)	Sodium (mg/L)
NMWQCC Standard:		5	1,000	700	620	none	none	none	NA	none	250	600	10.0	1.6	none	none	none	none
Post-Air Stripper	05/25/09	**260**	680	33	**790**	5.3	---	---	---	---	---	---	---	---	---	---	---	---
	06/22/09	**960**	**1,600**	63	**830**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/21/09	**280**	500	< 20	280	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/09	**230**	350	13	220	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/28/09	**290**	72	19	240	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/29/09	**450**	670	42	430	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/18/09	**200**	470	18	300	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/30/10	**450**	460	13	250	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/31/10	**190**	200	11	140	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/30/10	**450**	660	31	450	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/10/10	**59**	97	< 10	65	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/10/11	1.4	2.7	< 1	3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/09/11	**21**	37	2.0	22	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/03/11	**30**	66	3.4	47	--	---	---	---	---	---	---	---	---	---	---	---	---
	04/30/12	< 1	1.3	< 1	2.2	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/05/12	< 1	1.0	< 1	< 2	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/12	< 1	< 1	< 1	< 2	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/25/12	**170**	270	12	130	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/15/12	**13**	16	< 5	10	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/23/12	< 5	< 5	< 5	< 10	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/25/12	< 5	< 5	< 5	< 10	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/28/12	**5.1**	8.4	< 5	< 10	--	---	---	---	---	---	---	---	---	---	---	---	---
	05/16/13	< 5	< 5	< 5	< 10	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/17/13	< 5	< 5	< 5	< 10	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/17/13	< 5	< 5	< 5	< 10	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/31/14	< 1	< 1	< 1	< 3	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/25/14	< 1	< 1	< 1	< 3	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/17/14	< 1	< 1	< 1	< 3	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/15/14	5	11	< 1	10	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/15/15	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/27/15	**12**	14	1.5	11	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/20/15	**110**	160	9.3	140	--	---	---	---	---	---	---	---	---	---	---	---	---
	03/21/16	**22**	77	14	200	--	---	---	---	---	---	---	---	---	---	---	---	---
	04/20/16	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	05/19/16	< 1.0	< 1.0	< 1.0	< 3.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/16	< 2.5	< 5.0	< 5.0	< 10	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/0716	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/16	< 1.0	< 1.0	< 1.0	< 1.5	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/21/16	< 1.0	< 1.0	< 1.0	< 1.5	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/24/16	**20**	26	1.5	25	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/03/16	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/11/17	< 1.0	< 1.0	< 1.0	< 2.0	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/17	5.6	6.7	< 1.0	3.5	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/25/17	**380**	470	19	190	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/23/17	**9.6**	13	< 1.0	8	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/27/17	**29**	38	2	20	---	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/18	**8.3**	8.1	< 1.0	6.5	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/23/18	**22**	19	1.7	17	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/13/18	**20**	20	1.5	14	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/19/18	**74**	71	4.4	42	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/18/18	**110**	170	10	120	---	---	---	---	---	---	---	---	---	---	---	---	---
	09/16/19	**5.0**	6.2	<1.0	3.6	---	---	---	---	---	---	---	---	---	---	---	---	---
	10/29/19	**44**	52	1.9	36	---	---	---	---	---	---	---	---	---	---	---	---	---
	05/31/20	<1.0	<1.0	<1.0	<1.5	---	---	---	---	---	---	---	---	---	---	---	---	---
	06/25/20	2.9	4.5	<1.0	3.1	---	---	---	---	---	---	---	---	---	---	---	---	---
	09/21/20	**450**	**640.0**	31.0	350.0	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/26/20	1.5	3.9	<1.0	3.6	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 4-4 Summary of Water Treatment System Analyses
Transwestern Compressor Station No. 9 - Roswell, NM

Sample Point	Sampling Date	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (total) (ug/L)	GRO (Gasoline Range)	Acetone (ug/L)	2-Butanone (ug/L)	Remaining VOCs	Phosphorus (As P) (mg/L)	Chloride (mg/L)	Sulfate (mg/L)	Nitrate (NO3 as N) (mg/L)	Fluoride (mg/L)	Calcium (mg/L)	Magnesium (mg/L)	Potassium mg/L)	Sodium (mg/L)
NMWQCC Standard:		5	1,000	700	620	none	none	none	NA	none	250	600	10.0	1.6	none	none	none	none
Pre-Treatment	05/25/09	**640**	**1,700**	99	**1,900**	15	---	---	---	---	---	---	---	---	---	---	---	---
	06/22/09	**2,700**	**4,500**	210	**2,400**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/21/09	**2,500**	**4,600**	210	**2,600**	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/09	**2,700**	**4,000**	200	**2,500**	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/28/09	**2,900**	910	220	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/29/09	**3,000**	**4,100**	280	**2,700**	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/18/09	**1,400**	**3,300**	140	**2,000**	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/30/10	**2,700**	**2,800**	120	**1,500**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/31/10	**1,900**	**2,000**	140	**1,300**	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/30/10	**1,800**	**2,600**	150	**1,800**	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/10/10	**2,400**	**3,900**	220	**2,100**	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/10/11	**970**	**1,900**	130	**1,400**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/09/11	**3,000**	**4,800**	240	**2,500**	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/03/11	**2,400**	**4,900**	260	**2,800**	--	---	---	---	---	---	---	---	---	---	---	---	---
	04/30/12	**3,100**	**3,400**	200	**2,100**	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/05/12	**2,600**	**3,900**	220	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/12	**3,000**	**4,500**	250	**2,300**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/25/12	**2,900**	**4,600**	260	**2,700**	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/15/12	**2,900**	**3,500**	270	**2,300**	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/23/12	**2,600**	**3,600**	270	**2,400**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/25/12	**3,200**	**4,400**	280	**2,600**	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/28/12	**2,300**	**3,700**	230	**2,300**	--	---	---	---	---	---	---	---	---	---	---	---	---
	05/16/13	**2,800**	**4,900**	260	**2,600**	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/17/13	**2,500**	**4,500**	260	**2,500**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/17/13	**3,000**	**5,300**	270	**2,600**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/31/14	**570**	**1,500**	< 100	**2,100**	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/25/14	**1,200**	**1,600**	110	**1,500**	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/17/14	**2,100**	**3,100**	180	**1,900**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/15/14	**2,200**	**3,900**	200	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/15/15	**2,700**	**2,600**	160	**1,900**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/27/15	**1,700**	**1,700**	< 100	**1,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/20/15	**2,700**	**3,500**	160	**2,300**	--	---	---	---	---	---	---	---	---	---	---	---	---
	03/21/16	**1,500**	**2,200**	140	**2,300**	--	---	---	---	---	---	---	---	---	---	---	---	---
	04/20/16	**1,100**	**1,600**	100	**2,100**	--	---	---	---	---	---	---	---	---	---	---	---	---
	05/19/16	**960**	**1,100**	100	**2,000**	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/16	**2,100**	520	130	**970**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/07/16	**2,000**	**2,400**	160	**1,800**	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/16	**1,500**	**2,500**	170	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/21/16	**1,900**	**2,400**	190	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/24/16	**1,100**	**1,200**	140	**1,600**	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/03/16	**1,700**	**3,000**	180	**2,400**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/11/17	**5,200**	**7,000**	160	**2,700**	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/24/17	**3,600**	**3,800**	200	**1,500**	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/25/17	**4,300**	**5,700**	250	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/23/17	**4,400**	**5,200**	200	**2,300**	--	---	---	---	---	---	---	---	---	---	---	---	---
	11/27/17	**4,400**	**5,300**	200	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	06/28/18	**1,900**	**1,600**	120	**1,000**	--	---	---	---	---	---	---	---	---	---	---	---	---
	07/23/18	**3,000**	**2,300**	200	**1,800**	--	---	---	---	---	---	---	---	---	---	---	---	---
	08/13/18	**3,800**	**3,600**	280	**2,100**	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/19/18	**4,100**	**4,300**	250	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/18/18	**3,900**	**5,400**	260	**2,700**	--	---	---	---	---	---	---	---	---	---	---	---	---
	09/16/19	**4,600**	**5,400**	240	**2,300**	--	---	---	---	---	---	---	---	---	---	---	---	---
	10/29/19	**4,500**	**5,000**	190	**2,200**	--	---	---	---	---	---	---	---	---	---	---	---	---
	05/31/20	**3,100**	**4,500**	170	**2,200**	--	--	--	--	--	--	--	--	--	--	--	--	--
	06/25/20	**2,800**	**3,800**	180	**2,000**	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/21/20	**3,000**	**4,400**	230	**2,500**	--	--	--	--	--	--	--	--	--	--	--	--	--
	10/26/20	**2,700**	**4,800**	170	**2,900**	--	--	--	--	--	--	--	--	--	--	--	--	--

Notes:
ug/L = micrograms per liter
Concentrations are reported in ug/L except as noted.
Bold - Concentrations exceed the NMWQCC standard
Historical data before 2009 is presented in previous reports.

NT = Not Tested

Prepared by: SWS 3/2/21
Checked by: HRB 3/2/21

Table 4-5. Summary of Air Stripper Vapor Monitoring
Transwestern Compressor Station No. 9 - Roswell, NM

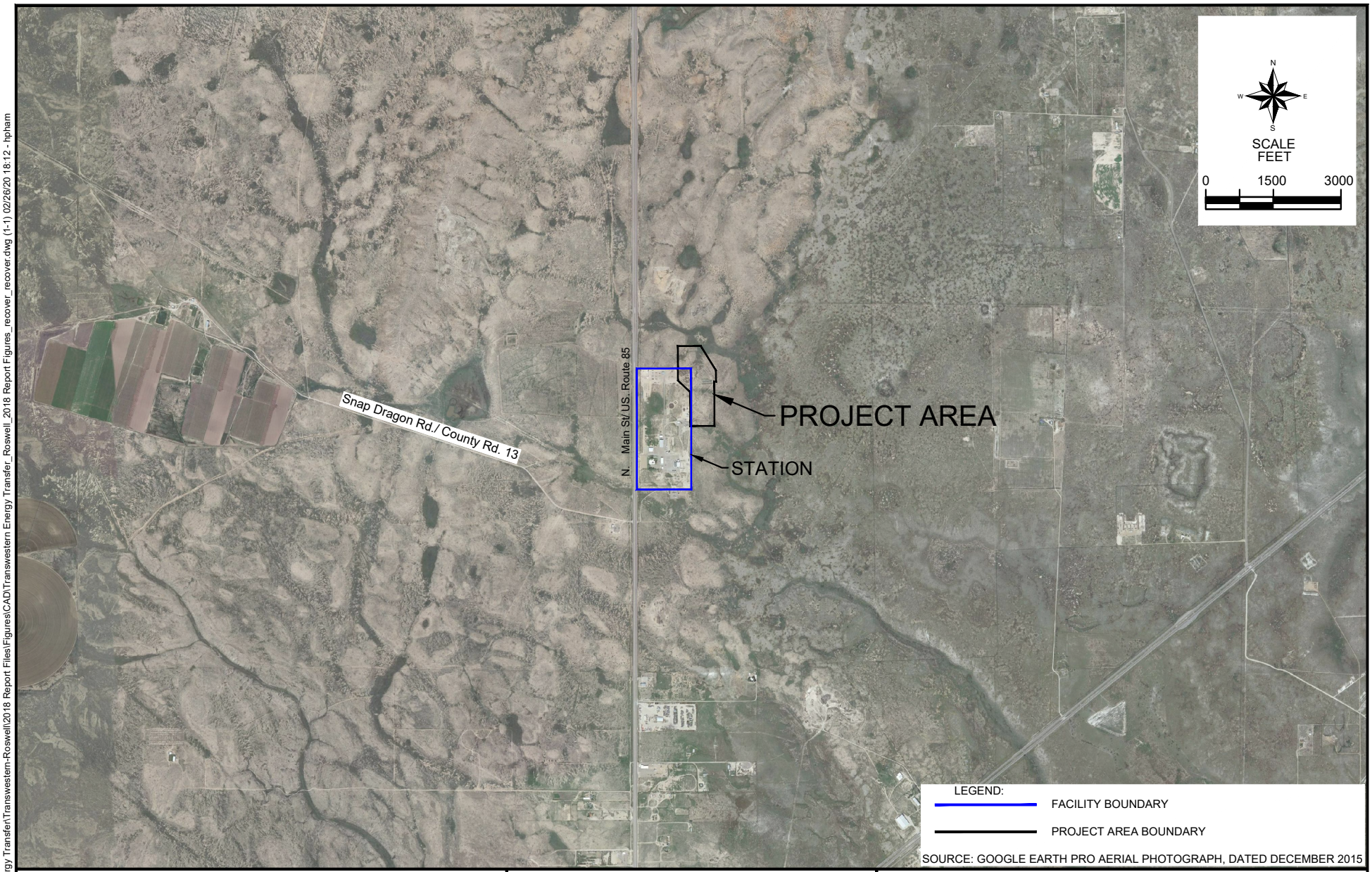
Date	Prior to Carbon (ppmV)	Between Carbon Vessels (ppmV)	After Carbon Vessels (ppmV)
4/14/2020	52.6	0	0
4/29/2020	37.9	0	0
5/8/2020	58.2	0	0
5/31/2020	64.1	0.7	0
6/2/2020	8.5	0	0
6/25/2020	14.7	15.1	4.6
9/7/2020*	NA	NA	NA
9/23/2020	89.7	2.6	0.4

Notes:
ppmV - parts per million per volume
*Air stripper down

Prepared by: HRB 2/25/21
Checked by: SWS 3/2/21

Released to Imaging: 11/22/2022 9:07:27 AM

FIGURES



TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No. 9
(ROSWELL COMPRESSOR STATION)
ROSWELL, CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®

EarthCon Consultants, Inc.

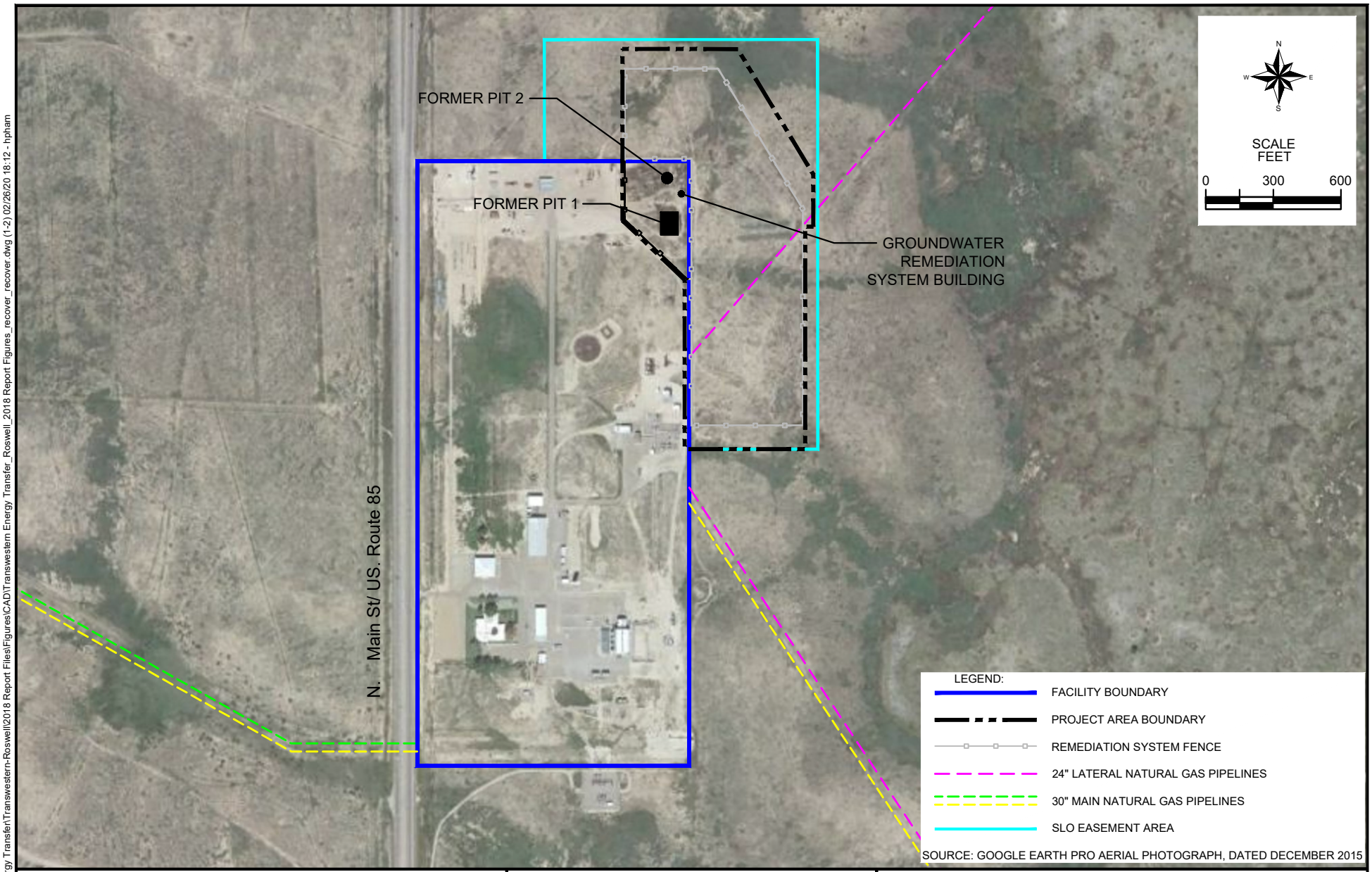
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

PROJECT AREA LOCATION MAP

DRAWN:	CHECKED:	DATE:	FIGURE:
HVP	JM	02/26/2020	1-1

FILENAME: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2018 Report Files\Figures\CAD\Transwestern Energy Transfer_Roswell_2018 Report Figures_recover_recover.dwg (1-1) 02/26/20 18:12 - hpham

Copyright © 2020 EarthCon Consultants, Inc. All Rights Reserved



TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No. 9
(ROSWELL COMPRESSOR STATION)
ROSWELL, CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®

EarthCon Consultants, Inc.

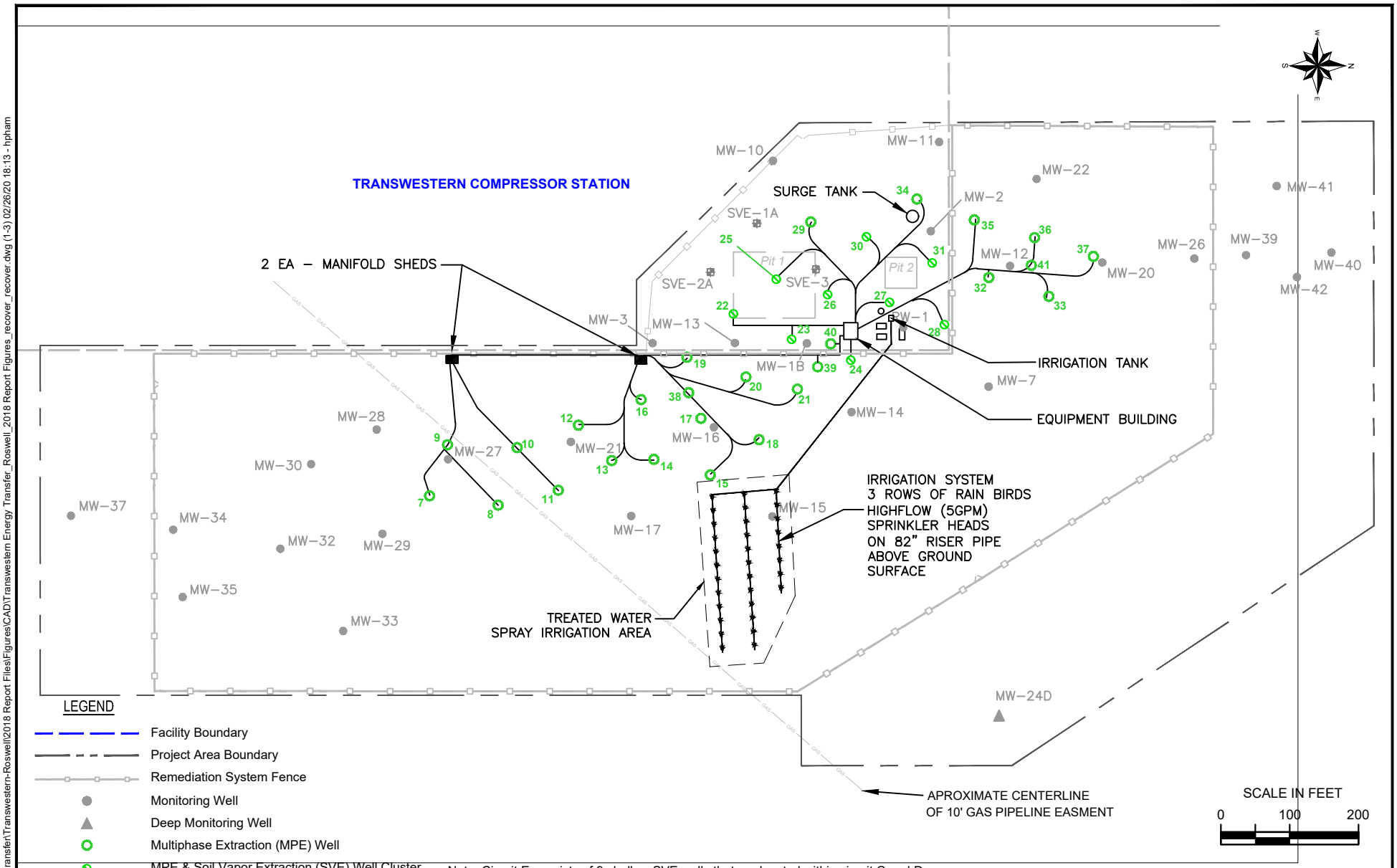
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

PROJECT AREA FEATURES

DRAWN:	CHECKED:	DATE:	FIGURE:
HVP	JM	02/26/2020	1-2

FILENAME:S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2018 Report Files\Figures\CAD\Transwestern Energy Transfer_Roswell_2018 Report Figures_recover_recover.dwg (1-2) 02/26/20 18:12 - hpham

Copyright © 2020 EarthCon Consultants, Inc. All Rights Reserved



Note: Circuit E consists of 9 shallow SVE wells that are located within circuit C and D.

SOURCE: CYPRESS ENGINEERING SERVICES INC.

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No. 9
(ROSWELL COMPRESSOR STATION)
ROSWELL, CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®

EarthCon Consultants, Inc.

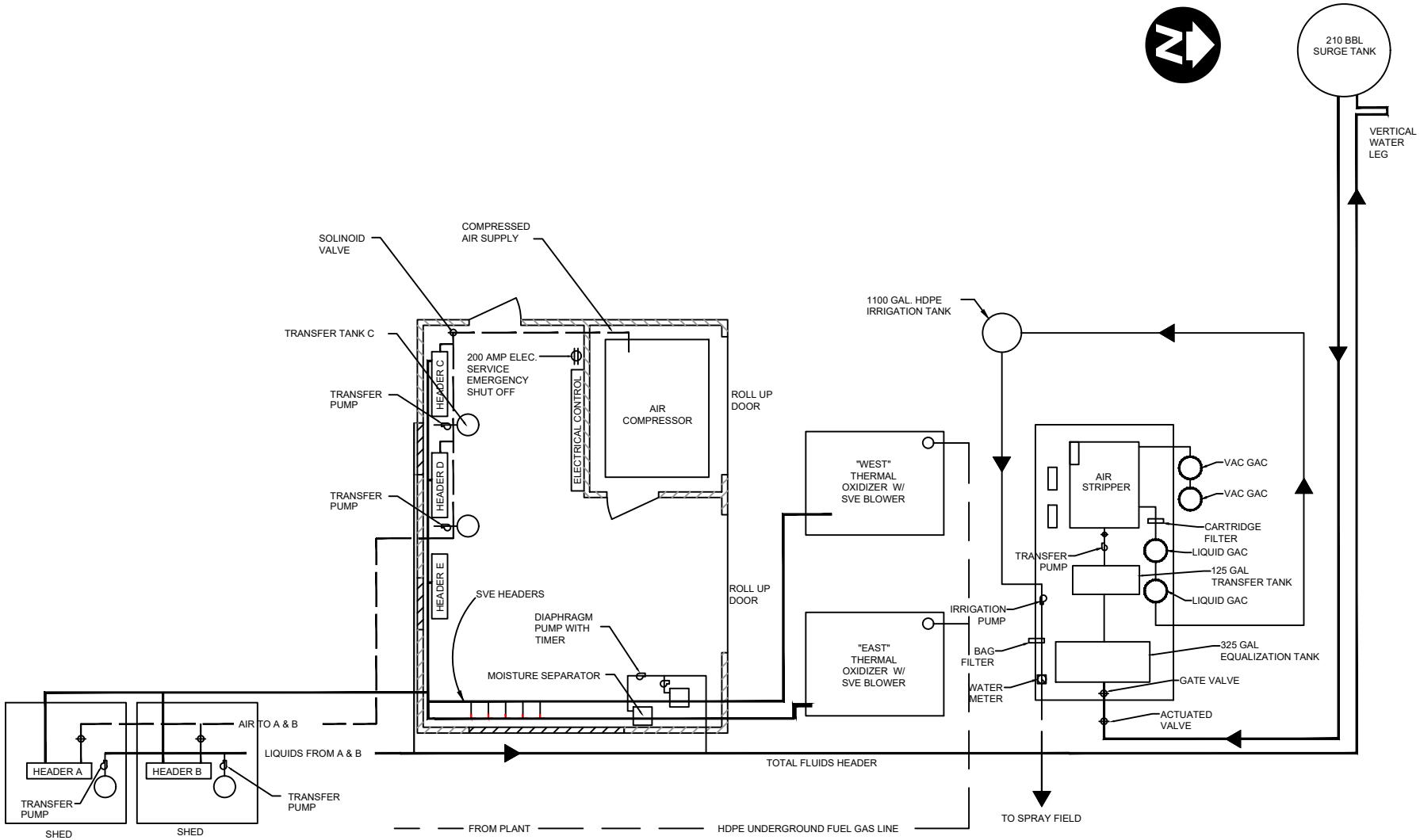
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

REMEDIATION SYSTEM LAYOUT

DRAWN:	CHECKED:	DATE:	FIGURE:
HVP	JM	02/26/2020	1-3

FILENAME:S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2018 Report Files\Figures\CAD\Transwestern Energy Transfer_Roswell_2018 Report Figures_recover_recover.dwg (1-3) 02/26/20 18:13 - hpham

Copyright © 2020 EarthCon Consultants, Inc. All Rights Reserved



(NOT TO SCALE)

SOURCE: CYPRESS ENGINEERING SERVICES INC.

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No. 9
(ROSWELL COMPRESSOR STATION)
ROSWELL, CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®

EarthCon Consultants, Inc.

1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

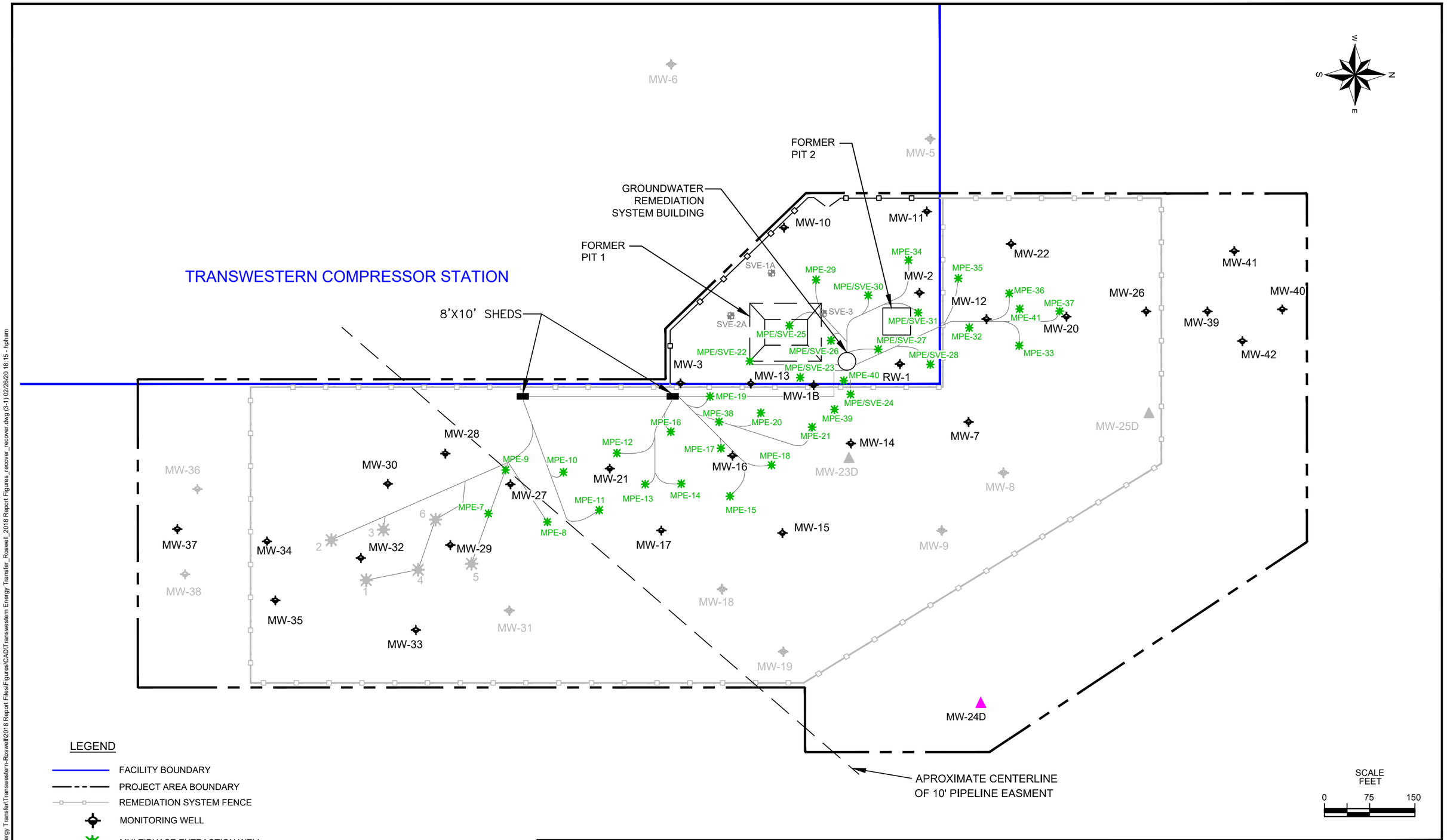
REMEDIATION SYSTEM
EQUIPMENT COMPOUND DETAIL

DRAWN:	CHECKED:	DATE:	FIGURE:
APD	JM	03/10/2021	1-4

FILENAME:C:\Users\adouglas\Desktop\Drafting\Transwestern-Roswell\Transwestern Energy Transfer_Roswell_2018 Report Figures_recover_recover.dwg (1-4) 03/10/21 14:29 - adouglas

Copyright © 2020 EarthCon Consultants, Inc. All Rights Reserved

Page 101 of 492



SOURCE: CYPRESS ENGINEERING SERVICES INC.

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No. 9
(ROSWELL COMPRESSOR STATION)
ROSWELL, CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®

EarthCon Consultants, Inc.
1880 WEST OAK PKWY, BLDG 100, STE 106, MARIETTA, GA, 30062

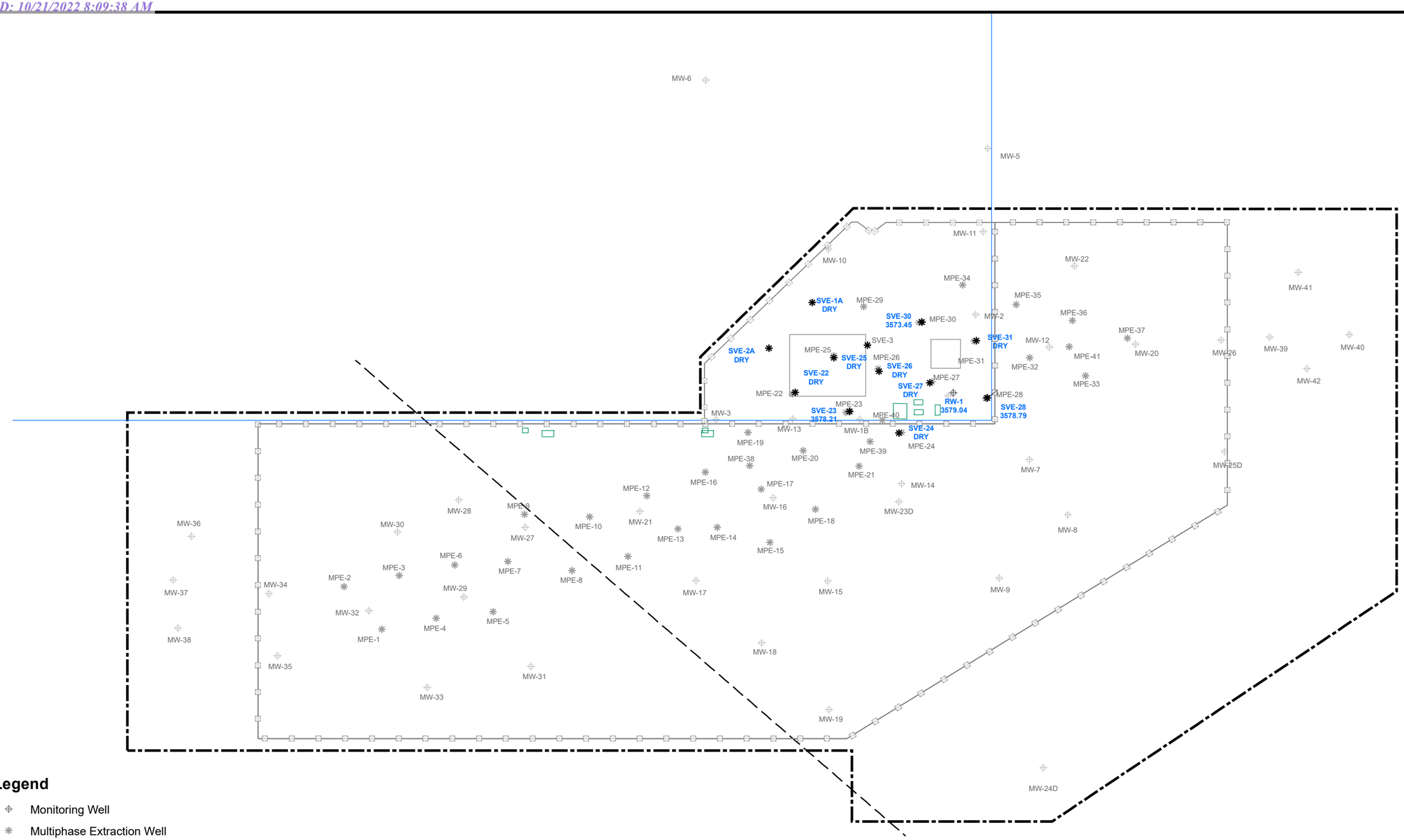
WELL LOCATIONS

DRAWN:	CHECKED:	DATE:	FIGURE:
HVP	JM	02/26/2020	3-1

FILE NAME: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2018 Report Files\Figures\CAD\Transwestern Energy Transfer_Roswell_2018 Report Figures_recover_recover.dwg (3-1) 02/26/20 18:15 - hpham

Received by OCD: 10/21/2022 8:09:38 AM

Released to Imaging: 11/22/2022 9:07:27 AM



Legend

- Monitoring Well
- Multiphase Extraction Well
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

Note: RW-1, SVE-23, SVE-28, SVE-30 are in the Perched Aquifer and required to be sampled per the approved 2020 Sampling Plan.

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

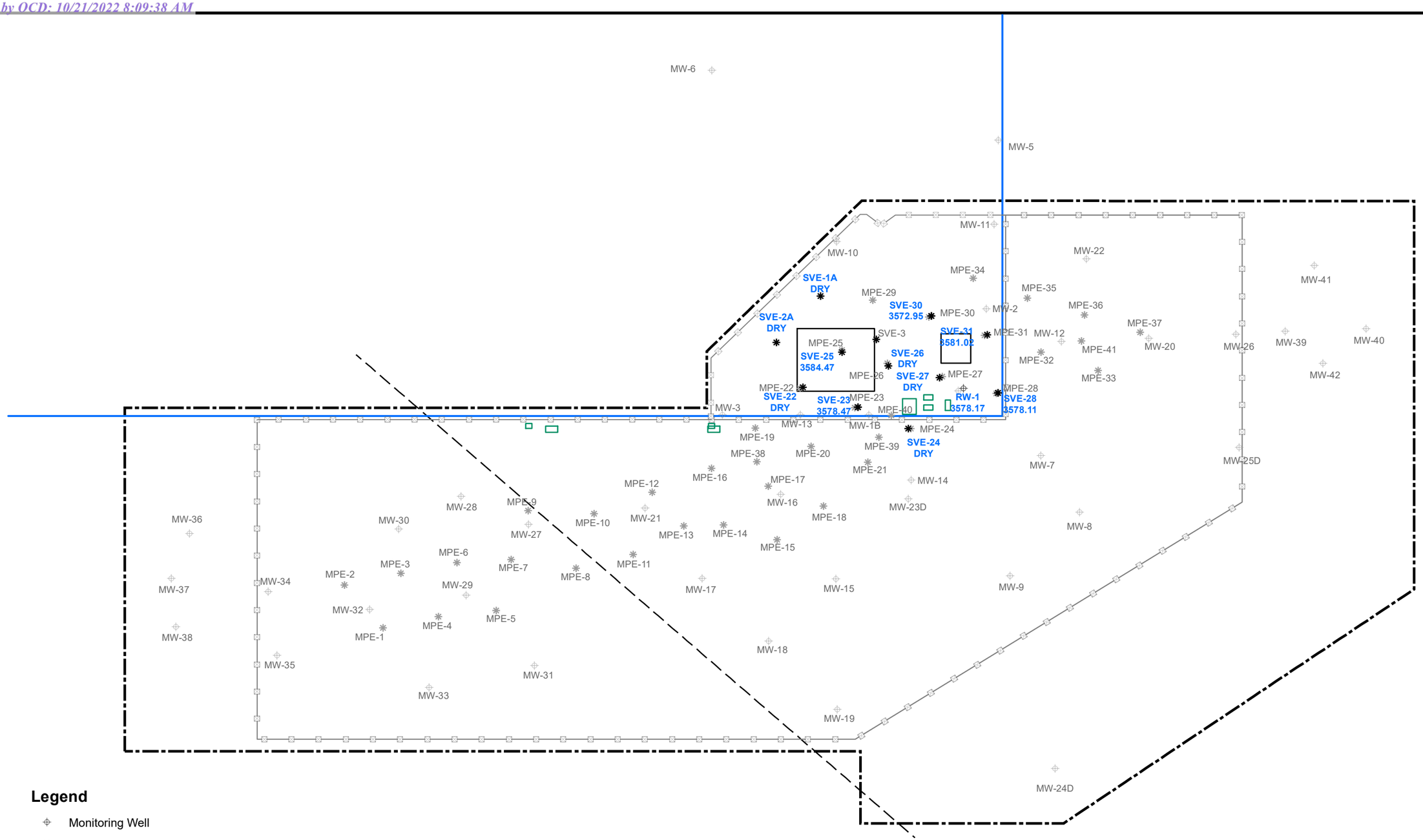
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Groundwater Surface Elevations in the Perched Aquifer May 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-2a

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-2a_Groundwater Surface Elevations in the Perched Aquifer, May 2020.mxd 3/23/2021 10:50:24 AM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

Note: RW-1, SVE-23, SVE-28, SVE-30 are in the Perched Aquifer and required to be sampled per the approved 2020 Sampling Plan.

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

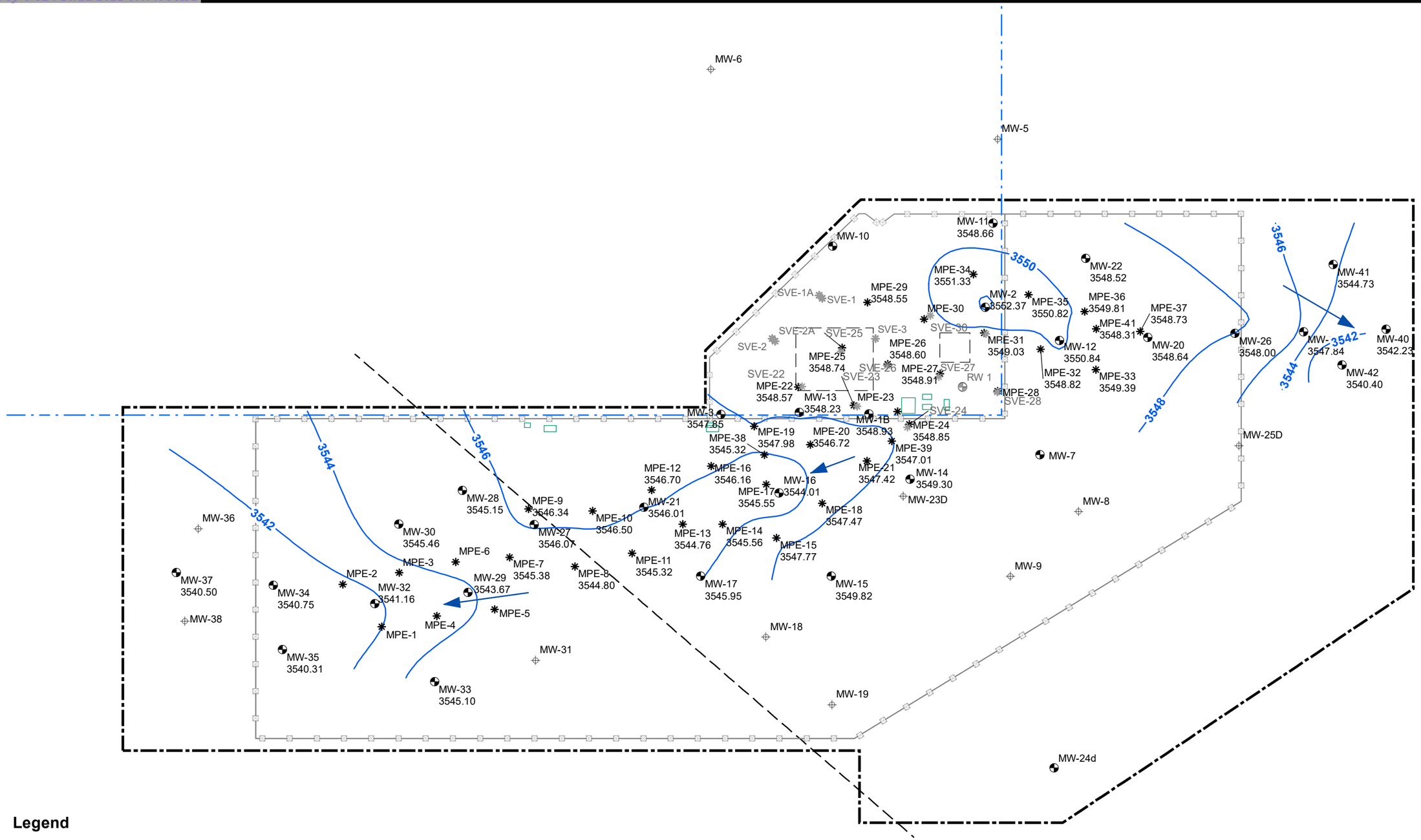
EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Groundwater Surface Elevations in the Perched Aquifer November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-2b

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-2b_Groundwater Surface Elevations in the Perched Aquifer, Nov 2020.mxd 3/23/2021 10:53:30 AM swebersnapp

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-3a_Groundwater Surface Elevations in the Upper Aquifer, May 2020.mxd 3/17/2021 3:55:10 PM hpham



Legend

- Monitoring Well
- Multi-Phase Extraction Well
- Old Monitoring Well
- Potentiometric Groundwater Contour
- Groundwater Flow Direction
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 70 140 280 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

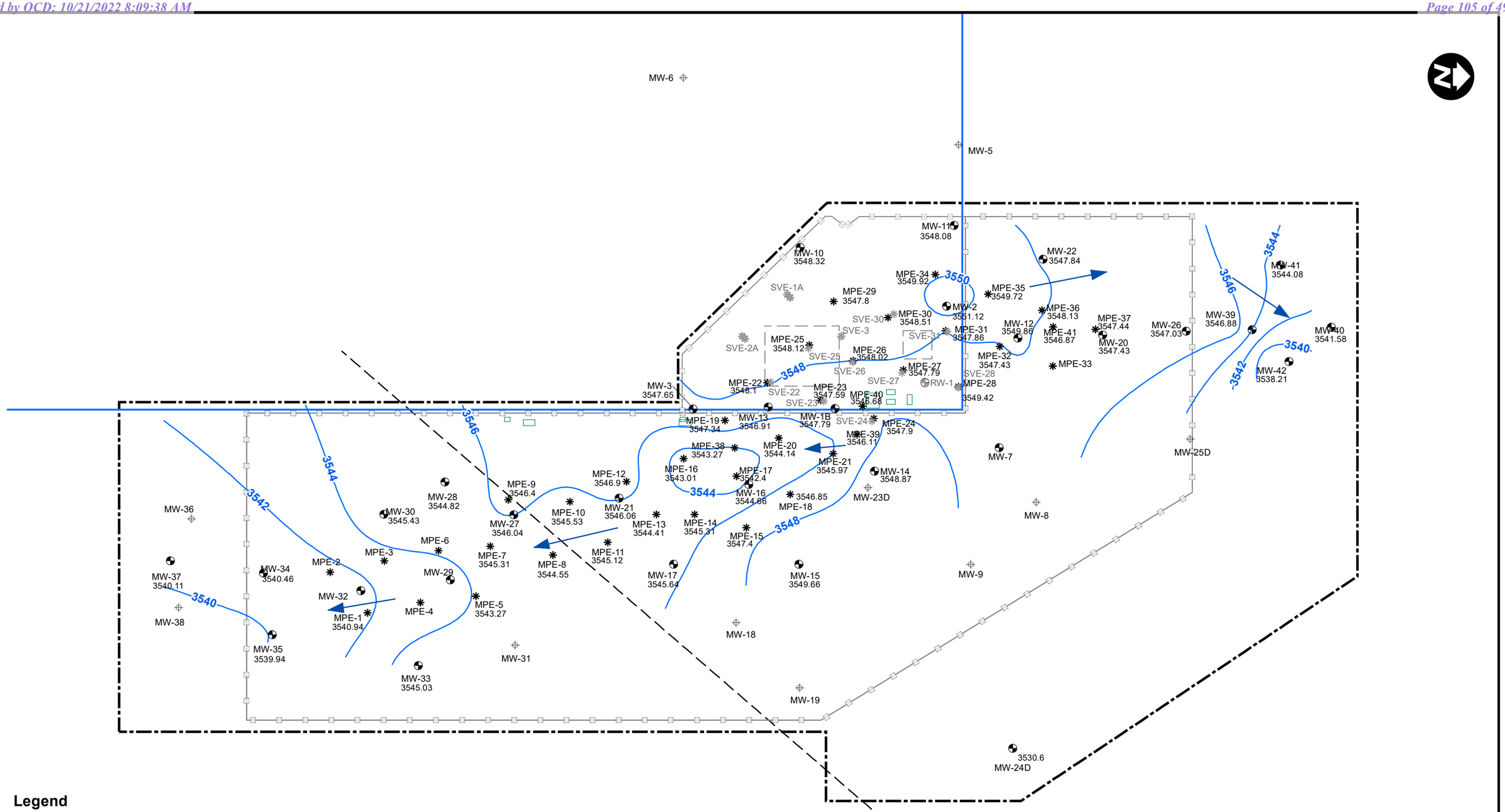
ROSWELL. CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Groundwater Surface Elevations
in the Upper Aquifer
May 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	MAR 2021	3-3a



Legend

- Monitoring Well
- Multi-Phase Extraction Well
- Old Monitoring Well
- Potentiometric Groundwater Contour
- Groundwater Flow Direction
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

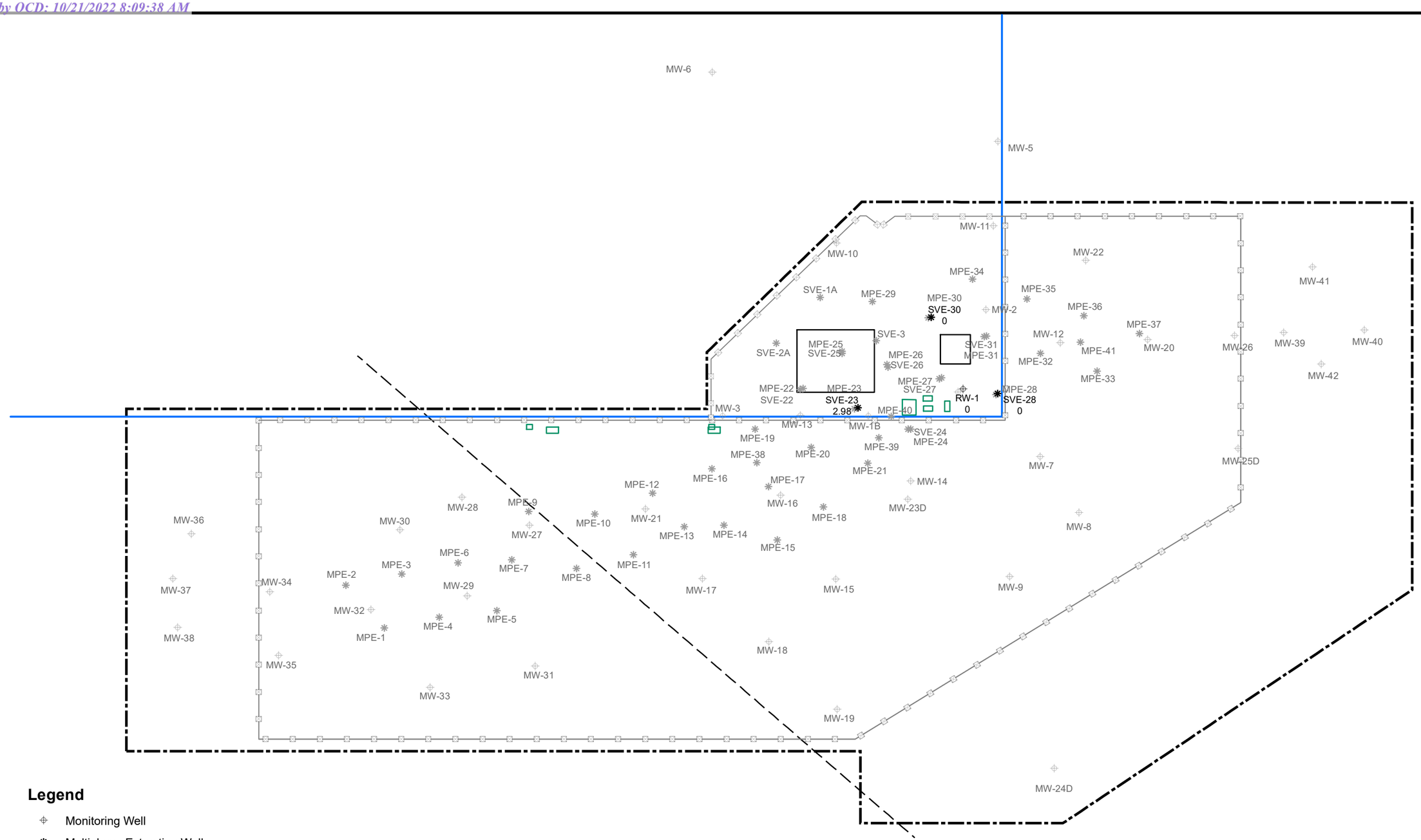
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Groundwater Surface Elevations
in the Upper Aquifer
November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	MAR 2021	3-3b

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-3b_Groundwater Surface Elevations in the Upper Aquifer, Nov 2020.mxd 3/17/2021 4:12:59 PM hpham



Legend

- Monitoring Well
- Multiphase Extraction Well
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

Note: Rw-1, SVE-23, SVE-28, SVE-30 are in the Perched Aquifer and required to be sampled per the approved 2020 Sampling Plan.

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

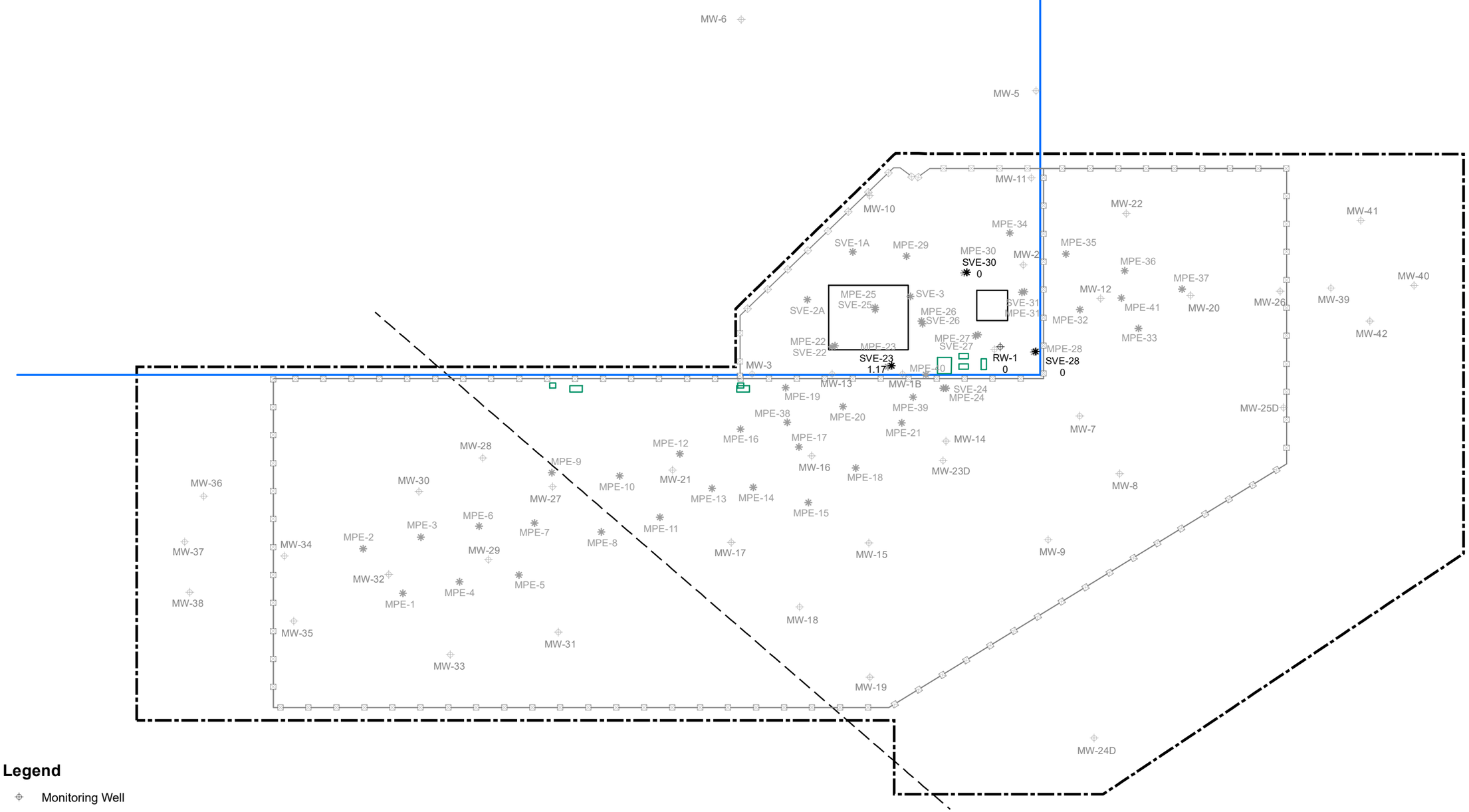
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of PSH in the Perched Aquifer May 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2020	3-4a

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-4a_Distribution of PSH in the Perched Aquifer May 2020.mxd 3/10/2021 11:34:48 AM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

Note: Rw-1, SVE-23, SVE-28, SVE-30 are in the Perched Aquifer and required to be sampled per the approved 2020 Sampling Plan.

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

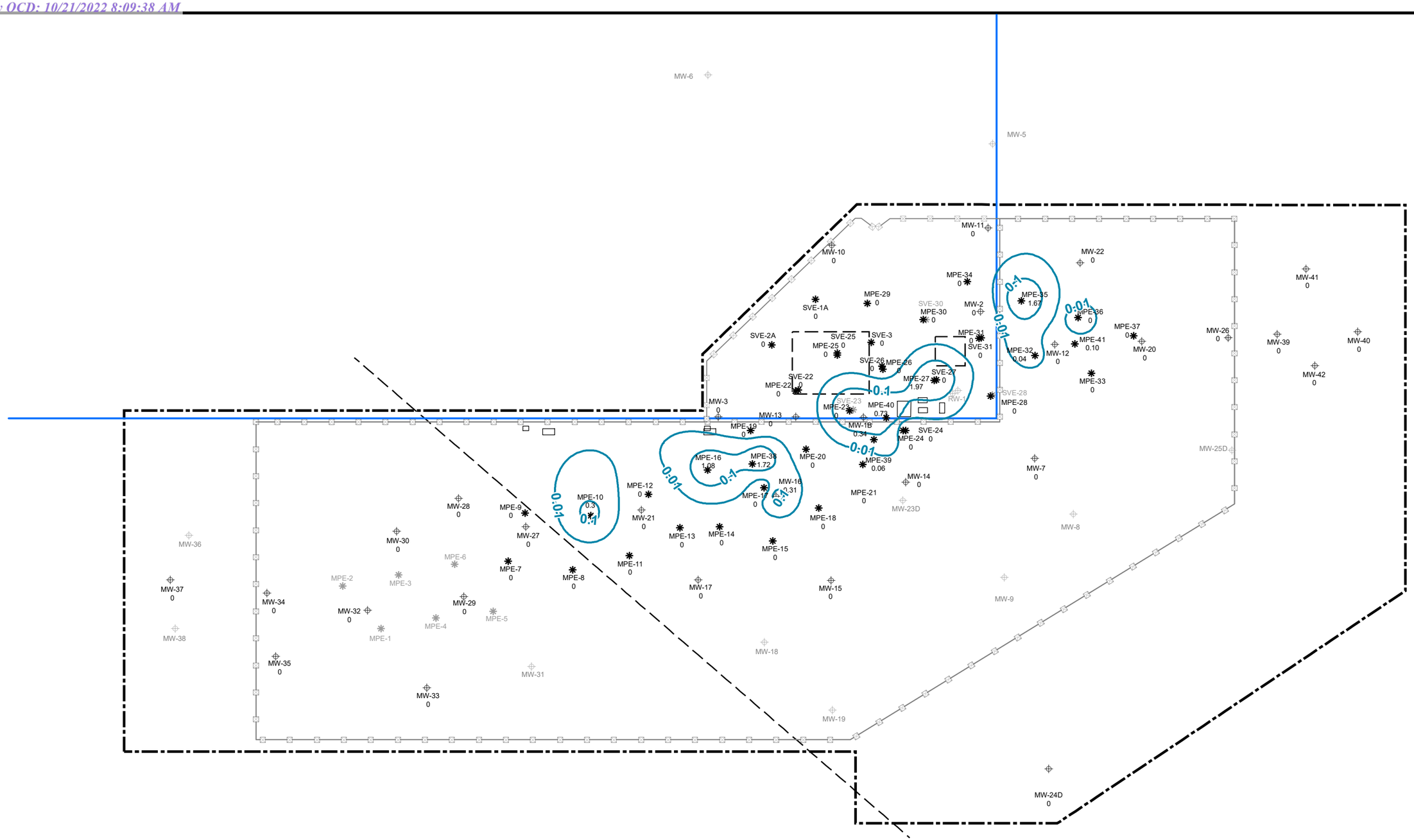
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of PSH in the Perched Aquifer November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2020	3-4b

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-4b_Distribution of PSH in the Perched Aquifer Nov 2020.mxd 3/10/2021 11:35:55 AM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- PSH Thickness Contour (ft) in Upper Aquifer (May 2020)
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

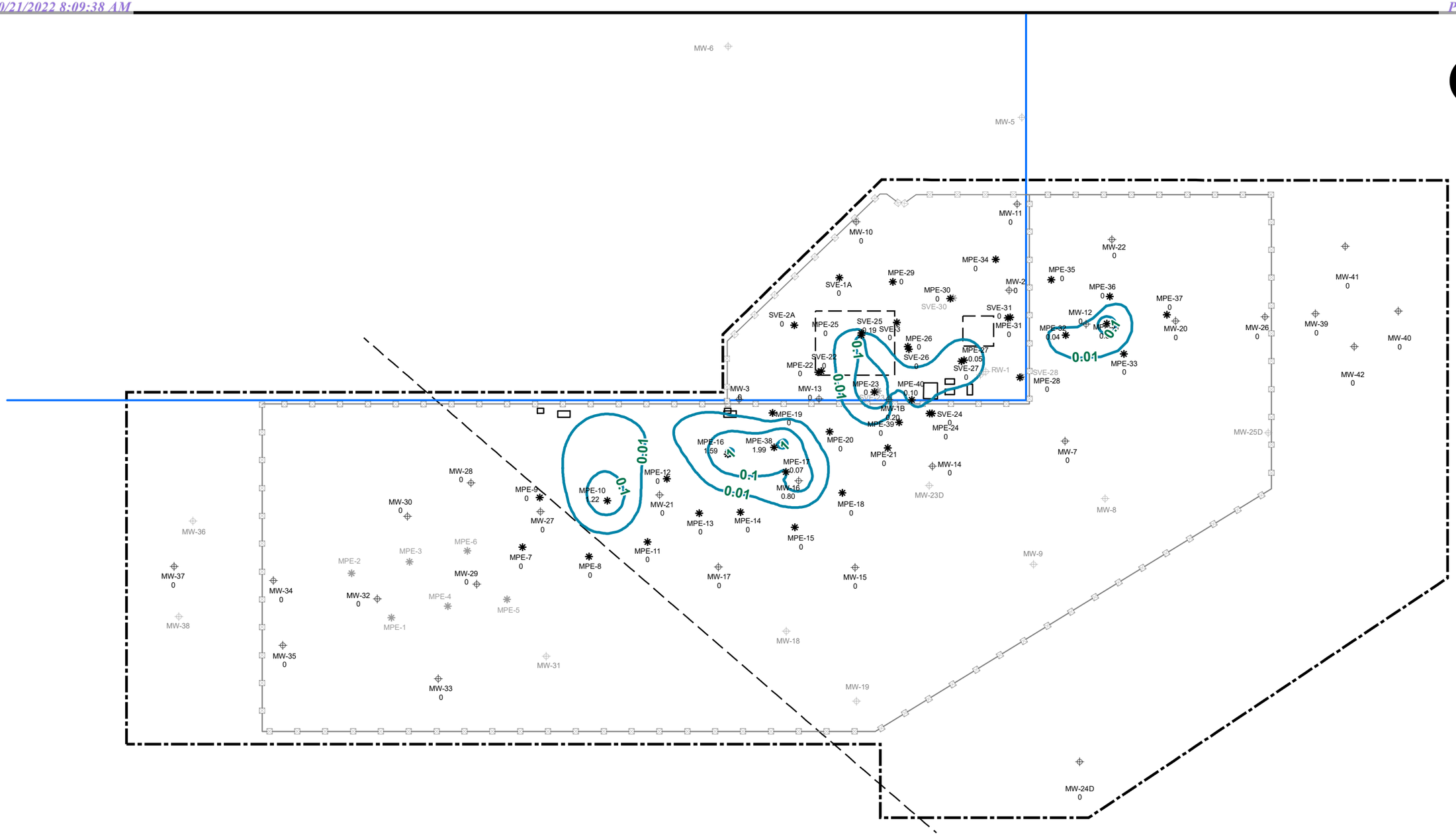
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of PSH in the Upper Aquifer May 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-5a

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-5a_Distribution of PSH in the Upper Aquifer May 2020.mxd 2/1/2021 10:22:41 AM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- PSH Thickness Contour (ft) in Upper Aquifer (Nov 2020)
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

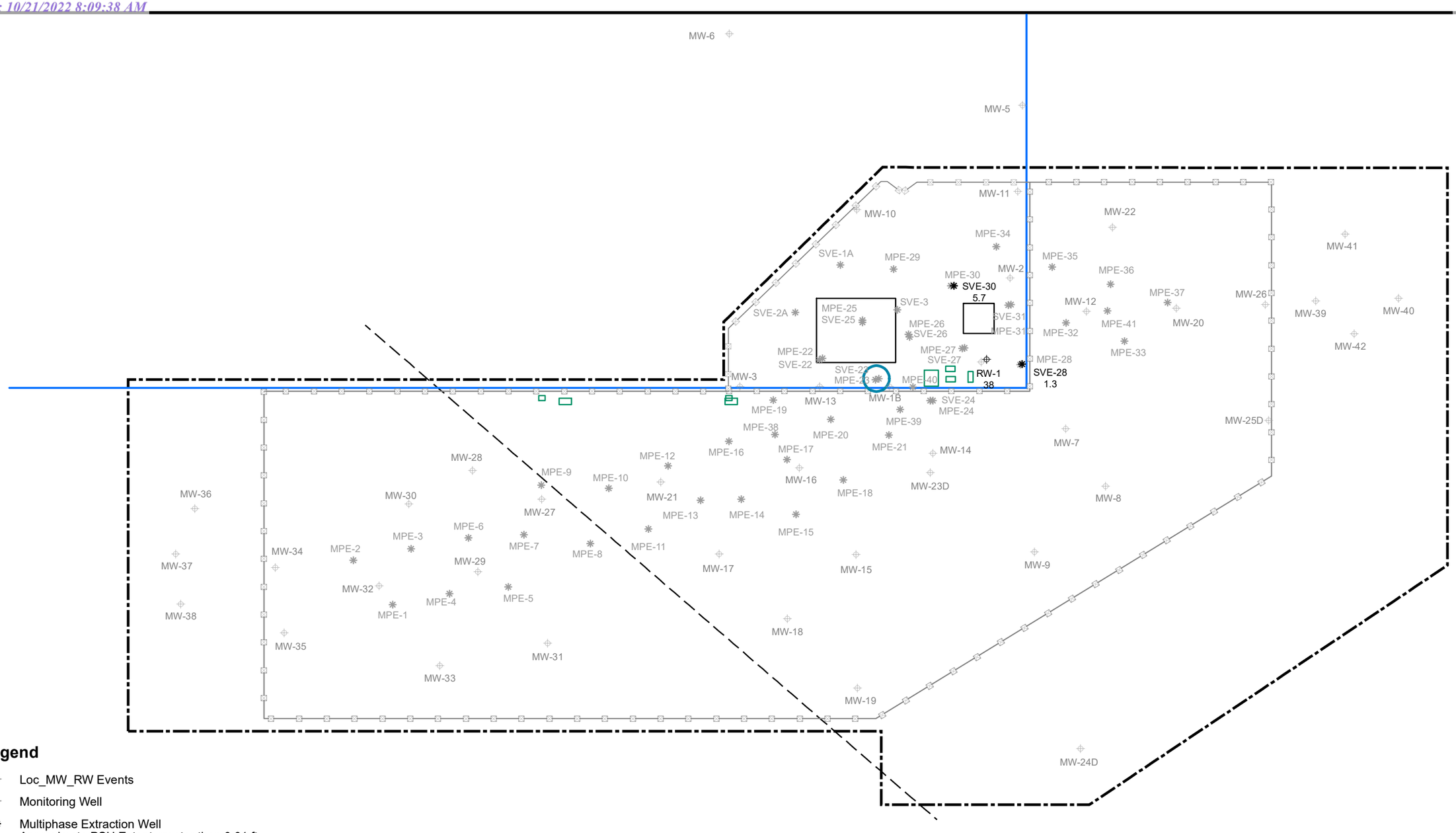
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of PSH in the Upper Aquifer
November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-5b

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-5b_Distribution of PSH in the Upper Aquifer Nov 2020.mxd 3/10/2021 2:06:30 PM swebersnapp



Legend

- Loc_MW_RW Events
- Monitoring Well
- Multiphase Extraction Well
- Approximate PSH Extent greater than 0.01 ft in Perched Aquifer (Nov 2020)
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary
- 5.3 Benzene Concentration in ug/L

0 75 150 300 Feet

Note: Rw-1, SVE-23, SVE-28, SVE-30 are in the Perched Aquifer and required to be sampled per the approved 2020 Sampling Plan.

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

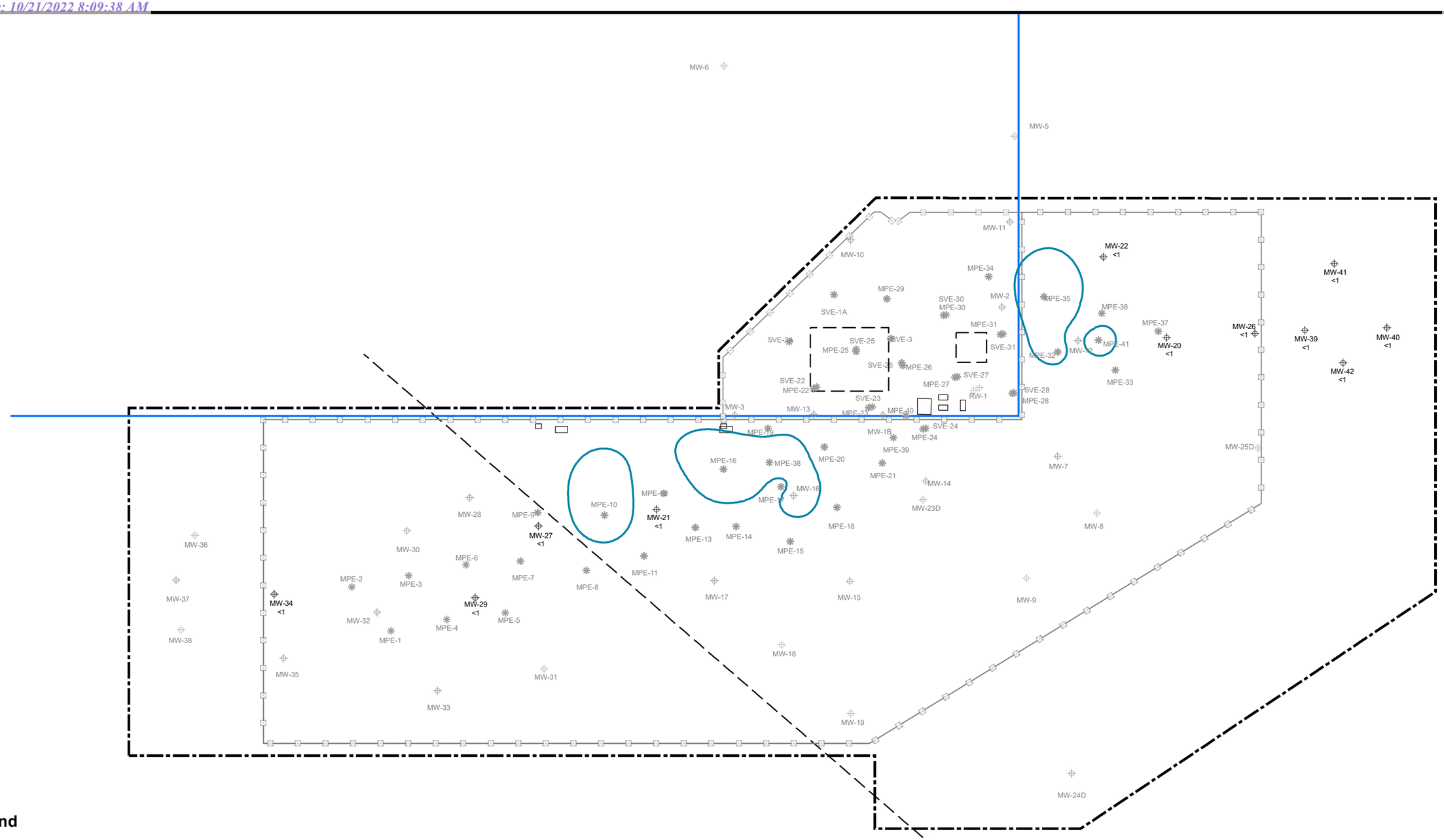
EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved Benzene in the Perched Aquifer November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2020	3-6

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-6_Distribution of Dissolved Benzene in the Perched Aquifer Nov 2020.mxd 3/10/2021 3:14:02 PM swebersnapp

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-7a_Distribution of Dissolved Benzene in the Upper Aquifer May 2020.mxd 3/10/2021 1:57:46 PM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- Approximate PSH Extent greater than 0.01 ft in Upper Aquifer (May 2020)
- Fence Line
- 5.3 Benzene Concentration in ug/L
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

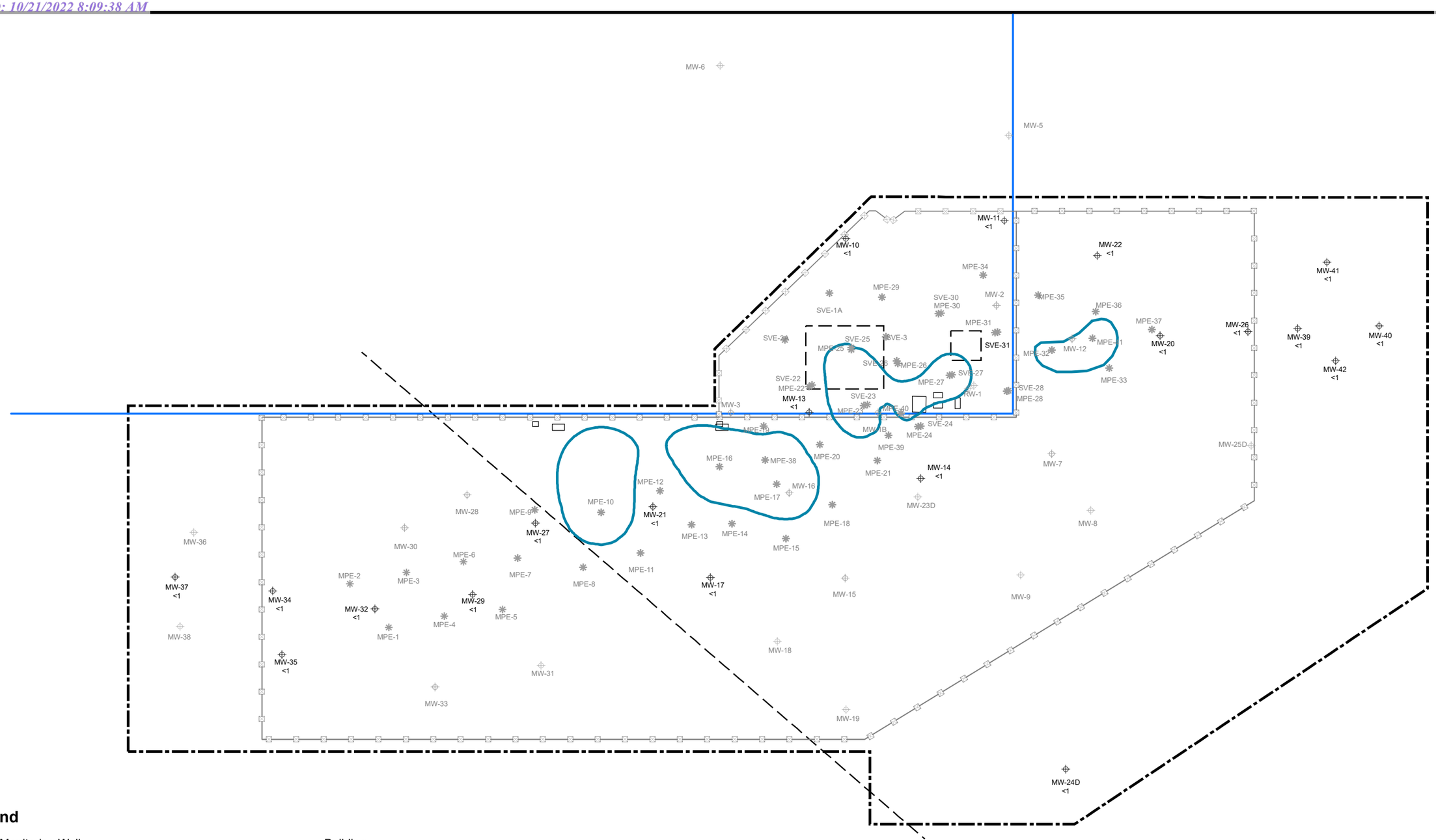
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved Benzene in the Upper Aquifer May 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-7a

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-7b_Distribution of Dissolved Benzene in the Upper Aquifer Nov 2020.mxd 3/10/2021 2:10:33 PM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- Approximate PSH Extent greater than 0.01 ft in Upper Aquifer (Nov 2020)
- Fence Line
- 5.3 Benzene Concentration in ug/L
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

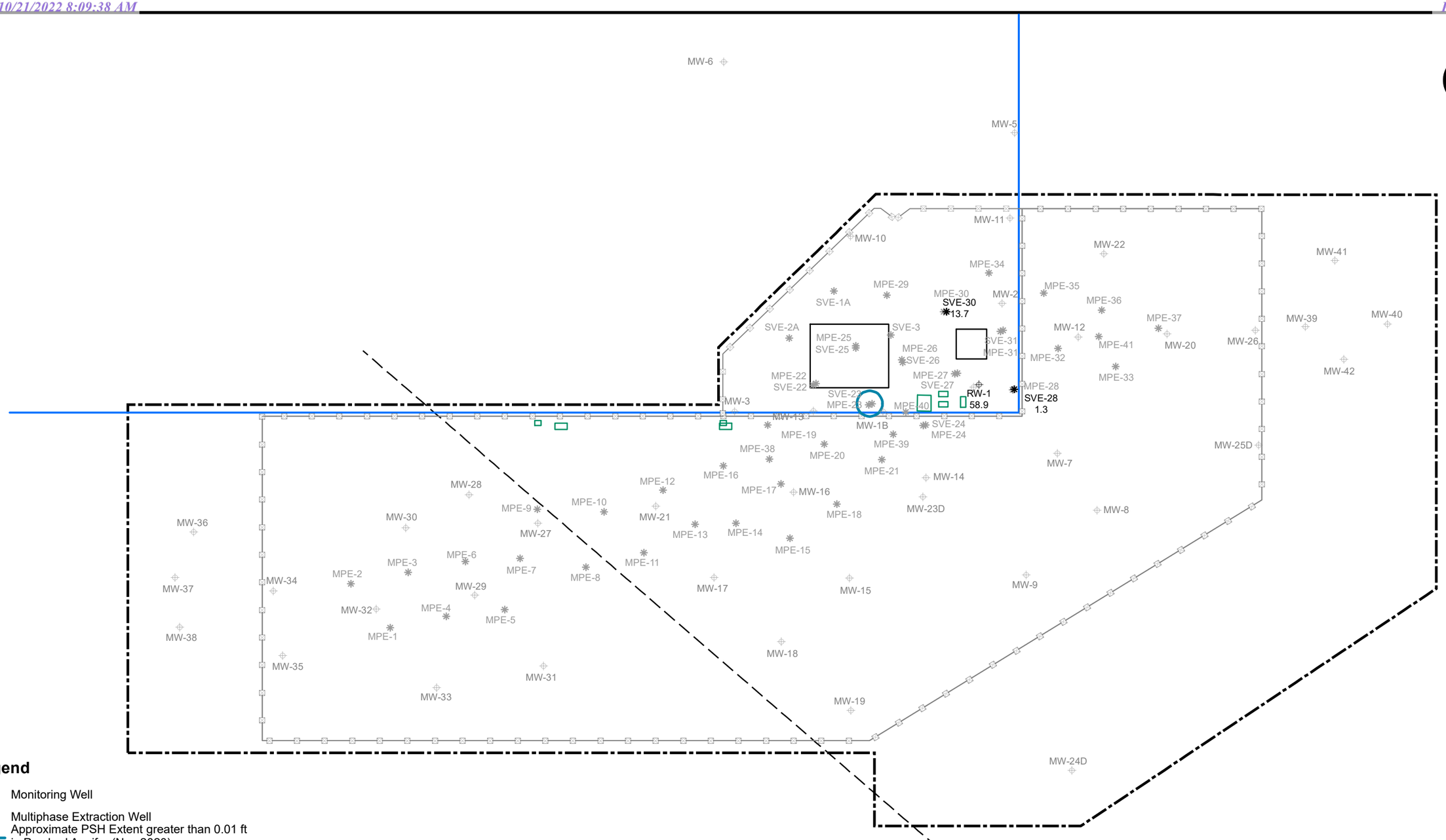
ROSWELL. CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved Benzene in the Upper Aquifer November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-7b



Legend

- Monitoring Well
- Multiphase Extraction Well
- Approximate PSH Extent greater than 0.01 ft in Perched Aquifer (Nov 2020)
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary
- 5.3 BTEX Concentration in ug/L

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

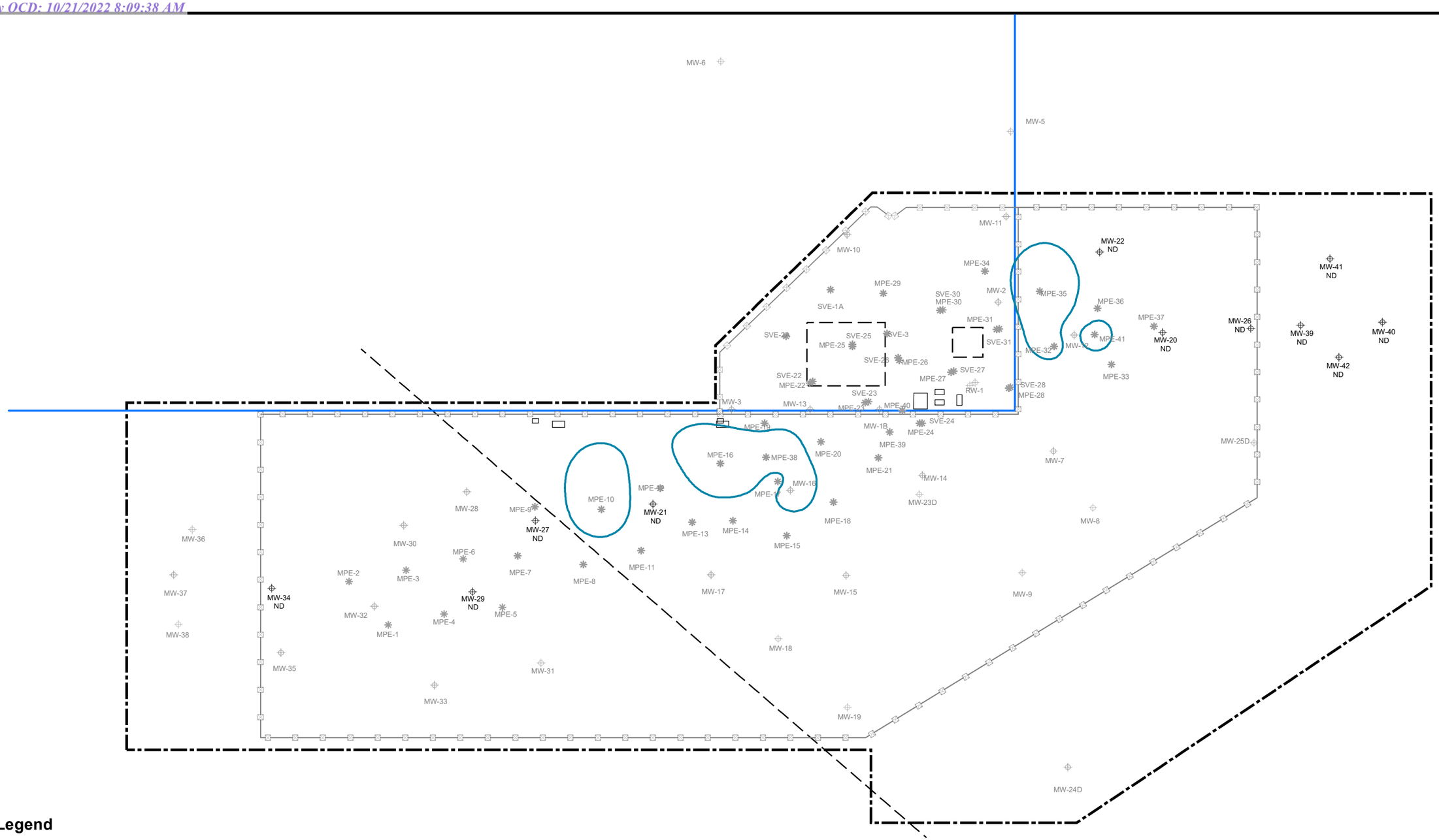
EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved BTEX in the Perched Aquifer November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2020	3-8

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-8_Distribution of Dissolved BTEX in the Perched Aquifer Nov 2020.mxd 3/10/2021 3:15:17 PM swebersnapp

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-9a_Distribution of Dissolved BTEX in the Upper Aquifer May 2020.mxd 3/10/2021 1:59:10 PM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- Approximate PSH Extent greater than 0.01 ft in Upper Aquifer (May 2020)
- Fence Line
- 5.3 BTEX Concentration in ug/L
- ND Non-Detect
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

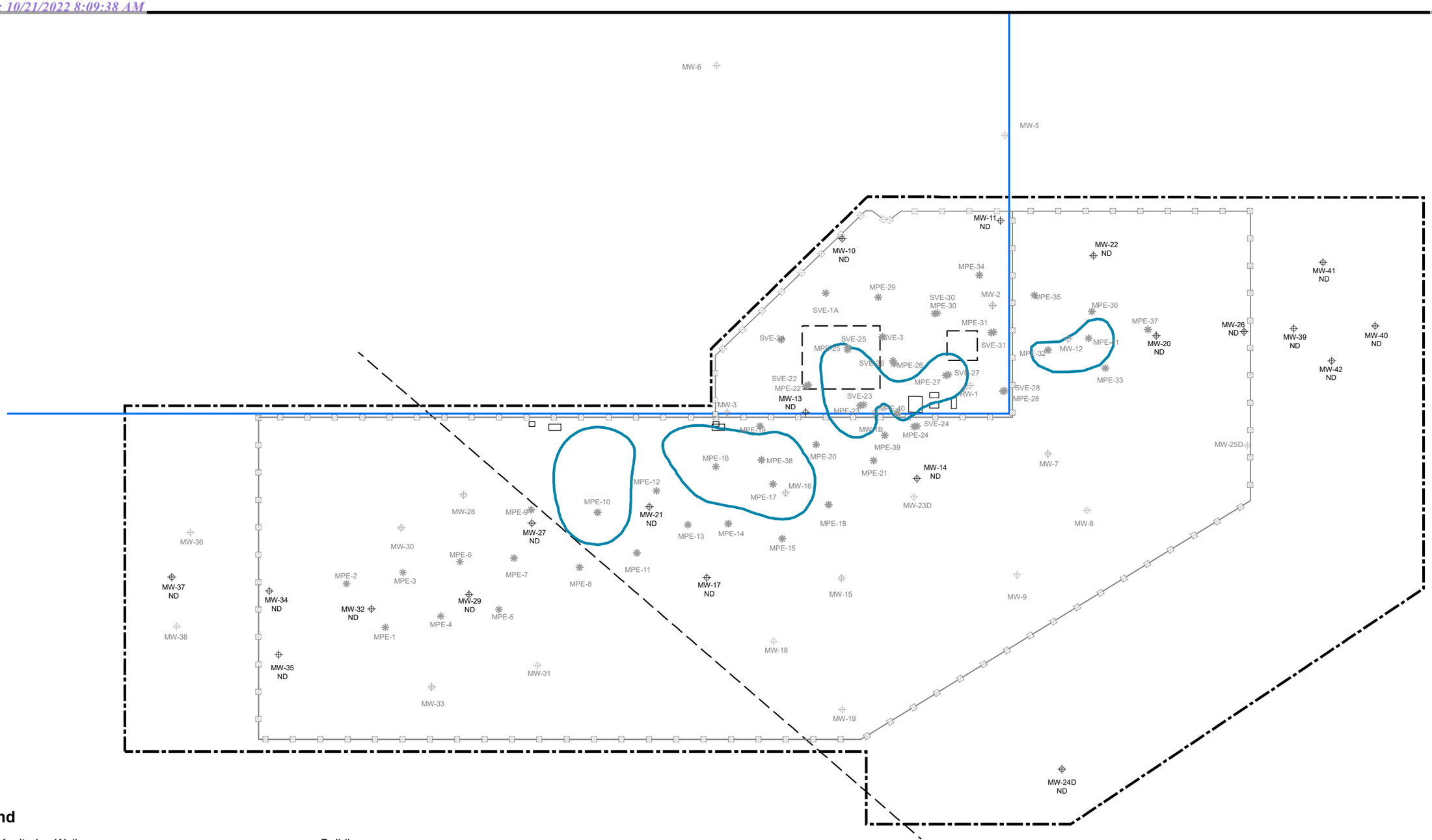
ROSWELL. CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved BTEX in the Upper Aquifer May 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-9a



Legend

- Monitoring Well
- Multiphase Extraction Well
- Approximate PSH Extent greater than 0.01 ft in Upper Aquifer (Nov 2020)
- Fence Line
- 5.3 BTEX Concentration in ug/L
- ND Non-detect
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

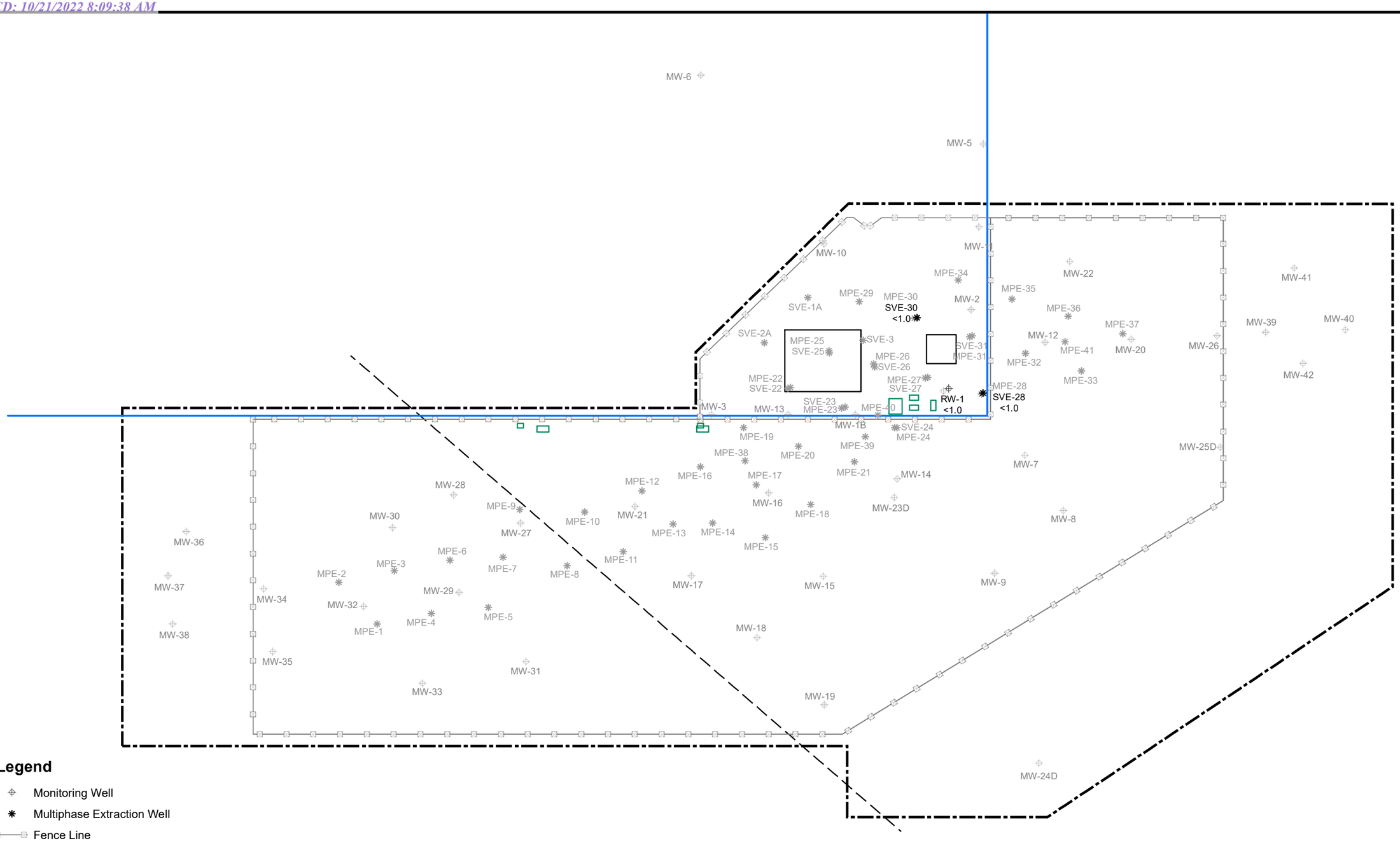
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved BTEX in the Upper Aquifer November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-9b

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-9b_Distribution of Dissolved BTEX in the Upper Aquifer Nov 2020.mxd 3/10/2021 2:12:09 PM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- Fence Line
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary
- 5.3 1,1-DCE Concentration in ug/L

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

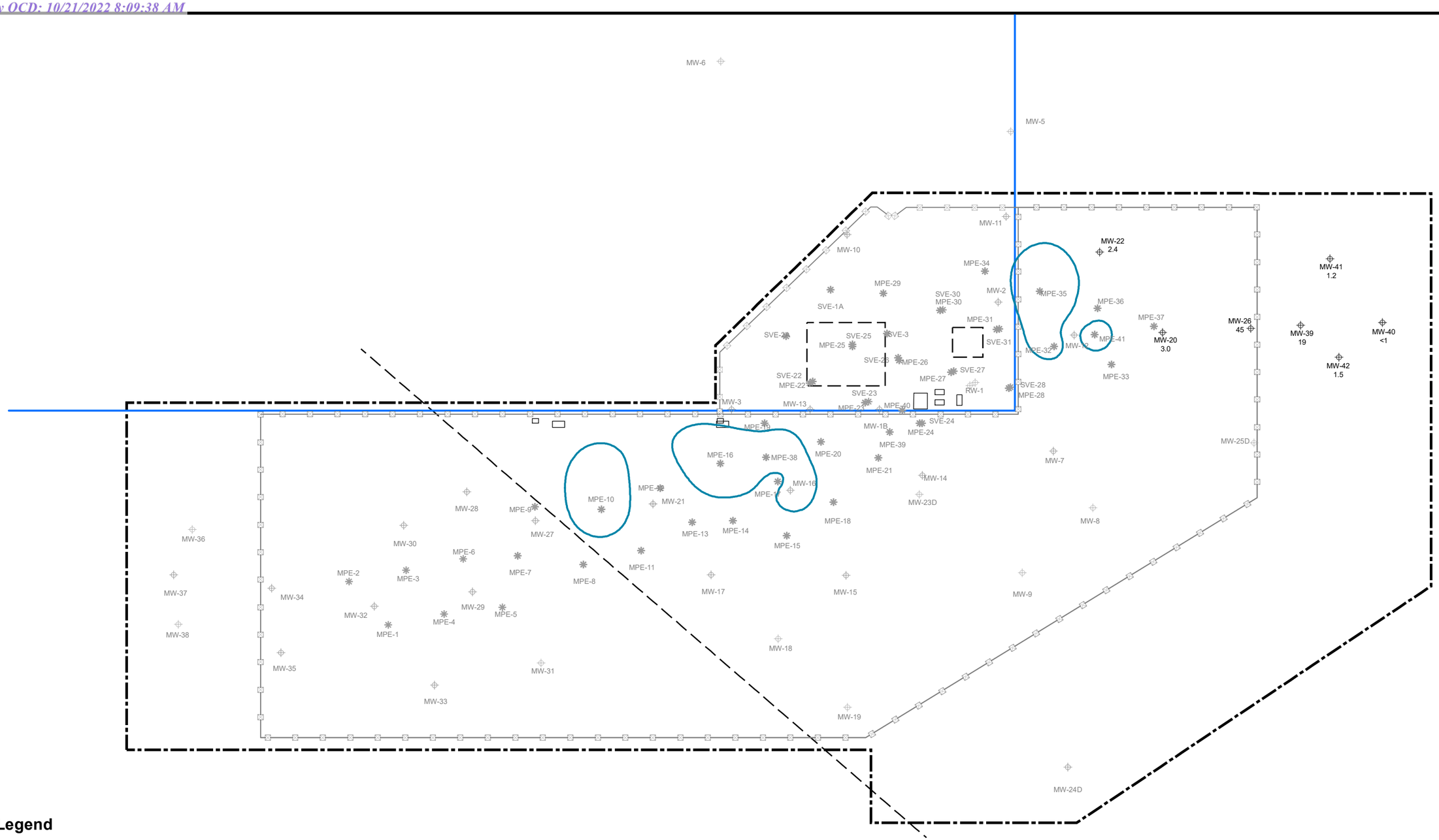
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved 1,1-DCE
in the Perched Aquifer
November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2020	3-10

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-10_Distribution of Dissolved 11DCE in the Perched Aquifer Nov 2020.mxd 2/1/2021 10:35:54 AM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- Approximate PSH Extentgreater than 0.01 ft in Upper Aquifer (May 2020)
- Fence Line
- 5.3 1,1-DCE Concentration in ug/L
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

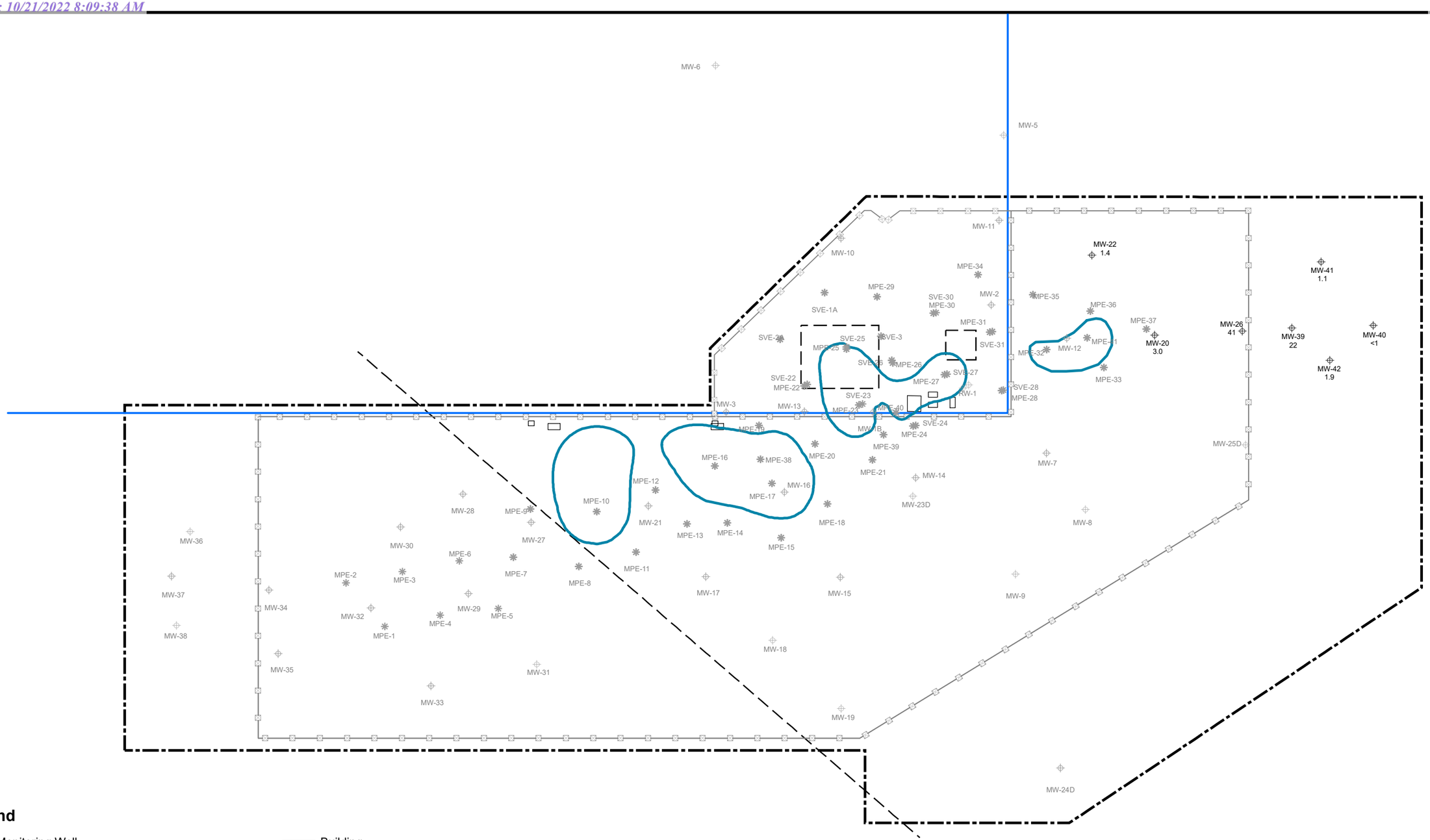
PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved 1,1-DCE in the Upper Aquifer May 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-11a

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-11a_Distribution of Dissolved 11DCE in the Upper Aquifer May 2020.mxd 3/10/2021 2:00:34 PM swebersnapp



Legend

- Monitoring Well
- Multiphase Extraction Well
- Approximate PSH Extent greater than 0.01 ft in Upper Aquifer (Nov 2020)
- Fence Line
- 5.3 1,1-DCE Concentration in ug/L
- Building
- Facility Boundary
- Station Pipeline
- Site Boundary

0 75 150 300 Feet

TRANSWESTERN PIPELINE COMPANY, LLC
TRANSWESTERN COMPRESSOR STATION No.9
(ROSWELL COMPRESSOR STATION)

ROSWELL. CHAVES COUNTY, NEW MEXICO

PROJECT NO. 02.20180005.00

EARTHCON®
EarthCon Consultants, Inc.
1880 West Oak Pkwy, Building 100, Suite 106
Marietta, GA 30062
(770)973-2100

Distribution of Dissolved 1,1-DCE in the Upper Aquifer November 2020

DRAWN	CHECKED	DATE	FIGURE
SWS	SD	JAN 2021	3-11b

File: S:\Premier\Projects\Energy Transfer\Transwestern-Roswell\2020 Report Files\Figures\mxd\Figure 3-11b_Distribution of Dissolved 11DCE in the Upper Aquifer Nov 2020.mxd 3/10/2021 2:11:51 PM swebersnapp

Appendices

Appendix A

Copies of May 2020, September 2020, and November 2020 PSH Evaluation Field Notes

Location Twp Roswell Station 9 Date 05/12/2020

Project / Client GW Monitoring 2020 / Earthcon Consultants, Inc. By: CMB

Environmental & Geological Services Inc. Page 1 of 7

Well #	DNAPL	DTW	T.D.	3 CV gallons	Remarks
MW-37	Ø	60.08'	—	—	2" BP in well
MW-34	Ø	65.01'	75.75	5.15	2" BP in well
MW-35	Ø	62.30'	—	—	2" BP in well
Pulled BP in MW-35 to gauge well					
MW-33	Ø	66.27'	—	—	2" BP in well
~~MW-28~~ 29	Ø	70.55	—	~~29~~ 29	2" BP in well
Pulled BP in MW-~~28~~ 29 to gauge wel					
MW-32	Ø	68.33	—	—	2" BP in well.
MW-29	Ø	70.55	73.90	1.60	2" BP in well
MW-30	Ø	67.87	—	—	2" BP in well
MW-28	Ø	71.47	—	—	2" BP in well
Had to pull pump in MW-28 to gauge MW.					
MPE-7	Ø	68.78'	—	—	4" MPE well
MPE-8	Ø	67.55'	—	—	4" MPE well
MPE-11	Ø	65.05	—	—	4" MPE well
MPE-10	67.05	67.35	—	—	4" MPE well

* NAPL = 67.35 - 67.05 = 0.30' NAPL

0.30' x 0.65 = 0.195 Gallons NAPL *

Location Twp Roswell Station 9 Date 05/13/2020

Project / Client GW Monitoring 2020 / Earthcon Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 2 of 7

Calibrated YSI 556 MPS

Serial # 05F2274AL

Conductivity Standard: Calitech 500mL 1413 µs/cm @ 25°C

Initial: @ 15:05 hr.

1.342 mS/cm @ 30.63°C

Final: 1.413 mS/cm @ 31.02°C

pH 7.0: @ 15:10 hr. Calitech 500mL pH 7.0 @ 25°C

Initial: 7.32 pH @ 29.91°C

Final: 7.00 pH @ 28.95°C

pH: 4.0: @ 15:12 hr. Calitech 500mL pH 4.0 @ 25°C

Initial: 4.76 pH @ 28.98°C

Final: 4.00 pH @ 29.01°C

ORP: @ 15:15 hr. Aurical 500mL ORP 100mV @ 25°C

Initial: 45.4 mV ORP @ 30.16°C

Final: 100.0 mV ORP @ 30.10°C

D.O: 8.30 mg/l ambient air

Initial: 9.74 @ 30.12°C

Final: 8.30 mg/l @ 30.12°C

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Released to Imaging: 11/22/2022 9:07:27 AM

Location TWP Roswell station 9 Date 05/12/2020

Project / Client GW monitoring 2020 / Earthloy Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 3 of 7

Well #	DNAPL	DTW	T.D. ~~3CV gallons~~	3CV gallons	Remarks
MPE-9	Ø	69.06'	—	—	4" MPE well
MW-27	Ø	69.69	76.10'	3.07	2" MW
MW-17	Ø	63.25	—	—	2" MW with BP
Pulled Bladder pump to gauge MW-17					
MW-15	Ø	61.42	—	—	2" MW with BP
MPE-18	Ø	63.65	—	—	4" MPE well
MPE-15	Ø	64.63	—	—	4" MPE well.
MPE-14	Ø	65.75'	—	—	4" MPE w/pump-
MPE-13	Ø	66.15	—	—	4" MPE w/pump
Had to pull 4" MPE pump to gauge well					
MPE-12	Ø	65.81'	—	—	4" MPE well
MW-21	Ø	66.70	75.0	3.984	2" MW with BP
MPE-16	66.72'	67.80'	—	—	4" MPE w/pump
*67.80 - 66.72 = 1.08' NAPL * = 0.702 Gallons					
Had to remove pump to Gauge well *					
MPE-19	Ø	66.48'	—	—	4" MPE well
MPE-38	68.08	69.80	—	—	4" MPE well w/pump
* 69.80' - 68.08' = 1.72' NAPL = 1.118 Gallons *					
MPE-17	Ø	67.30'	—	—	4" MPE well w/pump

Location TWP Roswell Station 9 Date 05/12/2020

Project / Client GW Monitoring 2020 / Earthloy Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 4 of 7

Well #	DNAPL	DTW	T.D.	3CV gallons	Remarks
MW-16	69.08	69.39	—	—	2" MW
* Removed absorbent pad to gauge well * NAPL in well.					
69.39 - 69.08 = 0.31' NAPL					
0.31 x 0.16 = 0.0496 Gallons					
* No Sample * changed out absorbent sock					
MPE-20	Ø	64.50'	—	—	4" MPE well w/pump
MPE-21	Ø	60.10	—	—	4" MPE w/pump
MPE-39	61.24	61.30	—	—	4" MPE with pump
*61.30' - 61.24 = 0.06' NAPL *					
0.06 x 0.65 = 0.039 Gallons NAPL					
MPE-24	Ø	59.60	—	—	4" MPE with pump
SVE-24	Ø	Ø	28.70		2" SVE well
MW-14	Ø	56.25	—	—	2" MW w/BP
MW-7	Ø	64.19	—	—	2" MW
MPE-32	58.58	58.62	—	—	4" MPE well w/pump
58.62 - 58.58 = 0.04' NAPL *					
0.04 x 0.65 = 0.026 Gallons					
MPE-35	58.73	60.40'			4" MPE well
60.40' - 58.73' = 1.67' NAPL					
1.67' x 0.65 = 1.08 Gallons					

Received by OCD: 10/21/2022 8:09:38 AM

Released to Imaging: 11/22/2022 9:07:27 AM

Location TWP Roswell Station 9 Date 05/13/2020

Project / Client GW Monitoring 2020 / EarthCon Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 5 of 7

Well #	D_{NAPL}	D_{TW}	T.D.	3CV gallons	Remarks
MW-22	Ø	58.10'	64.90'	3.264	2" MW
MPE-36	Ø	54.79'	—	—	4" MPE Well
MPE-33	Ø	53.83	—	—	4" MPE Well
MPE-37	Ø	52.47	—	—	4" MPE Well
MW-26	Ø	50.43'	65	6.99	2" MW w/BP
MW-20	Ø	52.70	64.0	5.424	2" MW with BP
MPE-41	57.16	57.26	—	—	4" MPE w/pump

57.26 − 57.16 = 0.10' NAPL

0.10 × 0.65 = 0.065 Gallons NAPL

MW-12	Ø	56.14'	—	—	2" MW
MW-24D	Ø	63.05	—	—	4" MW Deep
MW-42	Ø	54.81	75.95'	10.147	2" MW w/BP
MW-40	Ø	54.25	70.13'	7.62	2" MW w/BP
MW-41	Ø	57.0	70.06'	6.26	2" MW w/BP
MW-39	Ø	49.54	70.11	9.87	2" MW w/BP
SVE-3	Ø	Ø	61.60	—	2" Pilot test SVE
~~MPE-1~~ MPE-26	Ø	65.76	—	—	4" MPE Well

~~SVE~~ * Snake in well Vault *

SVE-26	Ø	Ø	32.9		DRY 2" SVE Well

Location TWP Roswell Station 9 Date 05/13/2020

Project / Client GW Monitoring 2020 EarthCon Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 6 of 7

Well #	D_{NAPL}	D_{TW}	T.D.	3CV gallons	Remarks
MPE-27	63.58	65.55'	—	—	4" MPE w/pump

65.55' − 63.58' = 1.97' NAPL

1.97 × 0.65 = 1.28 Gallons NAPL

SVE-27	Ø	Ø	34.0	—	2" SVE Well
RW-1	Ø	33.68	—	—	4" MW
MPE-28	Ø	57.11'	—	—	4" MPE Well
SVE-28	Ø	29.05	~~34.5~~ 34.80'	—	2" SVE Well
MPE-31	Ø	64.15	—	—	4" MPE Well w/ pump
SVE-31	Ø	Ø	32.0' DRY	—	2" SVE Well
MW-2	Ø	60.25'	—	—	2" MW
MPE-30	Ø	65.90'	—	—	4" MPE Well
SVE-30	Ø	42.55'	43.90'	—	2" SVE Well
MPE-34	Ø	64.91'	—	—	4" MPE Well
MW-11	Ø	65.42'	—	—	2" MW
MW-10	Ø	69.97'	—	—	2" MW
MPE-29	Ø	68.55'	—	—	4" MPE Well
SVE-1A	Ø	Ø	29.90	DRY	2" Pilot Test SVE.

Received by OCD: 10/21/2022 8:09:38 AM

Location Trap Roswell Station 9 Date 05/13/2022

Project / Client GW Monitoring 2020 / Earthlon Consultants, Inc. By: CMB

Environmental & Geology Consulting Inc. Page 7 of 9

Well #	DNAPL	DTW	T.D.	3CV Gallons	Remarks
MPE-25	Ø	68.25	—	—	4" MPE Well
SVE-25	Ø	Ø	32.60'	DRY	8" SVE Well
SVE-2A	Ø	Ø	29.82'	DRY	2" Pilot test SVE Well
MPE-22	Ø	68.23	—	—	4" MPE Well
SVE-22	Ø	Ø	33.10	DRY ~~33.10~~	2" SVE Well
MW-3	Ø	67.60'	—	—	2" MW
MW-13	Ø	64.96'	—	—	2" MW W/BP
MPE-23	Ø	63.81'	—	—	4" MPE W/Pump
SVE-23	33.52'	36.50	—	—	8" SVE Well

* Snake in well vault *

MW-1B	61.73	62.07'	—	—	2" MW

62.07 − 61.73' = 0.34' NAPL

0.34 X 0.16 = 0.0544 Gallons

MPE-40	61.34	61.87	—	—	4" MPE Well 2" pump

61.87' − 61.34 = 0.53' NAPL

0.53 X 0.65 = 0.344 Gallons

SVE-23: 36.50 − 33.52 = 2.98' ?? NAPL

Location _____ Date _____

Project / Client _____

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: MW-39	SAMPLE ID: MW-39		DATE: 05/17/2021

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 55 feet to 75 feet	STATIC DEPTH TO WATER (feet): 49.54	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (70.11 feet – 49.54 = 20.57 feet) X 0.16 gallons/foot = 3.29 gallons

3 WELL VOLUMES = 9.87 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 64.0'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 64.0'	PURGING INITIATED AT: 13:45	PURGING ENDED AT: 14:05	TOTAL VOLUME PURGED (gallons): 10

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
13:45	Initial	Ø	0.50	49.54	7.19	19.30	3.670	7.48	-31.4 / 154	Clear	None
13:49	2	2	0.50	1	7.02	18.96	3.657	7.61	-22.6 / 159.8	"	"
13:53	4	4	0.50	1	7.01	18.94	3.658	7.63	-22.2 / 161.3	"	"
13:57	6	6	0.50	1	7.01	19.07	3.655	7.55	-24.4 / 163.7	"	"
14:01	8	8	0.50	1	7.04	19.06	3.654	7.56	-24.2 / 163.9	"	"
14:05	10	10	0.50	1	7.05	19.04	3.654	7.58	-24.8 / 164.1	clear	None

INSTRUMENTS USED:

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT USED: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / KMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 14:05	SAMPLING ENDED AT: 14:10
PUMP OR TUBING DEPTH IN WELL (feet): 64.0'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-39	3	CG	40mL	HCL	120mL	7.05	8260 VOCS	BP	0.50
MW-39	1	AG	1 liter	None	1 Liter	7.05	1-4 Dioxane	BP	0.50
MW-39 Duplicate	3	CG	40mL	HCL	120mL	7.05	8260 VOCS	BP	0.50
MW-39 Duplicate	1	AG	1 liter	None	1 Liter	7.05	1-4 Dioxane	BP	0.50

REMARKS: Placed purged H_2O in on-site 55 gallon Drum For Evaporation

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: MW-41	SAMPLE ID: ~~MW-40~~ MW-41		DATE: 05/17/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 55 feet to 75 feet	STATIC DEPTH TO WATER (feet): 57.0	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (70.06 feet – 57.0 = 13.06 feet) X 0.16 gallons/foot = 2.089 gallons

3 WELL VOLUMES = 6.26 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58.49	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58.49	PURGING INITIATED AT: 12:47	PURGING ENDED AT: 13:10	TOTAL VOLUME PURGED (gallons): 6.50

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
12:47	Initial	0	0.285	57.0	7.08	19.69	3.584	7.21	-25.8/156.0	clear	None
12:54	2	2	0.285	✓	7.05	19.73	3.565	7.18	-24.3/156.9	"	"
13:01	4	4	0.285	✓	7.05	19.72	3.567	7.21	-23.4/158.9	"	"
13:08	6	6	0.285	✓	7.16	19.70	3.568	7.22	-25.1/158.3	"	"
13:10	6.50	6.5		✓	7.03	19.71	3.566	7.17	-23.8/158.8	"	"

INSTRUMENTS USED: YSI 556 MPS Solinst I.P.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): Clayton M Barnhill	SAMPLING INITIATED AT: 13:10	SAMPLING ENDED AT: 13:13
PUMP OR TUBING DEPTH IN WELL (feet): 58.49	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-41	3	CG	40mL	HCL	120 mL		8260 VOC's	BP	0.285
MW-41	1	AG	1 Liter	None	1 Liter		1-4 Dioxane	BP	0.285

REMARKS: Placed purged H2O in-onsite 55 gallon drum for evaporation

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9 | SITE LOCATION: 6381 N. Main St. Roswell, NM 88201

WELL NO: MW-40 | SAMPLE ID: MW-40 | DATE: 05/17/2020

PURGING DATA

WELL DIAMETER (inches): 2" | TUBING DIAMETER (inches): 1/2" | WELL SCREEN INTERVAL DEPTH: 55 feet to 75 feet | STATIC DEPTH TO WATER (feet): 54.25' | PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (70.13 feet - 54.25 = 15.88 feet) X 0.16 gallons/foot = 2.540 gallons

3 WELL VOLUMES = 7.622 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 62.31 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 62.31 | PURGING INITIATED AT: 11:40 | PURGING ENDED AT: 12:05 | TOTAL VOLUME PURGED (gallons): 7.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV) PH/ORP	COLOR (describe)	ODOR (describe)
11:40	Initial	Ø	0.33	54.25	6.97	18.86	3.637	7.69	-19.8/119.6	Clear	None
11:48	2	2	0.33	—	6.96	18.95	3.637	7.61	-19.8/121.5	"	"
11:54	4	4	0.33	—	6.98	18.94	3.638	7.63	-20.7/132.3	"	"
12:00	6	6	0.33	—	7.00	18.75	3.645	7.16	-22.2/138.1	"	"
12:05	7.75	7.75	0.33	—	7.02	18.78	3.640	7.00	-22.8/141.0	"	"

INSTRUMENTS USED: YSI 556 MPS Solinst I.P.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M. Barnhill / EAB | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 12:05 | SAMPLING ENDED AT: 12:08

PUMP OR TUBING DEPTH IN WELL (feet): 62.31 | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) Filtration Equipment Type: | FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-40	3	CG	40mL	HCL	120mL	7.02	8260 VOCs	BP	0.33
MW-40	1	AG	1 Liter	None	1 Liter	7.02	1-4 Dioxane	BP	0.33

REMARKS: Placed purged H_2O in on-site 55 gallon Drum For Evaporation

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell station 9 | SITE LOCATION: 6381 N Main St. Roswell NM 88201

WELL NO: MW-42 | SAMPLE ID: MW-42 | DATE: 05/17/2020

PURGING DATA

WELL DIAMETER (inches): 2" | TUBING DIAMETER (inches): 1/2" | WELL SCREEN INTERVAL DEPTH 55 feet to 75 feet | STATIC DEPTH TO WATER (feet): 54.81' | PURGE ~~PUMP~~ TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (75.95 feet – 54.81 = 21.14 feet) X 0.16 gallons/foot = 3.38 gallons

3 WELL VOLUMES = 10.147 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 64.03' | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 64.03' | PURGING INITIATED AT: 10:50 | PURGING ENDED AT: 11:17 | TOTAL VOLUME PURGED (gallons): 10.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV) ORP	COLOR (describe)	ODOR (describe)
10:50	Initial	Ø	0.40	54.81	7.21	18.61	3.707	7.83	-31.2/154.3	Turbid	None
10:55	2	2	0.40	/	7.04	18.58	3.682	7.84	-23.0/157.6	clear	None
11:00	4	4	0.40	/	7.02	18.59	3.681	7.83	-22.5/157.8	clear	None
11:05	6	6	0.40	/	7.04	18.76	3.677	7.79	-23.9/158.4	clear	None
11:10	8	8	0.40	/	7.00	18.60	3.669	7.83	-21.4/159.7	"	"
11:17	10.25	10.25	0.40	/	6.99	18.73	3.667	7.74	-20.9/160.0	"	"

INSTRUMENTS USED: YSI 556 MPS Solinist I.P.

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT USED: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / KMB | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 11:17 | SAMPLING ENDED AT: 11:20

PUMP OR TUBING DEPTH IN WELL (feet): 64.03' | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y (N) Filtration Equipment Type: | FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW42	3	CG	40mL	HCL	120mL	6.99	8260 VOC's	BP	0.40
MW42	1	AG	1 Liter	None	1 Liter	6.99	1-4 Dioxane	BP	0.40

REMARKS: Placed purged H2O in onsite 55 Gallon Drum For Evaporation

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell station 9		SITE LOCATION: 6381 N. Main St. Roswell New Mexico 88201	
WELL NO: MW-20	SAMPLE ID: MW-20		DATE: 05/17/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 54 feet to 74 feet	STATIC DEPTH TO WATER (feet): 52.70	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

= (~~74~~ 66.8 feet - 52.7 61.8 = 11.3 feet) X 0.16 gallons/foot = 1.80 gallons

3 WELL VOLUMES = 5.424 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 56.45	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 56.45	PURGING INITIATED AT: 0929	PURGING ENDED AT: 0947	TOTAL VOLUME PURGED (gallons): 5.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
0929	Initial	Ø	0.33	52.70	7.25	18.49	3.670	7.85	-38.5/113.7	Turbid	None
0935	2	2	0.33	/	7.11	18.77	3.704	7.73	-27.4/83.7	Clear	None
0938	3	3	0.33	/	7.10	18.86	3.702	7.68	-27/91.5	Clear	None
0941	4	4	0.32	/	7.09	18.86	3.705	7.67	-26.6/104.7	Clear	None
0945	5	5	0.33	/	7.09	18.85	3.704	7.66	-26.7/106.1	"	"
0947	5.50	5.5	0.33	/	7.09	18.85	3.706	7.68	-26.6/102.2	"	"

INSTRUMENTS USED: YSI 556 MPS

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0948	SAMPLING ENDED AT: 0951
PUMP OR TUBING DEPTH IN WELL (feet): 56.45	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-20	3	CG	40mL	HCL	120 mL	7.09	VOC's 8260	BP	0.33
MW-20	1	AG	1 Liter	None	1 Liter	7.09	1-4 Dioxane	BP	0.33

REMARKS: Placed purged H2O in on-site 55 gallon Drum for Evaporation

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Tuff Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell NM 88201	
WELL NO: MW-26	SAMPLE ID: MW-26	DATE: 05/17/2022

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 50.43'	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (65 feet – 50.43 = 14.57 feet) X 0.16 gallons/foot = 2.331 gallons

3 WELL VOLUMES = 6.99 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 56.63'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 56.63'	PURGING INITIATED AT: 0840	PURGING ENDED AT: 0901	TOTAL VOLUME PURGED (gallons): 7.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
0840	Initial	Ø	0.40	50.43	7.21	18.14	3.597	6.10	-33.1/178.8	Clear	None
0845	2	2	0.40	/	7.02	18.45	3.665	7.92	-22.8/176.0	Clear	None
0848	3	3	0.33	/	7.01	18.49	3.673	7.89	-22.4/170.7	Clear	None
0852	4	4	0.33	/	6.98	18.54	3.667	7.85	-23.7/170.0	Clear	None
0855	5	5	0.33	/	7.03	18.46	3.659	7.91	-22.8/167.6	Clear	None
0858	6	6	0.33	/	6.99	18.45	3.660	7.91	-21.0/167.3	Clear	None
0901	7	7	0.33	/	6.99	18.47	3.657	7.90	-20.5/167.2	Clear	None

INSTRUMENTS USED: YSI 556 MPS Solinist I.P.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0902	SAMPLING ENDED AT: 0905
PUMP OR TUBING DEPTH IN WELL (feet): 56.63'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (gal. per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-26	3	CG	40mL	HCL	120mL	6.99	8260 VOCs	BP	0.33
MW-26	1	AG	1 Liter	None	1 Liter	6.99	1-4 Dioxane	BP	0.33

REMARKS: Placed purge H_2O in-onsite Drum of Evaporation

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell NM 88201		
WELL NO: MW-22	SAMPLE ID: MW-22	DATE: 05/17/2020	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: 50 feet to 65 feet	STATIC DEPTH TO WATER (feet): 58.10	PURGE PUMP TYPE OR BAILER: 1.8"x3.0 Poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (64.90 feet – 58.10 = 6.8 feet) X 0.16 gallons/foot = 1.088 gallons

3 WELL VOLUMES = 3.264 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0740	PURGING ENDED AT: 0755	TOTAL VOLUME PURGED (gallons): 3.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
0740	Initial	Ø	0.25	58.10	6.57	18.83	3.598	7.68	3.1/172.0 mV	Turbid Red Silt	None
0745	1	1	0.25	—	6.79	18.71	3.621	7.77	-0.7/169.3	" "	" "
0749	2	2	0.25	—	6.90	18.73	3.617	7.74	-6.8/168.8	Turbid	None
0753	3	3	0.25	—	6.95	18.71	3.617	7.76	-9.2/168.4	Red Silt	"
0755	3.50	3.5	0.25	—	6.98	18.67	3.607	7.79	-20.5/167.9	" "	" "

INSTRUMENTS USED: YSI 556 MPS Solinist I.P.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0756	SAMPLING ENDED AT: 0800
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-22	3	CG	40mL	HCL	120mL	6.98	8260 VOC'S	B	0.25
Equipment Rinsate @0720 MW-22	3	CG	40mL	HCL	120 mL	—	8260 VOC'S	B	"
MW-22	1	AG	1 Liter	None	1 Liter	6.98	1-4 Dioxane	B	0.25

REMARKS: Placed purge H2O in On-Site 55 Gallon Drum for Evaporation

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St Roswell, NM 88201	
WELL NO: MW-21	SAMPLE ID: MW-21		DATE: 05/15/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 54' feet to 74' feet	STATIC DEPTH TO WATER (feet): 66.70'	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (75 feet – 66.7 = 8.30 feet) X 0.16 gallons/foot = 1.328 gallons

3 WELL VOLUMES = 3.984 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 68.21'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 68.21'	PURGING INITIATED AT: 11:00	PURGING ENDED AT: 11:30	TOTAL VOLUME PURGED (gallons): 36 gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
11:00	Ø	Initial	0.14	66.70	6.80	20.69	3.045	7.26	-18.4/15.0	Clear	None
11:07	1	1	0.10	—	6.91	19.88	3.089	2.23	-163/-9.1	Clear	None
11:17	2	2	0.10	—	6.96	20.06	3.099	2.27	-196/-11.1	Clear	None
11:30	3	3	0.07	—	6.99	20.85	3.135	1.89	-216/-6.9	Clear	None
	4	4									
				X Used Stabilization Criteria							
				For GW Sample X							

INSTRUMENTS USED: YSI 556 MPS Solinist F.P.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill, PE	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 11:31	SAMPLING ENDED AT: 11:35
PUMP OR TUBING DEPTH IN WELL (feet): 68.21'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ___ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-21	3	CG	40mL	HCL	120mL	6.99	BTEX 8260	BP	0.07
Duplicate MW-21	3	CG	40mL	HCL	120mL	6.99	BTEX 8260	BP	0.07

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main Street Roswell, NM 88201		
WELL NO: MW-27	SAMPLE ID: MW-27	DATE: 05/14/2020	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: 55 feet to 75 feet	STATIC DEPTH TO WATER (feet): 69.69	PURGE PUMP TYPE OR BAILER: 1.8"x3.0 Poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (76.10' feet – 69.69 = 6.41' feet) X 0.16 gallons/foot = 1.0256 gallons

3 WELL VOLUMES = 3.07 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 15:15	PURGING ENDED AT: 15:32	TOTAL VOLUME PURGED (gallons): 3.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
15:15	Ø	Initial	0.25	69.69	7.15	21.26	3.662	5.85	-32.2/-74.7	Turbid	Strong hydrocarbon odor
15:20	1	1	0.25	/	7.00	20.15	3.630	6.40	-21.4/-82.7	" "	" "
15:25	2	2	0.25	/	6.97	19.97	3.648	6.51	-19.8/-97.9	Turbid	Strong HC odor
15:30	3	3	0.25	/	7.00	19.90	3.651	6.55	-22.6/-93.1	Turbid	" "
15:32	3.25	3.25	0.25	/	7.02	19.91	3.646	6.55	-22.7/-82.2	"	Strong HC odor

INSTRUMENTS USED: YSI 556 MPS Solinist I.P.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: (B = Bailer); BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill, PT	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1535	SAMPLING ENDED AT: 15:38
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y (N replaced) DUPLICATE: (Y) N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-27	3	CG	40mL	HCL	120 mL	7.02	BTEX 8260	B	0.25
MW-27 Equipment Rinsate 0 15:00	3	CG	40mL	HCL	120 mL	—	BTEX 8260	B	—

REMARKS:

MATERIAL CODES: (AG) = Amber Glass; (CG) = Clear Glass; (PE) = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; (B = Bailer); BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main ST. Roswell, NM 88201	
WELL NO: MW-29	SAMPLE ID: MW-29		DATE: 05/14/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/4"	WELL SCREEN INTERVAL DEPTH: 60 feet to 75 feet	STATIC DEPTH TO WATER (feet): 70.55	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (73.90 feet – 70.55 = 3.35 feet) X 0.16 gallons/foot = 0.536 gallons

3 WELL VOLUMES = 1.60 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 10:25	PURGING ENDED AT: 11:06	TOTAL VOLUME PURGED (gallons): 1.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV) ORP	COLOR (describe)	ODOR (describe)
10:25	Ø	Initial	0.05	70.55	7.62	22.84	3.252	5.28	-565/-177.4	Clear	None
10:35	0.50	0.50	0.05	/	7.30	21.58	3.256	5.79	177.4	ORP = -316/1.6	
10:45	1.0	1.0	0.05	/	7.06	21.65	3.331	5.75	-247/-16.4	Clear	None
10:55	1.50	1.50	0.05	/	7.05	21.63	3.334	5.76	-24.1/-18.2	Clear	None
11:06	1.75	1.75	0.05	/	7.03	21.62	3.338	5.74	-23.4/-21.9	clear	None

INSTRUMENTS USED: YSI 556 MPS Solinist I.P.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Burnhill, PE	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 11:06	SAMPLING ENDED AT: 11:10
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-29	3	CG	40mL	HCL	120 mL	7.03	BTEX 8260	BP	0.05

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: MW-34	SAMPLE ID: MW-34		DATE: 05/14/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 49 feet to 79 feet	STATIC DEPTH TO WATER (feet): 65.01'	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (75.75 feet – 65.01 = 10.74 feet) X 0.16 gallons/foot = 1.718 gallons

3 WELL VOLUMES = 5.15 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 67.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 67.0	PURGING INITIATED AT: 0820	PURGING ENDED AT: 0847	TOTAL VOLUME PURGED (gallons): 5.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
0820	Ø	Initial	0.20	65.01	6.66	19.70	3.393	6.61	0.4/51.8	Turbid	Turbid
0825	1	1	0.20	/	6.97	19.56	3.382	6.97	-20.1/58.2	Clear	None
0830	2	2	0.20	/	6.98	19.58	3.381	6.70	-21.1/53.6	Clear	None
0835	3	3	0.20	/	6.99	19.63	3.380	6.67	-21.6/52.3	Clear	None
0840	4	4	0.20	/	7.01	19.75	3.379	6.61	-22.6/50.5	Clear	None
0847	5.25	5.25	0.20	/	7.03	19.88	3.376	6.57	-23.7/49.3	Clear	

INSTRUMENTS USED: YSI 556 MPS Solinst I.P.

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./FT.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Burnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0847	SAMPLING ENDED AT: 0850
PUMP OR TUBING DEPTH IN WELL (feet): 67.0'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-34	3	CG	40mL	HCL	120 mL	7.03	BTEX 8260	BP	0.20
MW-34 Duplicate	3	CG	40mL	HCL	120 mL	7.03	BTEX 8260	BP	0.20

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: EarthCon Consultants, Inc.
ATTN: James Mulloody
Mailing Address: 1550 West Oak Parkway Bldg. 100, Suite 106 Marietta, GA 30062
Phone #: 770-973-2100 x 2546
email or Fax#: jmulloody@earthcon.com
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. TWP Roswell Station 9
Project #: 02201200037
GW Monitoring 2020
Project Manager: JD Haines, PG
Sampler: CMBarnhill, PE
On Ice: ☒ Yes ☐ No
# of Coolers:
Cooler Temp (including CF): (°C)

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	BTEX 8260	1-4 Dioxane				
05/14/20	0847	H_2O	MW-34	3x40mL VOA's	HCL												X					
05/14/20	0847	H_2O	MW-34 Duplicate	3x40mL VOA's	HCL												X					
05/14/20	11:06	H_2O	MW-29	3x40mL VOA's	HCL												X					
05/14/20	1535	H_2O	MW-27	3x40mL VOA's	HCL												X					
05/14/20	1300	H_2O	MW-27 Equipment Rinsate	3x40mL VOA's	HCL												X					
05/15/20	1135	H_2O	MW-21	3x40mL VOA's	HCL												X					
05/15/20	1135	H_2O	MW-21 Duplicate	3x40mL VOA's	HCL												X					
05/17/20	0756	H_2O	MW-22	3x40mL VOA's 1 Lite AG	HCL / None									X				X				
05/17/20	0720	H_2O	MW-22 Equipment Rinsate	3x40mL VOA's	HCL									X								
05/17/20	0902	H_2O	MW-26	3x40mL VOA's 1 L (AG)	HCL / None									X				X				
05/17/20	0948	H_2O	MW-20	3x40mL VOA's 1 Liter AG	HCL / None									X				X				

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
05/18/20	1530					
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: * As per phone call between Andy Freeman & James Mulloody @ 10% discount cost needs to be applied *

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: Earth Con Consultants, Inc.
ATTN: James Malloy
Mailing Address: 550 West Oak Parkway Bldg 100 Suite 106, Marietta GA 30062
Phone #: 770-903-2100 x2896
email or Fax#: jmalloy@earthcon.com
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: EarthCon Consultants, Inc. TWP Roswell Station 9
Project #: 022072-0037 GW Monitoring 2020
Project Manager: JD Haines, PG
Sampler: CM Barnhill, PG
On Ice: ☑ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1-4 Dioxane
05/17/20	11:17	H_2O	MW-42	3x40mL VOAs 1L (AG)	HCL None									X			X
05/17/20	12:05	H_2O	MW-40	3x40mL VOAs 1 Liter AG	HCL None									X			X
05/17/20	1310	H_2O	MW-41	3x40mL VOAs 1x L AG	HCL None									X			X
05/17/20	1405	H_2O	MW-39	3x40mL VOAs 1x1L AG	HCL None									X			X
05/17/20	1405	H_2O	MW-39 Duplicate	3x40mL VOAs 1x1L AG	HCL None									X			X
			Trip Blank	2x40mL VOAs	HCL None												
			Trip Blank	3x40mL VOAs	HCL None												

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
05/18/20	1530					
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: * As per phone call between James Malloy & Andy Freeman a 10% Discount needs to be applied to Costs *

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

UPS Ground **S.D.P.**

Shipping Document

See instructions on back. Visit UPS.com® or call 1-800-PICK-UPS® (800-742-5877) for additional information and Tariff/Terms and Conditions.

TRACKING NUMBER: K305 800 827 7

1 SHIPMENT FROM

SHIPPER'S UPS ACCOUNT NO.: 1 A F 8 0 2

REFERENCE NUMBER: Earth Con Twp Roswell Station 9

NAME: TELEPHONE: 575-626-1615

COMPANY: CMB ENVIRONMENTAL

STREET ADDRESS: 115 E COLLEGE BLVD 109

CITY AND STATE: ROSWELL NM ZIP CODE: 88201

2 DELIVERY TO

NAME: Sample Receiving TELEPHONE: 505-345-3975

COMPANY: HALL ENVIRONMENTAL DEPT./FLR.

STREET ADDRESS: 4901 HAWKINS NE RM A Residential Delivery ☐

CITY AND STATE: ALBUQUERQUE NM ZIP CODE: 87109

3 WEIGHT | WEIGHT WHOLE LBS. ONLY | DIMENSIONAL WEIGHT If Applicable | LARGE PACKAGE ☐ | **4** SHIPPER RELEASE ☐ | G G

		CHARGES
5 GROUND S.D.P. SHIPPING CHARGES		$
6 OPTIONAL SERVICES	☐ DECLARED VALUE FOR CARRIAGE For declared value over $100, see instructions. $ AMOUNT	$
	C.O.D. shipping may be available at UPS.com	
7 ADDITIONAL HANDLING CHARGE	☐ An Additional Handling Charge applies for certain items. See instructions.	$
TOTAL CHARGES		$

8 METHOD OF PAYMENT: ☐ BILL SHIPPER'S ACCOUNT NUMBER (IN SECTION 1) ☒ BILL RECEIVER ☐ BILL THIRD PARTY ☐ CREDIT CARD (American Express, Diner's Club, MasterCard, Visa) (RECORD ACCOUNT NO. IN SECTION 9) ☐ CHECK

9 RECEIVER'S/THIRD PARTY'S UPS ACCT. NO. OR MAJOR CREDIT CARD NO.: 1AF802 EXPIRATION DATE /

THIRD PARTY'S COMPANY NAME: Hall Environmental Analysis Lab

STREET ADDRESS: 4901 Hawkins NE

CITY AND STATE: Albuquerque NM ZIP CODE: 87109

Shipper authorizes UPS to act as forwarding agent for export control and customs purposes. Shipper certifies that these commodities, technology or software, if exported from the United States, were exported in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

10 SHIPPER'S SIGNATURE X [signature] DATE OF SHIPMENT 05 18 20

All shipments are subject to the terms contained in the UPS Tariff/Terms and Conditions of Service, which are incorporated herein by reference, and are available at UPS.com and local UPS offices.

02129509 1/10 RRD UPS COPY

This form not needed with UPS Internet Shipping at UPS.com

UPS Ground **S.D.P.**

Shipping Document

See instructions on back. Visit UPS.com® or call 1-800-PICK-UPS® (800-742-5877) for additional information and Tariff/Terms and Conditions.

TRACKING NUMBER: K305 800 828 6

1 SHIPMENT FROM

SHIPPER'S UPS ACCOUNT NO.: 1 A F 8 0 2

REFERENCE NUMBER: Earth Con Twp Roswell Station 9

NAME: TELEPHONE: 575-626-1615

COMPANY: CMB ENVIRONMENTAL

STREET ADDRESS: 115 E COLLEGE BLVD 109

CITY AND STATE: ROSWELL NM ZIP CODE: 88201

2 DELIVERY TO

NAME: Sample Receiving TELEPHONE: 505-345-3975

COMPANY: HALL ENVIRONMENTAL DEPT./FLR.

STREET ADDRESS: 4901 HAWKINS NE RM A Residential Delivery ☐

CITY AND STATE: ALBUQUERQUE NM ZIP CODE: 87109

3 WEIGHT | WEIGHT WHOLE LBS. ONLY | DIMENSIONAL WEIGHT If Applicable | LARGE PACKAGE ☐ | **4** SHIPPER RELEASE ☐ | G G

		CHARGES
5 GROUND S.D.P. SHIPPING CHARGES		$
6 OPTIONAL SERVICES	☐ DECLARED VALUE FOR CARRIAGE For declared value over $100, see instructions. $ AMOUNT	$
	C.O.D. shipping may be available at UPS.com	
7 ADDITIONAL HANDLING CHARGE	☐ An Additional Handling Charge applies for certain items. See instructions.	$
TOTAL CHARGES		$

8 METHOD OF PAYMENT: ☐ BILL SHIPPER'S ACCOUNT NUMBER (IN SECTION 1) ☒ BILL RECEIVER ☐ BILL THIRD PARTY ☐ CREDIT CARD (American Express, Diner's Club, MasterCard, Visa) (RECORD ACCOUNT NO. IN SECTION 9) ☐ CHECK

9 RECEIVER'S/THIRD PARTY'S UPS ACCT. NO. OR MAJOR CREDIT CARD NO.: 1AF802 EXPIRATION DATE /

THIRD PARTY'S COMPANY NAME: Hall Environmental Analysis Lab

STREET ADDRESS: 4901 Hawkins NE

CITY AND STATE: Albuquerque NM ZIP CODE: 87109

Shipper authorizes UPS to act as forwarding agent for export control and customs purposes. Shipper certifies that these commodities, technology or software, if exported from the United States, were exported in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

10 SHIPPER'S SIGNATURE X [signature] DATE OF SHIPMENT 05 18 20

All shipments are subject to the terms contained in the UPS Tariff/Terms and Conditions of Service, which are incorporated herein by reference, and are available at UPS.com and local UPS offices.

02129509 1/10 RRD UPS COPY

This form not needed with UPS Internet Shipping at UPS.com

Drop-Off Package Receipt: 1 of 1

THIS IS NOT A SHIPPING LABEL. PLEASE SAVE FOR YOUR RECORDS.

DROP-OFF LOCATION:
The UPS Store #4804
115 E COLLEGE BLVD
ROSWELL NM 88201-5158

DROP-OFF DATE/TIME:
Mon 18 May 2020 4:11 PM

ESTIMATED PICKUP DATE:
UPS Mon 18 May 2020 2pkgs

CUSTOMER:
Not Provided
ID Type: Not Provided

TOTAL PACKAGES: 2pkgs

TRACKING NUMBER	CARRIER & SERVICE	WEIGHT
K3058008286	UPS Ground	53.20000 lb
K3058008277	UPS Ground	50 lb 6.0 oz

THIS RECEIPT LISTS EACH PACKAGE RECEIVED BY THE UPS STORE #4804 AND INDICATES THAT THE INFORMATION FOR EACH PACKAGE HAS BEEN TRANSMITTED TO EACH CARRIER'S DATA SYSTEM. THIS RECEIPT IS NOT CONFIRMATION THAT THE CARRIER HAS PICKED UP THE PACKAGES. TO VERIFY WHEN AND IF A PACKAGE HAS BEEN PICKED UP, ENTER ONE OF THE FOLLOWING WEB ADDRESSES IN YOUR BROWSER AND ENTER THE TRACKING NUMBERS LISTED ABOVE. HTTP://THEUPSSTORE.COM (SELECT TRACKING. THEN ENTER TRACKING #) YOU ACKNOWLEDGE THAT THE SHIPMENT SERVICES PROVIDED BY THE UPS STORE #4804 FOR THE LISTED PACKAGES ARE SUBJECT TO AND GOVERNED BY EACH CARRIER AGREEMENT, IF APPLICABLE, THE RATES AND SERVICE GUIDE FOR EACH CARRIER, AND THE TARIFF IN EFFECT AT THE TIME OF SHIPMENT.

Thank you for visiting The UPS Store

Join our FREE email program

FOR GREAT OFFERS AND RESOURCES VISIT WWW.THEUPSSTORE.COM/EMAIL

Powered by iShip(r)
05/18/2020 03:13 PM Pacific Time

Released to Imaging: 11/22/2022 9:07:27 AM

Location Twp Roswell Station 9 Date 09/08/2020

Project / Client GW Monitoring 2020

Earth Con Consultants, Inc. By:

CMB Environmental & Geological Services, Inc. Page 1 of 4

Calibrated YSI 556 MPS
Serial # 05F2274AL
Conductivity: 1413 µs/cm @ 25°C
500mL Calitech. Expires 12/13/2020
Initial: @ 0900 1.430 m S/cm @ 23.90°C
Final: 1.413 m S/cm @ 23.92°C
pH 7.0: @ 903 Calitech pH 7.0 @ 25°C expires: 11/20/2020
Initial: 6.56 pH @ 23.75°C
Final: 7.00 pH @ 23.75°C
pH 4.0: Calitech 500mL pH 4.0 @ 25°C expires: 06/07/2020 @ 09:05 hr
Initial: 3.78 pH @ 23.82°C
Final: 4.0 pH @ 23.81°C
ORP: @ 0910 Aurical 500mL 100 mVolts ORP vs. Ag/AgCl expires: 09/17/2020
Initial: 128.4 mv ORP Final: 100.0 mv @ 23.42°C
D.O.: @ 0915 8.30 mg/l Ambient air
Initial: 6.30 mg/l @ 24.14°C Final 8.30 mg/l

Location Twp Roswell Station 9 Date 09/08/20

Project / Client GW Monitoring 2020

Earth Con Consultants, Inc. By:

CMB Environmental & Geological Services, Inc. Page 2 of 4

Arrive on-site @ 14:00 09/09/2020
Cloudy 46°F Wind NC 16 mph
Barometric Pressure 30.27" →
Humidity @ 74%. Wind Chill 39°F
Distance From RW-1 To SVE-27 = 41.0'
Distance From RW-1 To SVE-28 = 56.0' (measured with CH Hanson 13" measuring wheel.)

Well #	D_{NAPL}	DTW	T.D.	3CV gallons	Remarks
SVE-28	Ø	28.79'	34.80'	2.88	2" SVE well
SVE-30	Ø	42.77'	44.0'	0.59	2" SVE well
RW-1	Ø	33.43'	41.70'	16.12	4" MW
MW-10	Ø	70.11'	72.5'	1.147	2" MW
MW-11	Ø	65.75	68.60'	1.368	2" MW
MW-17	Ø	63.85	67.40'	1.70	2" MW

Strong odor on probe RW-1
Well gauged with Solinist IP
Serial # 55638
Started Sampling - MW-17
Sample 3X 40mL VOA's / HCL
For BTEX 8021 Left Site @ 17:00

Received by OCD: 10/21/2022 8:09:38 AM

Released to Imaging: 11/22/2022 9:07:27 AM

Location TWP Roswell Station 9 Date 09/10/2020

Project / Client GW Monitoring 2020

EarthCon Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 3 of 4

Arrive on-site 07:30 hr.
Cloudy, rainy. 44°F Wind NE 9mph
Humidity 89% Barometric Pressure 30.37" →.
Started Sampling MW-10 @ 0740
Sampled 3x40mL VOA's / HCl / BTEX 8021 @ 0800
Started Sampling MW-11 @ 0820
Sampled 3x40mL VOA's/HCl/BTEX 8021 @ 0838
Started Sampling SVE-30 @ 0850
Sampled SVE-30 3x40mL/VOA's/HCl For VOC's 8260 & 1 Liter Amber Glass For 1,4 Dioxane EPA 8270C SIM @ 0905
Started Bailing RW-1 @ 10:45
Sampled RW-1 @ 11:15 3x40mL VOA's/HCl For 8260 VOC's Full List. 1 Liter Amber Glass/None / For 1,4-Dioxane EPA 8270 C SIM

Location TWP Roswell Station 9 Date 09/10/2020

Project / Client GW Monitoring 2020

EarthCon Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 4 of 4

SVE-28: Started Sampling @ 11:33 hr. Sampled SVE-28 For 1,4-Dioxane EPA 8270C SIM 1 Liter Amber Glass / None @ 11:48 hr.
All purge H_2O placed in Surge Tank
Materials:
5 x 1.8" x 3.0' poly Bailers.
+ 1 x 3.5" x 3.0' poly Bailers.

Left Site @ 12:00 hr.
Will Ship Samples to HEAL

[signature] PG wy. tx

Received by OCD: 10/21/2022 8:09:38 AM

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main Street, Roswell, NM 88201	
WELL NO: MW-17	SAMPLE ID: MW-17		DATE: 09/09/2020

PURGING DATA

WELL DIAMETER (inches): 2" Sch 40 PVC	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH 53 feet to 68 feet	STATIC DEPTH TO WATER (feet): 63.85	PURGE PUMP TYPE OR BAILER 1.5"x30' Poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (67.40' feet – 63.85 = 3.55 feet) X 0.16 gallons/foot = 0.568 gallons

3 WELL VOLUMES = 1.70 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: 16:00	PURGING ENDED AT: 16:12	TOTAL VOLUME PURGED (gallons): 1.75	

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL PH (mV)	COLOR (describe)	ODOR (describe)
16:00	Initial	Ø	0.25	63.85	6.70	16.55	4.050	2.11	9.1/92.4	Turbid Brown	None
16:04	0.50	0.50	0.25		6.71	17.19	4.039	2.50	7.6/-42.9	Turbid Brown	None
16:07	1.0	1.0	0.25		6.72	17.04	4.023	4.21	7.8/-89.6	Turbid	None
16:10	1.50	1.50	0.25		6.73	17.06	4.044	5.04	6.6/-96.4	Turbid	None
16:12	1.75	1.75	0.25		6.72	17.23	4.029	5.22	7.4/-96.7	Turbid	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / PH/CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 16:15	SAMPLING ENDED AT: 16:17
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-17	3	CG	40mL	HCL	120 mL	6.72	BTEX 8021	B	0.25

REMARKS: Turbid Brown fine Suspended Silt

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TNP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: MW-10	SAMPLE ID: MW-10		DATE: 09/10/2020

PURGING DATA

WELL DIAMETER (inches): 2" SCH 40 PVC	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 57 feet to 72 feet	STATIC DEPTH TO WATER (feet): 70.11	PURGE PUMP TYPE OR BAILER: 1.5" x 3.0' Poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH - STATIC DEPTH TO WATER) X WELL CAPACITY

= (72.5 feet - 70.11 = 2.39 feet) X 0.16 gallons/foot = 0.38 gallons

3 WELL VOLUMES = 1.14 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0745	PURGING ENDED AT: 0753	TOTAL VOLUME PURGED (gallons): 1.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV)	COLOR (describe)	ODOR (describe)
0745	Initial	Ø	0.25	70.11	6.84	16.44	3.668	2.89	-2.3/157.3	TURBID	None
0747	0.50	0.50	0.25		6.95	17.67	3.695	2.87	-9.0/145.6	TURBID	None
0750	0.75	0.75	0.25		6.98	17.94	3.698	3.04	-10.4/140.6	TURBID	None
0753	1.25	1.25	0.25		6.92	17.72	3.662	2.93	-6.5/137.7	TURBID	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Burnhill / PI / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0755	SAMPLING ENDED AT: 0800
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
MW-10	3	CG	40mL	HCL	120 mL	6.92	BTEX 8021	B	0.25

REMARKS: Turbid Red Sand - fine grained

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88201
WELL NO: MW-10	SAMPLE ID: MW-11	DATE: 09/10/2020

PURGING DATA

WELL DIAMETER (inches): 2" Sch 40 PVC	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: 54 feet to 69 feet	STATIC DEPTH TO WATER (feet): 65.75	PURGE PUMP TYPE OR BAILER: 1.5" x 3.0' Poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (68.60 feet – 65.75 = 2.85 feet) X ~~0.45~~ 0.16 gallons/foot = 0.456 gallons

3 WELL VOLUMES = 1.36 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: 0820	PURGING ENDED AT: 0829	TOTAL VOLUME PURGED (gallons): 1.50

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV)	COLOR (describe)	ODOR (describe)
0820	Initial	0	0.25	65.75	6.74	16.86	3.721	3.91	7.6 / 52.4	Turbid	None
0822	0.50	0.50	0.25	/	6.86	16.91	3.872	4.28	2.3 / 40.9	Turbid	None
0825	1.0	1.0	0.25	/	6.89	17.85	3.811	4.13	4.7 / 136.3	Turbid	None
0829	1.50	1.50	0.25	/	6.83	16.74	3.778	3.77	0.6 / 133.8	Turbid	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274 AL

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Cayton M Barnhill / PBC/CMS	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0835	SAMPLING ENDED AT: 0838
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-11	3	CG	40mL	HCL	120mL	6.83	BTEX 8021	B	0.25

REMARKS: Turbid Red Fine gr. Suspended Sand

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twin Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: SVE-30	SAMPLE ID: SVE-30	DATE: 09/10/2020

PURGING DATA

WELL DIAMETER (inches): 2" SCH40 PVC	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: 20 feet to 45 feet	STATIC DEPTH TO WATER (feet): 42.77	PURGE PUMP TYPE OR BAILER: 1.5" x 3.0' Poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH STATIC DEPTH TO WATER) X WELL CAPACITY

= (44.0 feet – ~~4.27~~ 42.77 = 1.23 feet) X 0.16 gallons/foot = 0.196 gallons

3 WELL VOLUMES = 0.59 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0850	PURGING ENDED AT: 0900	TOTAL VOLUME PURGED (gallons): 0.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
0850	Initial	Ø	0.75	42.77							
0900	0.75	0.75	0.6	Dry							

No Parameters Taken
Black H2O with Strong hydrocarbon odor & Sheen.

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AC

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / PG / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0900	SAMPLING ENDED AT: 0905
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
SVE-30	3	CG	40mL	HCL	120mL	N/A	8260 VOC'S	B	0.25
SVE-30	1	AG	1 Liter	None	1 Liter		1,4 Dioxane	B	0.25
							8270C SIM		

REMARKS: Black H2O Strong HC odor & Sheen.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9 | SITE LOCATION: 6351 N Main St. Roswell, NM 88201

WELL NO: RW-1 | SAMPLE ID: RW-1 | DATE: 09/10/2020

PURGING DATA

WELL DIAMETER (inches): 4" Sch 40 PVC | TUBING DIAMETER (inches): N/A | WELL SCREEN INTERVAL DEPTH: 42.5 feet to 49.15 feet | STATIC DEPTH TO WATER (feet): | PURGE PUMP TYPE OR BAILER: 3.5" x 3.0' Poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (41.70 feet – 33.43 = 8.27 feet) X 0.65 gallons/foot = 5.375 gallons

3 WELL VOLUMES = 16.126 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): | FINAL PUMP OR TUBING DEPTH IN WELL (feet): | PURGING INITIATED AT: 10:45 | PURGING ENDED AT: 11:10 | TOTAL VOLUME PURGED (gallons): 16.25

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
10:45	Initial	0	1.0	42.5	6.91	19.44	2.502	~~3.52~~ 2.57	5.7 / 70.4	Clear	Strong H2S
10:52	5	5	1.0		6.61	20.18	2.957	1.80	5.1 / -233.7	Black	Strong
11:00	10	10	1.0		6.51	19.91	3.006	0.56	4.1 / -317.5	Turbid	Strong
11:10	16.25	16.25	1.0		6.49	19.24	3.028	0.09	3.3 / -288.9	Turbid	Strong

Depth to water should be 33.43 ft per conversation with Clayton Barnhill 9/11/2020

INSTRUMENTS USED: YSI 556 MPS Serial # 05F 2274AL

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 11:12 | SAMPLING ENDED AT: 11:15

PUMP OR TUBING DEPTH IN WELL (feet): N/A | TUBING MATERIAL CODE: N/A | FIELD-FILTERED: Y (N) Filtration Equipment Type: | FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced) | DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
RW-1	3	CG	40mL	HCL	120 mL	6.49	8260 VOC's	B	1.0
RW-1	1	AG	1 Liter	None	1 Liter	6.49	1,4-Dioxane	B	1.0
							EPA 8270C SIM		

REMARKS: Black Turbid H2O w/ Strong Hydrocarbon odor & Schecy

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: SVE-28	SAMPLE ID: SVE-28		DATE: 09/10/2020

PURGING DATA

WELL DIAMETER (inches): 2" Sch 40 PVC	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: 25 feet to 35 feet	STATIC DEPTH TO WATER (feet): 28.79	PURGE PUMP TYPE OR BAILER: 1.5" x 3.0' Poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (34.80 feet – 28.79 = 6.01 feet) X 0.16 gallons/foot = 0.9616 gallons

3 WELL VOLUMES = 2.88 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	FINAL PUMP OR TUBING DEPTH IN WELL (feet): N/A	PURGING INITIATED AT: 11:33	PURGING ENDED AT: 11:42	TOTAL VOLUME PURGED (gallons): 3

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
11:33	Initial	Ø	0.25	28.79	6.60	18.67	2.748	1.17	16.4/-220	Turbid	~~None~~ Strong
11:35	1	1	0.25		6.68	18.98	2.743	1.36	15.9/-229.8	Turbid	Strong
11:39	2	2	0.25	/	6.61	19.13	2.743	1.80	14.8/-219.9	Turbid	Strong
11:42	3	3	0.25	/	6.61	19.16	2.741	2.34	14.8/-206.5	Turbid	Strong

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton McBride / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 11:45	SAMPLING ENDED AT: 11:48
PUMP OR TUBING DEPTH IN WELL (feet): N/A	TUBING MATERIAL CODE: N/A	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
SVE-28	1	AG	1 Liter	None	1 Liter	6.61	1,4-Dioxane EPA 8270 C SIM	B	0.25

REMARKS: Turbid Red Fine Suspended Sand - Strong Hc odor

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

Client: EarthCon Consultants, Inc.
ATTN: Sofie Weber Snapp
Mailing Address: 1880 West Oak Parkway, Suite 106
Marietta, Ga 30062
Phone #: 770.973.2100
email or Fax#: SweberSnapp@earthcon.com
QA/QC Package: SDiamond@EarthCon.com
☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. TWP Roswell Station 9
Project #: GW Monitoring 2020 Roswell Station 9
Project Manager: Sofie Weber-Snapp
Sampler: CM Barnhill, PE
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4-dioxane using EPA Method 8270C SIM				
09/09/20	16:17	H_2O	MW-17	3x40mL VOA's	HCL		X														
09/10/20	0800	H_2O	MW-10	3x40mL VOA's	HCL		X														
09/10/20	0838	H_2O	MW-11	3x40mL VOA's	HCL		X														
			SVE-30	3x40mL VOA's	HCL									X			X				
				1x1Liter Amber G	None																
09/10/20	11:15	H_2O	RW-1	3x40mL VOA's	HCL									X			X				
				1Liter Amber G	None																
09/10/20	11:48	H_2O	SVE-28	1x1Liter Amber Glass	None												X				
09/10/20	15:00	H_2O	Field Blank (No Trip Blank in Sample Kit)	3x40mL VOA's	HCL																

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
09/10/2020	15:05	[signature]				
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Any Questions Please Call CMB @ 575.626.1615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

UPS Ground **S.D.P.**

Shipping Document

See instructions on back. Visit UPS.com® or call 1-800-PICK-UPS® (800-742-5877) for additional information and Tariff/Terms and Conditions.

TRACKING NUMBER K305 800 846 4

1 SHIPMENT FROM

SHIPPER'S UPS ACCOUNT NO. 1 A F 8 0 2

REFERENCE NUMBER Earth Con Twp Roswell Station 9

NAME Cm Barnhill, PG TELEPHONE 575-626-1615

COMPANY CMB ENVIRONMENTAL

STREET ADDRESS 115 E COLLEGE BLVD 109

CITY AND STATE ROSWELL NM ZIP CODE 88201

2 DELIVERY TO

NAME Sample Receiving TELEPHONE 505-345-3975

COMPANY HALL ENVIRONMENTAL DEPT./FLR.

STREET ADDRESS 4901 HAWKINS NE RM A Residential Delivery ☐

CITY AND STATE ALBUQUERQUE NM ZIP CODE 87109

3 WEIGHT — Weight Whole Lbs. Only | Dimensional Weight If Applicable | Large Package ☐

4 SHIPPER RELEASE ☐

		CHARGES
5 GROUND S.D.P. SHIPPING CHARGES		$
6 OPTIONAL SERVICES	☐ DECLARED VALUE FOR CARRIAGE For declared value over $100, see instructions. $ AMOUNT	$
	C.O.D. shipping may be available at UPS.com	
7 ADDITIONAL HANDLING CHARGE	☐ An Additional Handling Charge applies for certain items. See instructions.	$
TOTAL CHARGES		$

8 METHOD OF PAYMENT — ☐ Bill Shipper's Account Number (In Section 1) | ☒ Bill Receiver | ☐ Bill Third Party | ☐ Credit Card (Record Account No. In Section 9) | American Express, Diner's Club, MasterCard, Visa | ☐ Check

9 RECEIVER'S/THIRD PARTY'S UPS ACCT. NO. OR MAJOR CREDIT CARD NO. 1 A F 802 EXPIRATION DATE /

THIRD PARTY'S COMPANY NAME Hall Environmental Analysis Lab

STREET ADDRESS 4901 Hawkins NE

CITY AND STATE Albuquerque, NM ZIP CODE 87109

Shipper authorizes UPS to act as forwarding agent for export control and customs purposes. Shipper certifies that these commodities, technology or software, if exported from the United States, were exported in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

10 SHIPPER'S SIGNATURE X [signature] DATE OF SHIPMENT 09 10 2020

All shipments are subject to the terms contained in the UPS Tariff/Terms and Conditions of Service, which are incorporated herein by reference, and are avaliable at UPS.com and local UPS offices.

02129509 1/10 RRD

UPS COPY

This form not needed with UPS Internet Shipping at UPS.com

Released to Imaging: 11/22/2022 9:07:27 AM

Location Twp Roswell Station 9 Date 11/10/2020

Project / Client GW Monitoring 2020 For EarthCon Consultants, Inc. By: CMB Environmental & Geological Services, Inc Page 1 OF 7

Calibrated YSI 556 mps
Serial # 05F2274AL

Conductivity: Calitech 500mL 1413 us/cm @ 25°C Expires: 09/04/2020
Initial: @ 0920 hr. 1.597 mS/cm @ 17.54°C
Final: 1.413 mS/cm @ 17.51°C

pH 7.0: Calitech 500mL pH 7.00 @ 25°C Expires: 11/20/2020
Initial: @ 0925 hr. 10.36 pH @ 18.45°C Final: 7.00 pH @ 18.48°C

pH 4.0: Calitech 500mL pH 4.0 @ 25°C Expires: 07/03/2020
Initial @ 0930 hr.
1.15 pH @ 17.98°C
Final: 4.00 pH @ 17.97°C

ORP: Aurical 500mL ORP 100 mV Expires: 09/17/2020
Initial: @ 0933 hr. 91.1 ORP @ 18.18°C
Final: 100.0 ORP @ 18.01°C

D.O.: 8.30 mg/l in ambient air @ 0935 hr
Initial: 9.26 mg/l Final: 8.27 mg/l @ 18.69°C

Location Twp Roswell Station 9 Date 11/09/2020

Project / Client GW Monitoring 2020 For Earthcon Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 2 OF 7

Well #	D_{Napl}	D_{TW}	T.D.	3CV (Gallons)
MW-37	Ø	60.47'	69.61'	2" BP in well 4.38 Gallons
MW-34	Ø	65.30'	75.75'	2" BP 5.016 Gallons
MW-35	Ø	62.67'	76.80'	2" BP in well 6.78 gallons
MW-30	Ø	67.90'	—	—
MW-32	Ø	68.55	74.20	2" BP in well 2.71 Gallons
MW-33	Ø	66.34	—	—
MW-28	Ø	71.80	—	Pulled 2" BP to Gauge well Pulled pump.
MW-29	Ø	70.95'	74.50	
MPE-7	Ø	68.85'	—	4" MPE well
MPE-8	Ø	67.80'	—	4" MPE well
MPE-9	Ø	69.0'	—	4" MPE Well
MW-27	Ø	69.72'	74.98'	2" MW 2.52 gallons
MPE-11	Ø	65.25'	—	4" MPE well
MPE-10	67.10	68.32	—	4" MPE well

68.32 - 67.10' = 1.22' Napl Thickness.

MW-21	Ø	66.65	75	2" MW w/ Bladder pump 4 Gallons
~~MPE-12~~				
MPE-12	Ø	65.91'	—	4" MPE well
MPE-13	Ø	66.50'	—	4" MPE W

Pulled pump to Gauge W/ Pump Well.

Received by OCD: 10/21/2022 8:09:38 AM

Received by OCD: 10/21/2022 8:09:38 AM

Location Twp Roswell Station 9 Date 11/09/2020

Project / Client GW Monitoring 2020 For Earthcon Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 3 of 7

Well #	DNapl	DTW	T.D.	3 cv gallons	Remarks
MW-17	Ø	63.56'	67.65'	1.96	2" MW 1.96 gallons
MW-15	Ø	61.58'	—	—	2" BP
MPE-18	Ø	64.27'	—	—	4" MPE well
MPE-15	Ø	65.0'	—	—	4" MPE well
MPE-14	Ø	66.0'	—	—	4" MPE well w/pump
* Strong hydrocarbon odor on probe *					
MPE-16	68.54	70.13'	—	—	4" MPE well with pump

pulled pump to gauge MPE-well
68.54' − 70.13' = 1.59' Napl Thickness
½" discharge line broken – will splice –

MPE-19	Ø	67.12'	—	—	4" MPE well
MPE-38	68.55'	70.54	—	—	4" MPE well w/pump.

70.54' − 68.55' = 1.99' Napl Thickness.

MPE-17	70.28'	70.35'	—	—	4" MPE well w/pump

pulled pump to gauge well.
70.35' − 70.28' = 0.07' Napl thickness.

MW-16	67.70'	68.50'	—	—	2" MW

68.50' − 67.70' = 0.80' Napl thickness

Location Twp Roswell Station 9 Date 11/09/2020

Project / Client GW Monitoring 2020 For Earthcon Consultants, Inc. By: CMB Environmental & Geological Services, Inc. Page 4 of 7

Well #	DNapl	DTW	T.D.	3 cv gallons	Remarks
MPE-20	Ø	67.26'	—	—	4" MPE well w/pump
MPE-21	Ø	61.55'	—	—	4" MPE w/pump

had to pull pump to gauge well

MPE-39	Ø	62.15'	—	—	4" MPE w/pump
MPE-24	Ø	60.55'	—	—	4" MPE w/pump
SVE-24	Ø	Ø	28.65'	—	2" SVE well
MW-14	Ø	56.68'	64.5	3.75	2" well w/BP
MW-7	Ø	67.85'	—	—	2" MW
MPE-32	Ø	59.98'	—	—	4" MPE well w/pump
MPE-35	Ø	60.23'	—	—	4" MPE well w/pump
MPE-36	Ø	56.47'	—	—	4" MPE well
MPE-41	57.97	58.62	—	—	4" MPE well w/pump

58.62' − 57.97' = 0.65' Napl Thickness

MPE-33	Ø	55.30	—	—	4" MPE well
MPE-37	Ø	53.77'	—	—	4" MPE well
MW-12	Ø	57.12'	—	—	2" MW
MW-22	Ø	58.78'	65.0'	2.98	2" MW
MW-20	Ø	53.90	64.0'	4.84	2" MW w/BP
MW-26	Ø	51.40'	65.0	6.528	2" MW w/BP

Released to Imaging: 11/22/2022 9:07:27 AM

Released to Imaging: 11/22/2022 9:07:27 AM

Location Twp Roswell Station 9 Date 11/~~09~~/10/2020

Project / Client GW Monitoring 2020 For EarthCon Consultants, Inc. By: CMB

Environmental & Geological Services, Inc.

Page 5 of 7

Well #	DNapl	DTW	T.D.	SVC gallons	Remarks
MPE-28	Ø	58.07'	—	—	4" MPE well
SVE-28	Ø	29.73'	35.0'	2.529	2" SVE well
RW-1	Ø	34.55'	42.10'	14.72	4" MW
~~MPE-31~~	~~Ø~~	~~31.65'~~	—	—	~~4" MPE well w/pump~~
SVE-31	Ø	31.65'	33.25'	0.768	2" SVE well
MPE-31	Ø	65.32'	—	—	4" MPE well w/pump
MW-2	Ø	61.50'	—	—	2" MW
MPE-34	Ø	66.32'	—	—	4" MPE well
MPE-30	Ø	67.50'	—	—	4" MPE well
SVE-30	Ø	43.05'	44.0'	0.45	2" SVE well
~~SVE-27~~ ~~MPE~~	~~Ø~~	—	—	—	~~4" MPE well w/pump~~
SVE-27	Ø	Ø	34.10'	—	2" SVE well
MPE-27	65.12	65.17'	—	—	4" MPE well w/pump
65.17' - 65.12' = 0.05' Napl Thickness					
MPE-26	Ø	66.28	—	—	4" MPE well
SVE-26	Ø	Ø	32.48	—	2" SVE well
SVE-3	Ø	Ø	62.0'	—	2" SVE well
MPE-25	Ø	68.87'	—	—	4" MPE well
SVE-25	~~Ø~~	~~Ø~~	~~32.70'~~	—	2" SVE well
~~SVE-1A~~	~~30.69~~ 32.50	32.69'			~~2" SVE well~~
32.69 - 32.50 = 0.19' Napl Thickness					Black Oil/ Engine Oil.

Location Twp Roswell Station 9 Date 11/10/2020

Project / Client GW Monitoring 2020 For EarthCon Consultants, Inc. By: CMB

Environmental & Geological Services Inc.

Page 6 of 7

Well #	DNapl	DTW	T.D.	SCV gallons	Remarks
SVE-1A	Ø	Ø	29.55	—	2" SVE well
MPE-29	Ø	69.30'	—	—	4" MPE well
MW-11	Ø	66.0'	68.77'	1.329	2" MW
MW-10	Ø	70.49'	72.40'	0.9168	2" MW
SVE-2A	Ø	Ø	29.75'	—	2" SVE pilot well
MW-3	Ø	68.10'	—	—	2" MW
MW-13	Ø	66.28'	71.92'	2.70	2" MW w/BP
Pulled BP To Gauge Well-					
MW-24D	Ø	66.20'	180'	221.91'	4" MW Deep.
MW-42	Ø	57.0'	~~70.13~~ 75.95	~~7.3~~ 9.09	2" MW w/BP
MW-40	Ø	54.90'	70.13	7.31	2" MW w/BP
MW-41	Ø	57.65'	70.06	5.96	2" MW w/BP
MW-39	Ø	50.50'	70.11	9.41	2" MW with BP
MPE-40	64.06'	64.16'	—	—	4" MPE well w/pump
64.16' - 64.06 = 0.10' Napl Thickness					
MW-18	62.75	62.95	—	—	2" MW
62.95 - 62.75 = 0.20 Napl Thickness					
MPE-23	Ø	64.85	—	—	4" MPE w/pump
SVE-23	33.70	34.87'	~~34.87'~~	—	2" SVE well
Black engine O.I. 34.87' - 33.70 = 0.17' ~~Napl~~ Thickness					
0.17' Napl Thickness					

Received by OCD: 10/21/2022 8:09:38 AM

Released to Imaging: 11/22/2022 9:07:27 AM

Location TWP Roswell Station 9 Date 11/10/2020

Project / Client GW Monitoring 2020 For EarthCon Consultants Inc. By: CMB ~~Engineering~~ Environmental & Geological Services, Inc. Page 7 of 7

Well #	Dwmpl	DTW	T.D.	3CV gallons	Remarks
MPE-22	Ø	68.70'	—	—	4" MPE well
SVE-22	Ø	Ø	33.10'	—	2" SVE well

[signature] TX, WY.

Location _____ Date _____

Project / Client _____

Received by OCD: 10/21/2022 8:09:38 AM

Sophie Weber -Snapp
Senior Project Engineer
EarthCon Consultants, Inc.

Monitor Well
GW and PsH Levels
GW Monitoring November 2020
TWP Roswell Station # 9

Clayton M. Barnhill, PG
CMB Environmental Geological Services, Inc.

Well #:	Depth to PsH	Depth to Water	Total Depth	PsH Thickness	3 Casing Volumes	Remarks:
MW-3	N/A	68.10'	70.73'	N/A	N/A	2 " MW
MW-7	N/A	67.85'	69.59'	N/A	N/A	2" MW
MW-10	**N/A**	**70.49'**	**72.40'**	**N/A**	**0.9168 gallons**	**2" MW**
MW-11	**N/A**	**66.0'**	**68.77'**	**N/A**	**1.329 gallons**	**2" MW**
MW-15	N/A	65.0'	N/A	N/A	N/A	2" MW with Bladder Pump
MW-17	**N/A**	**63.56'**	**67.65**	**N/A**	**1.96 gallons**	**2" MW with Bladder Pump**
MW-24D	**N/A**	**66.20'**	**180'**	**N/A**	**221.91 gallons**	**4" Deep MW**
MW-28	N/A	71.80'	N/A	N/A	N/A	2" MW with Bladder Pump
MW-30	N/A	67.90'	N/A	N/A	N/A	2" MW with Bladder Pump
MW-33	N/A	66.34'	N/A	N/A	N/A	2" MW with Bladder Pump
MW-27	**N/A**	**69.72'**	**74.98'**	**N/A**	**2.52 gallons**	**2" MW**
MW-35	**N/A**	**62.67**	**76.80'**	**N/A**	**6.78 gallons**	**2" MW with Bladder Pump**
MW-37	**N/A**	**60.47'**	**69.61'**	**N/A**	**4.38 gallons**	**2" MW with Bladder Pump**
MW-40	**N/A**	**54.90'**	**70.13'**	**N/A**	**7.31 gallons**	**2" MW with Bladder Pump**
MW-42	**N/A**	**57.0'**	**75.95'**	**N/A**	**9.09 gallons**	**2" MW with Bladder Pump**
MW-39	**N/A**	**50.5'**	**70.11'**	**N/A**	**9.41 gallons**	**2" MW with Bladder Pump**
MW-41	**N/A**	**57.65'**	**70.06'**	**N/A**	**5.96 gallons**	**2" MW with Bladder Pump**
MW-34	**N/A**	**65.30'**	**75.75'**	**N/A**	**5.016 gallons**	**2" MW with Bladder Pump**
MW-32	**N/A**	**68.55'**	**74.20'**	**N/A**	**2.71 gallons**	**2" MW with Bladder Pump**
MW-29	**N/A**	**70.95'**	**74.50'**	**N/A**	**1.704 gallons**	**2" MW with Bladder Pump**
MW-21	**N/A**	**66.65'**	**75'**	**N/A**	**4 gallons**	**2" MW with Bladder Pump**
MW-14	**N/A**	**56.68'**	**64.5'**	**N/A**	**3.75 gallons**	**2" MW with Bladder Pump**
MW-26	**N/A**	**51.40'**	**65**	**N/A**	**6.528 gallons**	**2" MW with Bladder Pump**
MW-22	**N/A**	**58.78'**	**65.0'**	**N/A**	**2.98 gallons**	**2" MW**
MW-20	**N/A**	**53.90'**	**64**	**N/A**	**4.84 gallons**	**2" MW with Bladder Pump**
MW-13	**N/A**	**66.28'**	**71.92'**	**N/A**	**2.7 gallons**	**2" MW with Bladder Pump**
MW-2	N/A	61.5'	N/A	N/A	N/A	2" MW
RW-1	**N/A**	**34.55'**	**42.10'**	**N/A**	**14.72 gallons**	**4" MW**
MW-16	**67.70'**	**68.50'**	**71.40'**	**0.80'**	**N/A**	**2" MW with PsH**
MW-12	N/A	57.12'	62.70'	N/A	N/A	2" MW
MW-1B	**62.75'**	**62.95'**	**62.95'**	**0.20'**	**N/A**	**2" MW with PsH**

Solinist Interface Probe: Model No. 122 Serial No. 222719

Sophie Weber -Snapp
Senior Project Engineer
EarthCon Consultants, Inc.

MPE Wells
GW and PsH Levels
GW Monitoring November 2020
TWP Roswell Station # 9

Clayton M. Barnhill, PG
CMB Environmental Geological Services, Inc.

Well #:	Depth to PsH	Depth to Water	Total Depth	PsH Thickness	3 Casing Volumes	Remarks:
MPE-7	N/A	68.85'	N/A			4" MPE Well
MPE-8	N/A	67.80'	N/A			4" MPE Well
MPE-9	N/A	69.0'	N/A			4" MPE Well
MPE-10	**67.10'**	**68.32'**	**N/A**	**1.22'**		**4" MPE Well**
MPE-11	N/A	65.25'	N/A			4" MPE Well
MPE-12	N/A	65.91'	N/A			4" MPE Well
MPE-13	N/A	66.50'	N/A			4" MPE Well
MPE-14	N/A	66.0'	N/A			4 " MPE Well w/ pump
MPE-15	N/A	65.0'	N/A			4" MPE Well
MPE-16	**68.54'**	**70.13'**	**N/A**	**1.59'**		**4 " MPE Well w/ pump**
MPE-17	**70.28'**	**70.35'**	**N/A**	**0.07'**		**4 " MPE Well w/ pump**
MPE-18	N/A	64.27'	N/A			4" MPE Well
MPE-19	N/A	67.12'	N/A			4" MPE Well
MPE-20	N/A	67.26'	N/A			4 " MPE Well w/ pump
MPE-21	N/A	61.55'	N/A			4 " MPE Well w/ pump
MPE-22	N/A	68.70'	N/A			4" MPE Well
MPE-23	N/A	64.85'	N/A			4 " MPE Well w/ pump
MPE-24	N/A	60.55'	N/A			4 " MPE Well w/ pump
MPE-25	N/A	68.87'	N/A			4" MPE Well
MPE-26	N/A	66.28'	N/A			4" MPE Well
MPE-27	**65.12'**	**65.17'**	**N/A**	**0.05'**		**4 " MPE Well w/ pump**
MPE-28	N/A	58.07'	N/A			4" MPE Well
MPE-29	N/A	69.30'	N/A			4" MPE Well
MPE-30	N/A	67.50'	N/A			4" MPE Well
MPE-31	N/A	65.32'	N/A			4 " MPE Well w/ pump
MPE-32	N/A	59.98'	N/A			4 " MPE Well w/ pump
MPE-33	N/A	55.30'	N/A			4" MPE Well
MPE-34	N/A	66.32'	N/A			4" MPE Well
MPE-35	N/A	60.23'	N/A			4 " MPE Well w/ pump
MPE-36	N/A	56.47'	N/A			4" MPE Well
MPE-37	N/A	53.77'	N/A			4" MPE Well
MPE-38	**68.55'**	**70.54'**	**N/A**	**1.99'**		**4 " MPE Well w/ pump**
MPE-39	N/A	62.15'	N/A			4 " MPE Well w/ pump
MPE-40	**64.06'**	**64.16'**	**N/A**	**0.10'**		**4 " MPE Well w/ pump**
MPE-41	**57.97'**	**58.62'**	**N/A**	**0.65'**		**4 " MPE Well w/ pump**

Solinist Interface Probe: Model No. 122 Serial No. 222719

Sophie Weber -Snapp
Senior Project Engineer
EarthCon Consultants, Inc.

SVE Wells
GW and PsH Levels
GW Monitoring November 2020
TWP Roswell Station # 9

Clayton M. Barnhill, PG
CMB Environmental Geological Services, Inc.

Well #:	Depth to PsH	Depth to Water	Total Depth	PsH Thickness	3 Casing Volumes	Remarks:
SVE-1A	N/A	N/A	29.55'		Dry Well	2" SVE Well
SVE-2A	N/A	N/A	29.75'		Dry Well	2" SVE Well
SVE-3	N/A	N/A	62.0'		Dry Well	2" SVE Well
SVE-22	N/A	N/A	33.10'		Dry Well	2" SVE Well
SVE-23	**33.70'**	**34.87**	**34.87**	**0.19'**		**2" SVE Well**
SVE-24	N/A	N/A	28.65'		Dry Well	2" SVE Well
SVE-25	**32.50'**	**32.69'**	**32.69'**	**0.19'**		**2" SVE Well**
SVE-26	N/A	N/A	32.48'		Dry Well	2" SVE Well
SVE-27	N/A	N/A	34.10'		Dry Well	2" SVE Well
SVE-28	**N/A**	**29.73'**	**35.0'**		**2.529 gallons**	**2" SVE Well**
SVE-30	**N/A**	**43.05'**	**44.0'**		**0.45 gallons**	**2" SVE Well**
SVE-31	**N/A**	**31.65'**	**33.25'**		**0.768 gallons**	**2" SVE Well**

Solinist Interface Probe: Model No. 122 Serial No. 222719

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell NM 88201
WELL NO: MW-10	SAMPLE ID: MW-10
DATE: 11/23/2020	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 57 feet to 72 feet	STATIC DEPTH TO WATER (feet): 70.49	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (72.40 feet – 70.49 = 1.91 feet) X 0.16 gallons/foot = 0.30 gallons

3 WELL VOLUMES = 0.9168 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0812	PURGING ENDED AT: 0815	TOTAL VOLUME PURGED (gallons): 1.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV)	COLOR (describe)	ODOR (describe)
0812	Initial	Ø	0.25	70.49	6.67	17.11	3.507	1.65	206.1/31.4	Turbid	None
0813	0.50	0.50	0.25		6.62	17.92	3.517	1.38	206.2/30.9	Turbid	None
0814	0.75	0.75	0.25		6.77	18.03	3.507	1.48	206.9/30.5	Turbid	None
0815	1.0	1.0	0.25		6.73	18.03	3.505	1.37	209.0/30.2	Turbid	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274 AL Solinist IP Serial # 822719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0815	SAMPLING ENDED AT: 0820
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N Replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-10	3	CG	40mL	HCL	120mL	6.73	BTex 8260	B	0.25

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9		SITE LOCATION: 6381 N. Main Street Roswell NM 8820	
WELL NO: MW-16	SAMPLE ID: MW-16		DATE: 11/09/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: 61.4 feet to 71.4 feet	STATIC DEPTH TO WATER (feet): 68.50	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (71.46 feet – DNAPL 67.70' DTW 68.50 (feet) X 0.16 gallons/foot = 0.80 gallons NAPL

3 WELL VOLUMES = N/A gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
				68.50							
		DNAPL = 67.70' FROM TOC									
		DTW = 68.50 FROM TOC									
		0.80 NAPL THICKNESS – DID									
				NOT Sample							

INSTRUMENTS USED: N/A

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill/CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: N/A	SAMPLING ENDED AT: N/A
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
				N					
					A				

REMARKS: NAPL In well DID NOT Sample

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: MW-11	SAMPLE ID: MW-11		DATE: 11/23/2022

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: 54 feet to 69 feet	STATIC DEPTH TO WATER (feet): 66.0	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (68.77 feet – 66.0 = 2.77 feet) X ~~0.44~~ 0.16 gallons/foot = 0.4432 gallons

3 WELL VOLUMES = 1.329 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0745	PURGING ENDED AT: 0750	TOTAL VOLUME PURGED (gallons): 1.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL PH(mV)	COLOR (describe)	ODOR (describe)
0745	Initial	Ø	0.25	66.0	6.20	16.89	3.542	2.91	196.2/46	Turbid	None
0746	0.50	0.50	0.25	/	6.02	17.29	3.614	2.16	194.8/33.9	Turbid	None
0748	1.0	1.0	0.25	/	6.14	17.13	3.621	3.75	192.0/29.0	Turbid	None
0750	1.50	1.50	0.25	/	6.17	17.65	3.632	3.03	192.1/28.9	Turbid	None

INSTRUMENTS USED: YSI 556 MPS Serial# 05F2274AL Solinist I.P. Serial# 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0750	SAMPLING ENDED AT: 0755
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-11	3	CG	40mL	HCL	120 mL	6.17	8260 8260	B	0.25
MW-11 Duplicate	3	CG	40mL	HCL	120mL	6.17	8260 8260	B	0.25

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. Temperature: ≤ 10% °C Specific Conductance: ≤ 10% µS/cm Dissolved Oxygen: all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88201
WELL NO: MW-13	SAMPLE ID: MW-13
DATE: 11/23/2020	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2	WELL SCREEN INTERVAL DEPTH: 57 feet to 72 feet	STATIC DEPTH TO WATER (feet): 66.28	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (71.92 feet – 66.28 = 5.64 feet) X 0.16 gallons/foot = 0.902 gallons

3 WELL VOLUMES = 2.70 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0835	PURGING ENDED AT: 0840	TOTAL VOLUME PURGED (gallons): 2.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV) ORP	COLOR (describe)	ODOR (describe)
0835	Initial	Ø	0.25	66.28	6.75	18.64	3663	0.58	233.6/-60.0	Clear	None
0837	1	1	0.25	/	6.66	20.02	3590	0.57	234.4/-92.3	Turbid	None
0838	2	2	0.25	/	6.52	20.12	3600	0.65	234.0/-108.1	"	"
0840	2.75	2.75	0.25	/	6.37	19.71	3618	0.63	220.5/-111.1	"	"

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solinst IP. Serial # 222713

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 0840	SAMPLING ENDED AT: 0845

PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-13	3	CG	40mL	HCL	120mL	6.37	BTEX 8260	B	0.25

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: MW-14	SAMPLE ID: MW-14		DATE: 11/19/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 49.5 feet to 64.5 feet	STATIC DEPTH TO WATER (feet): 56.68'	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (64.5 feet – 56.68' = 7.82 feet) X 0.16 gallons/foot = 1.25 gallons

3 WELL VOLUMES = 3.75 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 57.85	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 57.85	PURGING INITIATED AT: 12:55	PURGING ENDED AT: 13:15	TOTAL VOLUME PURGED (gallons): 3.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
12:55	Initial	0	0.20	56.68	6.83	20.28	3.530	3.77	64.3/-246.8	Clear	None
13:00	1	1	0.20		6.26	19.73	3.532	1.09	74.5/-233.6	Clear	None
13:05	2	2	0.20		6.24	19.72	3.538	1.99	75.6/-210.7	Clear	None
13:10	3	3	0.20		6.87	19.81	3.547	2.22	69.5/-189.1	Clear	None
13:15	3.75	3.75	0.20		6.92	19.84	3.548	2.19	69.1/-184.2	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solinst IP Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill KHB	SAMPLER(S) SIGNATURE(S): Clayton M Barnhill PE	SAMPLING INITIATED AT: 13:15	SAMPLING ENDED AT: 13:17
PUMP OR TUBING DEPTH IN WELL (feet): 57.85	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-14	3	CG	40mL	HCL	120 mL	6.92	BTEX 8260	BP	0.20

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twin Roswell Station 9	SITE LOCATION: 6381 N.
WELL NO: MW-17	SAMPLE ID: MW-17 / DATE: 11/19/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): N/A	WELL SCREEN INTERVAL DEPTH: 53 feet to 68 feet	STATIC DEPTH TO WATER (feet): 63.56	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (67.65 feet – 63.56 = 4.09 feet) X 0.16 gallons/foot = 0.65 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
3EV = 1.96 Gallons = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 11:00	PURGING ENDED AT: 11:07	TOTAL VOLUME PURGED (gallons): 2.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	~~TURBIDITY (NTUs)~~ PPM/%sat	COLOR (describe)	ODOR (describe)
11:00	Initial	0	0.25	63.56	6.27	19.84	3.845	2.38	177.9/6.1	Clear	None
11:01	0.50	0.50	0.25		6.95	19.41	3.826	2.82	179.4/4.5	Turbid	None
11:03	1.0	1.0	0.25		6.76	19.06	3.829	3.40	182.5/4.2	Turbid	None
11:05	1.50	1.50	0.25		6.27	18.72	3.831	4.22	184.4/6.2	"	"
11:07	2.0	2.0	0.25		6.18	18.86	3.833	4.60	185.1/3.9	"	"

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016
PURGING EQUIPMENT CODES: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 11:10	SAMPLING ENDED AT: 11:12
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-17	3	CG	40mL	HCL	120mL	6.18	BTEX 8260	B	1.25

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)
SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units Temperature: ± 0.2 °C Specific Conductance: ± 5% Dissolved Oxygen: all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) Turbidity: all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: Tw 7 Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: MW-20	SAMPLE ID: MW-20		DATE: 11/20/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 54 feet to 64.8 feet	STATIC DEPTH TO WATER (feet): 53.90	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (~~65.64~~ feet – 53.90 = 10.1 feet) X ~~1.616~~ 0.16 gallons/foot = 1.616 gallons

3 WELL VOLUMES = 4.84 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 56.45	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 56.45	PURGING INITIATED AT: 1408	PURGING ENDED AT: 1430	TOTAL VOLUME PURGED (gallons): 5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV)	COLOR (describe)	ODOR (describe)
14:08	Initial	Ø	0.25	53.90	6.76	18.44	3.583	6.43	22.7/21.6	Clear	None
14:12	1	1	0.25		6.81	18.19	3.589	6.34	23.3/27.3	Clear	None
14:16	2	2	0.25		6.73	18.17	3.586	6.13	23.7/29.1	Clear	None
14:20	3	3	0.25		6.80	18.19	3.585	6.09	23.3/31.5	Clear	None
14:25	4	4	0.25		6.78	18.19	3.585	6.10	22.7/31.9	Clear	None
14:30	5	5	0.25		6.82	18.20	3.584	6.09	22.3/32.0	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solinist IP Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88

TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1430	SAMPLING ENDED AT: 1435
PUMP OR TUBING DEPTH IN WELL (feet): 56.45'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y N	TUBING Y N (replaced)	DUPLICATE: Y N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-20	3	CG	40mL	HCL	120 mL	6.82	VOCS8260B	BP	0.25
MW-20	1	AG	1 Liter	None	1 Liter	6.82	1,4 Dioxane 8270C SIM	BP	0.25

REMARKS: Placed Purged H_2O in on-site Drum

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88201
WELL NO: MW-21	SAMPLE ID: MW-21
DATE: 11/18/2022	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 54 feet to 74' feet	STATIC DEPTH TO WATER (feet): 66.65'	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (75 feet – 66.65' = 8.35 feet) X 0.16 gallons/foot = 1.33 gallons

3 WELL VOLUMES = 4.00 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 68.21	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 68.21	PURGING INITIATED AT: 14:05	PURGING ENDED AT: 1425	TOTAL VOLUME PURGED (gallons): 4.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
14:05	Initial	Ø	0.20	66.65	6.71	20.65	3.000	8.85	82.4/-165.1	Clear	None
14:10	1	1	0.20	/	6.76	19.50	2.987	3.18	75.7/-152.6	Clear	None
14:15	2	2	0.20	/	6.72	19.53	2.979	4.54	78.2/-146.4	Clear	None
14:20	3	3	0.20	/	6.64	19.55	2.977	4.70	85.4/-148.6	Clear	None
14:25	4	4	0.20	/	6.73	19.63	2.985	5.88	78.8/-106.5	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F227YAL Solinist IP Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M. Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 1427	SAMPLING ENDED AT: 1435
PUMP OR TUBING DEPTH IN WELL (feet): 68.21	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-21	3	CG	40mL	HCL	120 mL	6.73	BTEX 8260	BP	0.20
MW-21 Duplicate	3	CG	40mL	HCL	120 mL	6.73	BTEX 8260	BP	0.20

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88203	
WELL NO: MW-22	SAMPLE ID: MW-22	DATE: 11/20/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 58.78	PURGE PUMP TYPE OR BAILER

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (65 feet – 58.78 = 6.22 feet) X 0.16 gallons/foot = 0.99 gallons

3 WELL VOLUMES = 2.98 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 1318	PURGING ENDED AT: 1327	TOTAL VOLUME PURGED (gallons): 3 Gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
13:18	Initial	0	0.25	58.78	6.34	20.23	3.520	4.99	317/7.1	Turbid	None
13:21	1	1	0.25		6.68	19.04	3.530	4.83	243/2.0	Turbid	None
13:25	2	2	0.25		6.91	18.65	3.528	5.07	20.6/4.1	Turbid	None
13:27	3	3	0.25		7.04	18.65	3.526	4.95	18.3/6.5	Turbid	None
13:27											

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AC Solinst T.P. Serial # 222419

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill CMB	SAMPLER(S) SIGNATURE(S):	SAMPLING INITIATED AT: 1330	SAMPLING ENDED AT: 1335
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-22	3	CG	40mL	HCL	120 mL		VOC'S 8260	B	0.25
MW-22	1	AG	1 Liter	None	1 Liter		1,4 Dioxane	B	0.25
							8270C SIM		
MW-22 Duplicate	3	CG	40mL	HCL	120 mL		VOC'S 8260	B	0.25
	1	AG	1 Liter	None	1 Liter		1,4 Dioxane	B	0.25
							8270C SIM		

REMARKS: Placed purged water in on-site Drum

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell NM 88201	
WELL NO: MW-24D	SAMPLE ID: MW-24D		DATE: 11/30/2020

PURGING DATA

WELL DIAMETER (inches): 4"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 146 feet to 176 feet	STATIC DEPTH TO WATER (feet): 66.20	PURGE PUMP TYPE OR BAILER: ESP Submersible

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (180 feet – 66.20 = 113.8 feet) X 0.65 gallons/foot = 73.97 gallons

3 WELL VOLUMES = 221.91 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 10:00	PURGING ENDED AT: 10:30	TOTAL VOLUME PURGED (gallons): 30

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
10:00	0	0	1.0	66.20	7.49	17.08	3.407	~~3.44~~ 2.88	203.2/-189.4	Clear	None
10:10	10	10	1.0		7.58	17.91	3.392	2.88	202.9/-208.9	Clear	None
10:20	20	20	1.0		7.48	17.82	3.112	2.61	201.3/-199.8	"	"
10:30	30	30	1.0		7.23	17.15	3.137	2.96	198.1/-198.3	"	"
10:40	40	40	1.0								
10:50	50	50	1.0								

Parameters have Stabilized
Will Take Sample @ 10:35

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solinst Serial # 322719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill/CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 10:35	SAMPLING ENDED AT: 10:40
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-24D	3	CG	40mL	HCL	120mL	7.23	BTEX 8260	ESP	1.0
MW-24D Duplicate	3	CG	40mL	HCL	120mL	7.23	BTEX 8260	ESP	1.0
				$HgCl_2$					

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88201
WELL NO: MW-26	SAMPLE ID: MW-26	DATE: 11/20/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 43' feet to 63' feet	STATIC DEPTH TO WATER (feet): 51.40	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (65 feet – 51.40' = 13.6 feet) X 0.16 gallons/foot = 2.176 gallons

3 WELL VOLUMES = 6.528 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 56.63	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 56.63'	PURGING INITIATED AT: 14:40	PURGING ENDED AT: 15:01	TOTAL VOLUME PURGED (gallons): 6.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
14:40	Initial	Ø	0.40	51.40'	6.86	18.19	3.593	5.11	32.4/38.6	Clear	None
14:45	2	2	0.40		6.20	18.10	3.607	5.73	32.9/41.5	Clear	None
14:50	4	4	0.40		6.34	18.14	3.575	4.54	30.7/42.3	Clear	None
14:55	6	6	0.40		6.25	18.20	3.568	4.44	31.8/42.5	Clear	None
15:01	6.5	6.5	0.40		6.31	18.21	3.569	4.43	30.7/42.5	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274 AC Solinst IP Serial # 222715

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill, KMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 15:01	SAMPLING ENDED AT: 15:05
PUMP OR TUBING DEPTH IN WELL (feet): 56.63'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-26	3	CG	40mL	HCL	120 mL	6.31	8260 VOC'S	BP	0.40
Duplicate MW-26	1	AG	1 Liter	None	1 Liter	6.31	1,4 Dioxane 8270C SIM	BP	0.40
Duplicate MW-26	3	CG	40mL	HCL	120 mL	6.31	8260 VOC'S	BP	0.40
MW-26	1	AG	1 Liter	None	1 Liter	6.31	1,4 Dioxane 8270 C SIM	BP	0.40

REMARKS: Placed Purged H_2O in on-site Drum

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St Roswell, NM 88201	
WELL NO: MW-27	SAMPLE ID: MW-27		DATE: 11/16/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH 55 feet to 75 feet	STATIC DEPTH TO WATER (feet): 69.72'	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (74.98 feet – 69.72 = 5.26' feet) X 0.16 gallons/foot = 0.841 gallons

3 WELL VOLUMES = 2.52 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 14:05	PURGING ENDED AT: 14:16	TOTAL VOLUME PURGED (gallons): 2.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV)	COLOR (describe)	ODOR (describe)
14:05	Initial	Ø	0.25	69.72	6.11	20.76	3.617	2.29	183.5 / -18.7	Clear	Strong HC
14:07	0.50	0.50	0.25		6.67	19.69	3.647	1.11	202.8 / -229.6	Turbid	" "
14:10	1.0	1.0	0.25		6.62	19.34	3.638	1.32	205.5 / -232.2	"	" "
14:12	1.5	1.50	0.25		6.64	19.21	3.649	1.56	203.4 / -225.7	"	" "
14:14	2.0	2.0	0.25		6.66	19.23	3.647	1.41	202.2 / -232.2	"	" "
14:16	2.5	2.5	0.25		6.69	19.17	3.646	1.60	200.5 / -238.1	Turbid	Strong HC

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solinist IP Serial # 022719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Claytin M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): Claytin M Barnhill	SAMPLING INITIATED AT: 14:20	SAMPLING ENDED AT: 14:25
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-27	3	CG	40mL	HCL	120mL	6.69	BTEX 8260	B	0.25
MW-27 Duplicate	3	CG	40mL	HCL	120mL	6.69	BTEX 8260	B	0.25

REMARKS: Strong Hydrocarbon odor

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main ST. Roswell, NM 88201	
WELL NO: MW-29	SAMPLE ID: MW-29	DATE: 11/12/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 60 feet to 75 feet	STATIC DEPTH TO WATER (feet): 70.95'	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (74.50 feet – 70.95 = 3.55 feet) X 0.16 gallons/foot = 0.568 gallons

3 WELL VOLUMES = 1.704 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT:	PURGING ENDED AT:	TOTAL VOLUME PURGED (gallons):
69.51	69.51	1450	1458	1.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (circle units) mV/ORP	COLOR (describe)	ODOR (describe)
14:50	Initial	Ø	0.25	70.95	6.20	18.71	3.324	1.38	109.5/-103.2	Turbid	None
14:52	0.50	0.50	0.25		6.10	18.62	3.314	1.17	115.1/-137.7	Turbid	None
14:54	1.0	1.0	0.25		6.12	18.64	3.302	1.35	113.9/-142.8	Turbid	None
14:56	1.50	1.50	0.25		6.13	18.61	3.288	1.60	113.6/-139.7	Turbid	None
14:58	1.75	1.75	0.25		6.14	18.58	3.289	1.48	113.4/-132.1	Turbid	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solinist IP Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) /AFFILIATION: Clayton M Barnhill/ CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 15:00	SAMPLING ENDED AT: 15:02
PUMP OR TUBING DEPTH IN WELL (feet): 69.51'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-29	3	CG	40mL	HCL	120 mL	6.14	BTEX 8260	B	0.25

REMARKS: Pulled BP and Sampled with 1.8" x 3.0' Poly Disposable Bailer, Twine & Tip.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88201
WELL NO: MW-32	SAMPLE ID: MW-32	DATE: 11/12/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 60 feet to 75 feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (74.20 feet - 68.55 = 5.65 feet) X 0.16 gallons/foot = 0.904 gallons

3 WELL VOLUMES = 2.71 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 68.61	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 68.61	PURGING INITIATED AT: 13:25	PURGING ENDED AT: 13:45	TOTAL VOLUME PURGED (gallons): 3.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV) ORP	COLOR (describe)	ODOR (describe)
13:25	Initial	Ø	0.125	68.55	6.28	19.85	3.081	5.50	106.4/23.8	Turbid	None
13:33	1	1	0.125	/	6.19	19.04	3.049	2.50	110.2/7.0	Turbid	None
13:37	2	2	0.125	/	6.21	19.05	3.067	2.35	108.7/-4.0	Turbid	None
13:45	3	3	0.125	/	6.21	19.07	3.081	2.51	108.6/-12.5	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solonist IP Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton McBarnhill, CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 13:46	SAMPLING ENDED AT: 13:48

PUMP OR TUBING DEPTH IN WELL (feet): 68.61	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-32	3	CG	40mL	HCL	120 mL	6.21	BTEX 8260	BP	0.125

REMARKS:

MATERIAL CODES: AG = Amber Glass; (CG) = Clear Glass; (PE) = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; (BP) = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main ST. Roswell, NM 88201	
WELL NO: MW-34	SAMPLE ID: MW-34	DATE: 11/12/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 49 feet to 79 feet	STATIC DEPTH TO WATER (feet): 65.3	PURGE PUMP TYPE OR BAILER: BP ~~BP Bailer~~

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (75.75 feet – 65.3 = 10.45 feet) X 0.16 gallons/foot = 1.672 gallons

3 WELL VOLUMES = 5.016 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 67.0	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 67.0	PURGING INITIATED AT: 11:00	PURGING ENDED AT: 11:28	TOTAL VOLUME PURGED (gallons): 5.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
11:05	Initial	Ø	0.333	65.3	6.97	18.59	3.333	1.96	121.1/170.5	Turbid	None
11:08	1	1	0.20	1	7.14	18.67	3.336	0.69	70.0/146.0	Clear	None
11:13	2	2	0.20		6.92	18.65	3.329	0.74	125.2/72.1	Turbid	None
11:18	3	3	0.20		6.87	18.69	3.325	0.70	130.4/-22.8	Turbid	None
11:23	4	4	0.20		6.79	18.54	3.323	0.79	133.4/-48.1	Clear	None
11:28	5	5	0.20		6.77	18.56	3.332	0.84	134.2/-49.3	Clear	None

INSTRUMENTS USED: YSI MPS Serial # 05F2274AL Solinist I.P. Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton McBornhill, PG	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 11:30	SAMPLING ENDED AT: 11:33
PUMP OR TUBING DEPTH IN WELL (feet): 67.0'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y N Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-34	3	CG	40mL	HCL	120mL	6.77	BTEX 8260	BP	0.20

REMARKS:

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station #9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88203
WELL NO: MW-35	SAMPLE ID: MW-35 / DATE: 11/12/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 49 feet to 79 feet	STATIC DEPTH TO WATER (feet): 62.67	PURGE PUMP TYPE OR BAILER: 1.8"x3.0' poly Disposable

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (76.80' feet – 62.67' = 14.13 feet) X 0.16 gallons/foot = 2.26 gallons

3 WELL VOLUMES = 6.78 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 61.9	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 61.9	PURGING INITIATED AT: 11:54	PURGING ENDED AT: 12:13	TOTAL VOLUME PURGED (gallons): 7.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV)/ORP	COLOR (describe)	ODOR (describe)
11:54	Initial	Ø	0.25	62.67'	6.19	18.81	3.741	4.04	169.6/-25.7	Turbid	None
11:58	2	2	0.25		6.15	18.72	3.765	4.60	172.0/-11.1	Turbid	None
12:05	4	4	0.25		6.05	18.51	3.758	4.93	177.7/-2.0	Turbid	None
12:10	6	6	0.25		6.07	18.53	3.759	4.90	188.0/28	Turbid	None
12:13	7	7	0.25		6.81	18.55	3.752	5.04	192.4/33	Turbid	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274 Solinst I.P # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 6" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill KMS	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 12:15	SAMPLING ENDED AT: 12:20
PUMP OR TUBING DEPTH IN WELL (feet): 61.9	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-35	3	CG	40mL	HCL	120mL	6.81	BTEX 8260	B	0.25
Duplicate MW-35	3	CG	40mL	HCL	120mL	6.81	BTEX 8260	B	0.25

REMARKS: Pulled BP and sampled with 1.8"x3.0' poly Disposible Bailer, Twine, Tip

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: TWP 6381 N. Main Street Roswell, NM 88201		
WELL NO: MW-37	SAMPLE ID: MW-37	DATE: 11/12/2020	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 50 feet to 70 feet	STATIC DEPTH TO WATER (feet): 60.47	PURGE PUMP TYPE OR BAILER: (BP)

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (69.61 feet – 60.47 = 9.14 feet) X 0.16 gallons/foot = 1.46 gallons

3 WELL VOLUMES = 4.38 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 64.20	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 64.20	PURGING INITIATED AT: 10:00	PURGING ENDED AT: 10:30	TOTAL VOLUME PURGED (gallons): 4.50

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or (µS/cm)	DISSOLVED OXYGEN (circle units) (mg/L) or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV)	COLOR (describe)	ODOR (describe)
10:00	Initial	Ø	0.20	60.47	6.55	19.00	3.613	7.23	76/158.1	Clear	None
10:05	1	1	0.20		6.60	18.54	3.601	4.10	84.3/155.2	Clear	None
10:20	2	2	0.20		6.68	18.48	3.604	4.13	80.1/153.0	Clear	None
10:25	3	3	0.20		6.68	18.48	3.600	4.25	80.6/148.5	Clear	None
10:30	4.50	4.50	0.20		6.69	18.49	3.610	4.28	79.7/147.5	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F 2274AL Solinist T.P. Serial # 202719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; (2" = 0.16); 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; (1/2" = 0.010); 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; (BP) = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill, PE	SAMPLER(S) SIGNATURE(S): Clayton M Barnhill PE	SAMPLING INITIATED AT: 10:35	SAMPLING ENDED AT: 10:40
PUMP OR TUBING DEPTH IN WELL (feet): 64.20'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-37	3	CG	40mL	HCL	120 mL	6.69	BTEX 8260	BP	0.20
MW-37 Replicate	3	CG	40mL	HCL	120mL	6.69	BTEX 8260	BP	0.20

REMARKS:

MATERIAL CODES: AG = Amber Glass; (CG) = Clear Glass; (PE) = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; (BP) = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units. **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell NM 88201	
WELL NO: MW-39	SAMPLE ID: MW-39		DATE: 11/30/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/4"	WELL SCREEN INTERVAL DEPTH: 60 feet to 70 feet	STATIC DEPTH TO WATER (feet): 50.50	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (70.11 feet – 50.50 feet) X 0.16 gallons/foot = 3.136 gallons

3 WELL VOLUMES = 9.41 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 64.0'	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 64.0'	PURGING INITIATED AT: 12:18	PURGING ENDED AT: 12:40	TOTAL VOLUME PURGED (gallons): 9.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
12:18	~~Initial~~	Ø	0.50	50.5	7.02	18.33	3.526	2.72	177.7/13.4	Clear	None
12:24	3	3	0.50		7.03	18.33	3.523	2.80	177.7/16	Clear	None
12:30	6	6	0.50		7.03	18.31	3.527	2.76	177.5/17.8	Clear	None
12:40	9.5	9.5	0.50		7.04	18.32	3.526	2.85	177.8/17.5	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F 227 4AL Solinst IP Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMS	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 12:40	SAMPLING ENDED AT: 12:45
PUMP OR TUBING DEPTH IN WELL (feet): 64.0	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-39	3	CG	40 mL	HCL	120 mL	7.04	8260 VOC'S	BP	0.50
MW-39	1	AG	1 Liter	None	1 Liter	7.04	8270C Sim. 1,4 Dioxane	BP	0.50

REMARKS: Placed purged H_2O in on-site Drum.

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell NM 88201	
WELL NO: MW-40	SAMPLE ID: MW-40		DATE: 11/30/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH 50 feet to 70 feet	STATIC DEPTH TO WATER (feet): 54.90	PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (70.13 feet – 54.90 feet) X 0.16 gallons/foot = 2.43 gallons

3 WELL VOLUMES = 7.31 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 62.31	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 62.31	PURGING INITIATED AT: 11:30	PURGING ENDED AT: 11:48	TOTAL VOLUME PURGED (gallons): 7.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
11:30	Initial	Ø	0.50	54.90	6.55	18.30	3.535	2.36	186.0/-5.7	Clear	None
11:34	2	2	0.50		6.54	18.29	3.536	2.40	186.9/-8.8	Clear	None
11:38	4	4	0.50		6.47	18.26	3.531	2.38	184.5/-9.5	Clear	None
11:42	6	6	0.50		6.54	17.87	3.540	2.91	186.7/-6.6	Clear	None
11:48	7.50	7.50	0.50		6.46	18.19	3.541	2.20	184.8/-6.5	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solinist Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 11:50	SAMPLING ENDED AT: 11:55
PUMP OR TUBING DEPTH IN WELL (feet): 62.31'	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: (Y) N	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-40	3	CG	40mL	HCL	120mL	6.46	8260 VOC's	BP	0.50
~~Dup-MW-40~~	1	AG	1 Liter	None	1 Liter	6.46	1,4 Dioxane SIMS 8270C	BP	0.50
Duplicate MW-40	3	CG	40mL	HCL	120mL	6.46	8260 VOC's	BP	0.50
	1	AG	1 Liter	None	1 Liter	6.46	1,4 Dioxane	BP	0.50

REMARKS: Placed purged H2O in on-site Drums

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Tap Roswell Station 9 | SITE LOCATION: 6381 N. Main St. Roswell NM 88201

WELL NO: MW-41 | SAMPLE ID: MW-41 | DATE: 11/30/2020

PURGING DATA

WELL DIAMETER (inches): 2" | TUBING DIAMETER (inches): 1/2" | WELL SCREEN INTERVAL DEPTH 50 feet to 70 feet | STATIC DEPTH TO WATER (feet): 57.65 | PURGE PUMP TYPE OR BAILER: BP

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (70.06 feet – 57.65 feet) X 0.16 gallons/foot = 1.9856 gallons

3 WELL VOLUMES = 5.96 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 58.49 | FINAL PUMP OR TUBING DEPTH IN WELL (feet): 58.49 | PURGING INITIATED AT: 11:57 | PURGING ENDED AT: 12:10 | TOTAL VOLUME PURGED (gallons): 6

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
11:57	Initial	Ø	0.40	57.65	7.03	18.69	3.462	2.53	177.7/8.2	Clear	None
12:00	2	2	0.40		7.05	18.65	3.460	2.56	178.3/1.1	Clear	None
12:05	4	4	0.40		7.04	18.70	3.458	2.58	178.2/7.3	Clear	None
12:10	6	6	0.40		7.03	18.63	3.463	2.57	178.0/8.5	Clear	None

INSTRUMENTS USED:

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB | SAMPLER(S) SIGNATURE(S): [signature] | SAMPLING INITIATED AT: 12:10 | SAMPLING ENDED AT: 12:15

PUMP OR TUBING DEPTH IN WELL (feet): 58.49' | TUBING MATERIAL CODE: PE | FIELD-FILTERED: Y N | Filtration Equipment Type: | FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y N TUBING Y N (replaced) | DUPLICATE: Y N

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-41	3	CG	40mL	HCL	120 mL	7.03	8260 VOC's	BP	0.40
MW-41	1	AG	1 Liter	None	1 Liter	7.03	1,4 Dioxane	BP	0.40
							8270C SIM		

REMARKS: Placed Purged H2O in on-site Drum

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: Twp Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell NM 88201	
WELL NO: MW-42	SAMPLE ID: MW-42		DATE: 11/30/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches): 1/2"	WELL SCREEN INTERVAL DEPTH: 50 feet to 70 feet	STATIC DEPTH TO WATER (feet): 57.0	PURGE PUMP TYPE OR BAILER:

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (75.95 feet – 57.0 feet) X 0.16 gallons/foot = 3.03 gallons

3 WELL VOLUMES = 9.09 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet): 64.03	FINAL PUMP OR TUBING DEPTH IN WELL (feet): 64.03	PURGING INITIATED AT: 10:55	PURGING ENDED AT: 11:20	TOTAL VOLUME PURGED (gallons): 9.0

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV) PH/ORP	COLOR (describe)	ODOR (describe)
10:55	Initial	Ø	0.375	57.0	6.97	17.59	3.470	3.14	192.5 / -146.5	Clear	None
11:03	3	3	0.375	/	6.82	18.04	3.590	3.14	191.4 / -62.8	Clear	None
11:11	6	6	0.375	/	6.77	18.02	3.579	3.03	190.5 / -32.2	Clear	None
11:20	9	9	0.375	/	6.75	18.03	3.574	3.18	190.2 / -24.4	Clear	None

INSTRUMENTS USED: YSI 556 MPS Serial # 05F2274AL Solinst Serial # 220719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton McBride II / CME	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 11:20	SAMPLING ENDED AT: 11:25
PUMP OR TUBING DEPTH IN WELL (feet): 64.03	TUBING MATERIAL CODE: PE	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (ml per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
MW-42	3	CG	40mL	HCL	120mL	6.75	8260 VOCs	BP	0.375
MW-42	1	AG	1 Liter	None	1 Liter	6.75	8270 Sim 1,4 Dioxane	BP	0.375

REMARKS: Placed purged H2O in on-site Drum

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: SVE-28	SAMPLE ID: ~~#~~ SVE-28		DATE: 11/23/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet) 29.73	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (35.0 feet – 29.73 = 5.27 (feet) X 0.16 gallons/foot = 0.843 gallons

3 WELL VOLUMES = 2.529 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0925	PURGING ENDED AT: 0930	TOTAL VOLUME PURGED (gallons): 2.5

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL (mV)	COLOR (describe)	ODOR (describe)
0925	Initial	Ø	0.25	29.73	6.12	18.03	2.661	0.59	178.8/-140.8	Clear	Strong
0927	1.0	1.0	0.25	/	6.74	19.41	2.632	0.48	189.1/-184.4	Turbid	Strong
0928	2.0	2.0	0.25	/	6.53	19.72	2.624	0.39	186.2/-199.6	Turbid	Strong
0930	2.5	2.5	0.25	/	6.09	19.66	2.633	0.31	178.7/-199.8	"	"

INSTRUMENTS USED: XSI 556 MPS Serial # 05F2274AL Solinst IP. Serial # 222719

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Burnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0930	SAMPLING ENDED AT: 0935
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
SVE-28	3	CG	40mL	HCL	120mL	6.09	8260 VOC'S	B	0.25
SVE-28	1	AG	1 Liter	None	1 Liter	6.09	8270C SVMS	B	0.25
							1,4 Dioxane		

REMARKS: Placed Purged H2O in on-site Transfer Tank

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88201
WELL NO: SVE-30	SAMPLE ID: SVE-30
DATE: 11/23/2020	

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 43.05	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY

= (44.0 feet - 43.05 = 0.95 feet) X 0.16 gallons/foot = 0.152 gallons

3 WELL VOLUMES = 0.45 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)

= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0900	PURGING ENDED AT: 0905	TOTAL VOLUME PURGED (gallons) 0.50

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or µS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	OXYGEN REDUCTION POTENTIAL pH (mV)	COLOR (describe)	ODOR (describe)
0900											
~~0905~~	Initial	Ø	0.25	43.05							
~~0900~~ 0905	0.50	0.50	0.25	1							

Strong Screen / Black H_2O
Strong Hydrocarbon odor
No Parameters Taken.

INSTRUMENTS USED:

WELL CAPACITY (Gallons Per Foot): 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

PURGING EQUIPMENT USED: B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; PP = Peristaltic Pump; O = Other (Specify)

SAMPLING DATA[1]

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0905	SAMPLING ENDED AT: 0910
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm

FIELD DECONTAMINATION: PUMP Y (N) TUBING Y (N) (replaced) DUPLICATE: Y (N)

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
~~SVE-30~~	1	~~AGCG~~	40mL	HCL	120mL	N/A	8260 VOC's	B	0.25
SVE-30	1	AG	1 liter	None	1 Liter		1,4 Dioxane	B	0.25
							8270 SIM		

REMARKS: Placed Purged H_2O in Transfer Tank

MATERIAL CODES: AG = Amber Glass; CG = Clear Glass; PE = Polyethylene; PP = Polypropylene; S = Silicone; T = Teflon; O = Other (Specify)

SAMPLING EQUIPMENT CODES: APP = After Peristaltic Pump; B = Bailer; BP = Bladder Pump; ESP = Electric Submersible Pump; RFPP = Reverse Flow Peristaltic Pump; SM = Straw Method (Tubing Gravity Drain); O = Other (Specify)

NOTES: 1. Sample collection will occur after 3 well volumes are purged or after well stabilization:
STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS:
pH: ≤ 10% units **Temperature:** ≤ 10% °C **Specific Conductance:** ≤ 10% µS/cm **Dissolved Oxygen:** all readings ≤ 10% mg/L
Oxygen Reduction Potential: ≤ 10% mV

Revision Date: October 22, 2013

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell Station 9		SITE LOCATION: 6381 N. Main St. Roswell, NM 88201	
WELL NO: SVE-31	SAMPLE ID: SVE-31		DATE: 11/23/2020

PURGING DATA

WELL DIAMETER (inches): 2"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 31.65	PURGE PUMP TYPE OR BAILER: B

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (33.25 feet – 31.65 = 1.6 feet) X 0.16 gallons/foot = 0.256 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable)
3CV = 0.768 = gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 0950	PURGING ENDED AT: 0952	TOTAL VOLUME PURGED (gallons): 0.75

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or mS/cm	DISSOLVED OXYGEN (circle units) mg/L or % saturation	~~TURBIDITY~~ (NTUs) DH/MV/ORP	COLOR (describe)	ODOR (describe)
0950	Initial	Ø	0.25	31.65	6.59	18.57	2.035	1.08	18.3/-161.3	Turbid	None
0951	0.50	0.50	0.25	/	6.51	18.98	2.007	1.30	18.1/-130.1	Turbid	Strong
0952	0.75	0.75	0.25	/	6.64	18.96	2.008	1.22	18.3/	Turbid	Strong

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016

PURGING EQUIPMENT CODES: B = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 0950	SAMPLING ENDED AT: 0954
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION			INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH			
SVE-31	3	CG	40mL	HCL	120mL	6.41	8260 BTEX	B	0.25

REMARKS:

MATERIAL CODES: **AG** = Amber Glass; **CG** = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

GROUNDWATER SAMPLING LOG

SITE NAME: TWP Roswell station 9	SITE LOCATION: 6381 N. Main St. Roswell, NM 88201
WELL NO: RW-1	SAMPLE ID: RW-1 / DATE: 11/23/2020

PURGING DATA

WELL DIAMETER (inches): 4"	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH: feet to feet	STATIC DEPTH TO WATER (feet): 34.55	PURGE PUMP TYPE OR (BAILER)

WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY
(only fill out if applicable)
= (42.10' feet – 34.55 = 7.55 feet) X 0.65 gallons/foot = 4.907 gallons

EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME
(only fill out if applicable) 3cv = 14.72 Gallons
= gallons + (gallons/foot X feet) + gallons = gallons

INITIAL PUMP OR TUBING DEPTH IN WELL (feet):	FINAL PUMP OR TUBING DEPTH IN WELL (feet):	PURGING INITIATED AT: 10:15	PURGING ENDED AT: 1030	TOTAL VOLUME PURGED (gallons): 15 Gallons

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (circle units) µmhos/cm or ~~µS/cm~~	DISSOLVED OXYGEN (circle units) mg/L or % saturation	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)
10:15	Initial	Ø	1.0	34.55					DHW/OKP		
10:20	5	5	1.0								
10:25	10	10	1.0								
10:30	15	15	1.0								

Black Strong Hydrocarbon Odor & Sheen - NO Parameters Taken

WELL CAPACITY (Gallons Per Foot): **0.75"** = 0.02; **1"** = 0.04; **1.25"** = 0.06; **2"** = 0.16; **3"** = 0.37; **4"** = 0.65; **5"** = 1.02; **6"** = 1.47; **12"** = 5.88
TUBING INSIDE DIA. CAPACITY (Gal./Ft.): **1/8"** = 0.0006; **3/16"** = 0.0014; **1/4"** = 0.0026; **5/16"** = 0.004; **3/8"** = 0.006; **1/2"** = 0.010; **5/8"** = 0.016
PURGING EQUIPMENT CODES: **B** = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **PP** = Peristaltic Pump; **O** = Other (Specify)

SAMPLING DATA

SAMPLED BY (PRINT) / AFFILIATION: Clayton M Barnhill / CMB	SAMPLER(S) SIGNATURE(S): [signature]	SAMPLING INITIATED AT: 10:30	SAMPLING ENDED AT: 10:35
PUMP OR TUBING DEPTH IN WELL (feet):	TUBING MATERIAL CODE:	FIELD-FILTERED: Y (N) Filtration Equipment Type:	FILTER SIZE: ____ µm
FIELD DECONTAMINATION: PUMP Y (N)	TUBING Y (N) (replaced)	DUPLICATE: Y (N)	

SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION					
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH	INTENDED ANALYSIS AND/OR METHOD	SAMPLING EQUIPMENT CODE	SAMPLE PUMP FLOW RATE (mL per minute)
RW-1	3	CG	40mL	HCL	120mL		8260 VOC'S	B	1.0
RW-1	1	AG	1 liter	None	1 Liter	N/A	8270C SIM 1,4, Dioxane	B	1.0

REMARKS: Placed purged water in on-site Secondary containment

MATERIAL CODES: (AG) = Amber Glass; (CG) = Clear Glass; **PE** = Polyethylene; **PP** = Polypropylene; **S** = Silicone; **T** = Teflon; **O** = Other (Specify)

SAMPLING EQUIPMENT CODES: **APP** = After Peristaltic Pump; (B) = Bailer; **BP** = Bladder Pump; **ESP** = Electric Submersible Pump; **RFPP** = Reverse Flow Peristaltic Pump; **SM** = Straw Method (Tubing Gravity Drain); **O** = Other (Specify)

NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.
2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)
pH: ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)

Revision Date: February 12, 2009

Chain-of-Custody Record

Client: EarthCon Consultants Inc.
ATTN: Sofie Weber-Snapp
Mailing Address: 1800 West Oak Parkway Suite 106
Marietta, Ga 30062
Phone #: 775.973.2100
email or Fax#: sweberspnapp@earthcon.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: EarthCon Consultants, Inc. TWP Roswell Station #9
Project #: GW Monitoring 2020 TWP Roswell Station 9
Project Manager: Sofie Weber-Snapp
Sampler: CM Barnhill, PG
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	BTEX 8260
12/2020	10:35	H_2O	MW-37	3x40mL VOAs	HCL												X
12/2020	10:35	H_2O	MW-37 Duplicate														X
12/2020	11:30	H_2O	MW-34														X
12/2020	12:15	H_2O	MW-35														X
12/2020	12:15	H_2O	MW-35 Duplicate														X
12/2020	13:46	H_2O	MW-32														X
12/2020	15:00	H_2O	MW-29														X
12/2020	14:20	H_2O	MW-27														X
12/2020	14:27	H_2O	MW-21														X
12/2020	14:27	H_2O	MW-21 Duplicate														X
12/2020	11:10	H_2O	MW-17														X
12/2020	13:15	H_2O	MW-14														X

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
		TRIP BLANK				
12/2020	14:45	[signature]				
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Any Questions? Please Call CMBC 575.626.1615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Received by OCD: 10/21/2022 8:09:08 AM
Released to Imaging: 11/22/2022 9:07:27 AM

Page 1 of 2

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: EarthCon Consultants, Inc.
ATTN: Sofie Weber-Snapp
Mailing Address: 1880 West Oak Parkway Suite 106, Marietta, Ga 30062
Phone #: 775.973.2108
email or Fax#: sweber@snappearthcon.com
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. TWP Roswell Station 9
Project #: GW Monitoring 2020 TWP Roswell Station 9
Project Manager: Sofie Weber-Snapp
Sampler: Cm Barnhill, PE
On Ice: ☑ Yes ☐ No
# of Coolers:
Cooler Temp(including CF):

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4-Dioxane 8270C SIM	BTEX 8260			
1/20/2020	1330	H_2O	MW-22	3x40mL VOAs 1 Liter AG	HCl None									X			X				
1/20/20	1330	H_2O	MW-22 Duplicate	3x40mL VOAs 1 Liter AG	HCl None									X			X				
1/20/20	1430	H_2O	MW-20											X			X				
~~1/20/20~~	~~1430~~	~~H_2O~~	~~MW-20 Duplicate~~											X			X				
1/20/20	15:01	H_2O	MW-26											X			X				
1/20/20	15:01	H_2O	MW-26 Duplicate											X			X				
1/23/20	0750	H_2O	MW-11	3x40mL VOAs	HCl													X			
1/23/20	0750	H_2O	MW-11 Duplicate	3x40mL VOAs	HCl													X			
1/23/20	0815	H_2O	MW-18	3x40mL VOAs	HCl													X			
1/23/20	0840	H_2O	MW-13	3x40mL VOAs	HCl													X			
1/23/20	0905	H_2O	SVE-30	3x40mL VOAs 1 Liter AG	HCl None									X			X				
1/23/20	0930	H_2O	SVE-28	3x40mL VOAs 1 Liter AG	HCl None									X			X				

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
1/23/2020	1530					
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Any Questions Please Call CMBC 575.626.1615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Received by: OCD: 10/21/2022 8:09:38 AM
Released to Imaging: 11/22/2022 9:07:27 AM

Chain-of-Custody Record

Client: EarthCon Consultants, Inc.
ATTN: Sofie Weber-Snapp
Mailing Address: 1880 West Oak Parkway Suite 100
Marietta, GA 30062
Phone #: 775.973.2108
email or Fax#: Sweberssnapp@earthcon.com
QA/QC Package:
☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☑ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. Twp Roswell Station 9
Project #: GW Monitoring 2020 Twp Roswell Station 9
Project Manager: Sofie Weber-Snapp
Sampler: CM Barnhill, PE
On Ice: ☑ Yes ☐ No
# of Coolers:
Cooler Temp(including CF):

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No.	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4 Dioxane 8270C SIM	BTEX 8260				
1/23/2020	0950	H2O	SVE-31	3x40mL VOAs	HCl													X				
1/23/2020	1030	H2O	RW-1	3x40mL VOAs 1x1L Amber	HCl None									X			X					
			Trip Blank	2x40mL VOAs	HCl																	

Date	Time	Relinquished by:	Received by:	Via:	Date	Time
1/23/2020	1530					
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Any Questions Please Call CMBC 575.626.1615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Received by OCD: 10/21/2022 8:09:38 AM
Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:36 AM

Chain-of-Custody Record

Client: EarthCon Consultants, Inc.
ATTN: Sofie Weber-Snapp
Mailing Address: 1880 West Oak Parkway Suite 106
Marietta GA 30062
Phone #: 775.973.2100
email or Fax#: sweber@snapp@earthcon.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: EarthCon Consultants, Inc. TWP Roswell Station 9
Project #: GW Monitoring 2020 TWP Roswell Station #9
Project Manager: Sofie Weber-Snapp
Sampler: CM Barnhill, PG
On Ice: ☒ Yes ☐ No
Sample Temperature: /

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No.	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) Full List	8270 (Semi-VOA)	BTEX 8260	1,4-Dioxane 8270CSIM			Air Bubbles (Y or N)
1/30/20	0800	H_2O	ESP Rinsate, Pre-Sampling	3x 40mL VOA's	HCL													X				
1/30/2020	1035	H_2O	MW-24D	3x 40mL VOA's	HCL													X				
1/30/2020	1035	H_2O	MW-24D Duplicate	3x 40mL VOA's	HCl_2													X				
1/30/2020	12:40	H_2O	MW-39	3x 40mL 1 Liter AG	None / HCL											X			X			
1/30/20	11:30	H_2O	MW-40	3x 40mL 1 Liter AG	HCL / None											X			X			
1/30/20	11:50	H_2O	MW-40 Duplicate	3x 40mL 1 x 1L AG	HCL / None											X			X			
1/30/20	12:10	H_2O	MW-41	" "	" "											X			X			
1/30/20	11:20	H_2O	MW-42	" "	" "											X			X			
1/30/20	14:50	H_2O	Field Blank	3x 40mL VOAs	HCL																	

Date:	Time:	Relinquished by:	Received by:	Date	Time
1/30/20	1500	[signature]			
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Any Questions? Please Call CMBe 575.626.1615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

UPS Ground **S.D.P.**

Shipping Document

See instructions on back. Visit UPS.com® or call 1-800-PICK-UPS® (800-742-5877) for additional information and Tariff/Terms and Conditions.

TRACKING NUMBER K305 800 858 0

1 SHIPMENT FROM

SHIPPER'S UPS ACCOUNT NO. 1 A F 8 0 2

REFERENCE NUMBER EarthCon Twp Roswell Station 9

NAME CM Barnhill, PE — TELEPHONE 575-626-1615

COMPANY CMB ENVIRONMENTAL

STREET ADDRESS 115 E COLLEGE BLVD 109

CITY AND STATE ROSWELL NM — ZIP CODE 88201

2 DELIVERY TO

NAME Sample Receiving — TELEPHONE 505-345-3975

COMPANY HALL ENVIRONMENTAL — DEPT./FLR.

STREET ADDRESS 4901 HAWKINS NE RM A — Residential Delivery ☐

CITY AND STATE ALBUQUERQUE NM — ZIP CODE 87109

3 WEIGHT

WEIGHT WHOLE LBS. ONLY	DIMENSIONAL WEIGHT If Applicable	LARGE PACKAGE	4 SHIPPER RELEASE
		☐	☐

		CHARGES
5 GROUND S.D.P. SHIPPING CHARGES		$
6 OPTIONAL SERVICES	☐ DECLARED VALUE FOR CARRIAGE $ AMOUNT (For declared value over $100, see instructions.)	$
	C.O.D. shipping may be available at UPS.com	
7 ADDITIONAL HANDLING CHARGE	☐ An Additional Handling Charge applies for certain items. See instructions.	$
TOTAL CHARGES		$

8 METHOD OF PAYMENT: Bill Shipper's Account Number (In Section 1) ☐ — Bill Receiver ☒ — Bill Third Party ☐ — Credit Card ☐ (American Express, Diner's Club, MasterCard, Visa) (Record Account No. In Section 9) — Check ☐

9 RECEIVER'S/THIRD PARTY'S UPS ACCT. NO. OR MAJOR CREDIT CARD NO. 1 A F 802 — EXPIRATION DATE

THIRD PARTY'S COMPANY NAME Hall Environmental Analysis Lab

STREET ADDRESS 4901 Hawkins NE

CITY AND STATE Albuquerque NM — ZIP CODE 87109

Shipper authorizes UPS to act as forwarding agent for export control and customs purposes. Shipper certifies that these commodities, technology or software, if exported from the United States, were exported in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

10 SHIPPER'S SIGNATURE X [signature] — DATE OF SHIPMENT 11 19 2020

All shipments are subject to the terms contained in the UPS Tariff/Terms and Conditions of Service, which are incorporated herein by reference, and are available at UPS.com and local UPS offices.

02129509 1/10 RRD — UPS COPY

This form not needed with UPS Internet Shipping at UPS.com

Released to Imaging: 11/22/2022 9:07:27 AM

UPS Ground **S.D.P.**

Shipping Document

See instructions on back. Visit UPS.com® or call 1-800-PICK-UPS® (800-742-5877) for additional information and Tariff/Terms and Conditions.

TRACKING NUMBER K305 800 861 5

1 SHIPMENT FROM

SHIPPER'S UPS ACCOUNT NO. 1 A F 8 0 2

REFERENCE NUMBER Earth Con Twp Roswell Station 9

NAME Cm Barnhill, PE TELEPHONE 575-626-1615

COMPANY CMB ENVIRONMENTAL

STREET ADDRESS 115 E COLLEGE BLVD 109

CITY AND STATE ROSWELL NM ZIP CODE 88201

2 DELIVERY TO

NAME Sample Receiving TELEPHONE 505-345-3975

COMPANY HALL ENVIRONMENTAL DEPT./FLR.

STREET ADDRESS 4901 HAWKINS NE RM A Residential Delivery ☐

CITY AND STATE ALBUQUERQUE NM ZIP CODE 87109

3 WEIGHT — Weight Whole Lbs. Only | Dimensional Weight If Applicable | Large Package ☐ | **4** Shipper Release ☐ G

		CHARGES
5 Ground S.D.P. Shipping Charges		$
6 Optional Services	☐ Declared Value For Carriage (For declared value over $100, see instructions.) $ Amount	$
	C.O.D. shipping may be available at UPS.com	
7 Additional Handling Charge	☐ An Additional Handling Charge applies for certain items. See instructions.	$
Total Charges		$

8 Method of Payment: Bill Shipper's Account Number (In Section 1) ☐ | Bill Receiver ☒ | Bill Third Party ☐ | Credit Card ☐ (Record Account No. In Section 9) | American Express / Diner's Club / MasterCard / Visa | Check ☐

9 Receiver's/Third Party's UPS Acct. No. or Major Credit Card No. 1 A F 802 — Expiration Date

Third Party's Company Name: Hall Environmental Analysis Lab

Street Address: 4901 Hawkins NE

City and State: Albuquerque NM ZIP Code: 87109

Shipper authorizes UPS to act as forwarding agent for export control and customs purposes. Shipper certifies that these commodities, technology or software, if exported from the United States, were exported in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

10 Shipper's Signature X — Date of Shipment 11 23 2022

All shipments are subject to the terms contained in the UPS Tariff/Terms and Conditions of Service, which are incorporated herein by reference, and are available at UPS.com and local UPS offices.

02129509 1/10 RRD

UPS COPY

This form not needed with UPS Internet Shipping at UPS.com

UPS Ground **S.D.P.**

Shipping Document

See instructions on back. Visit UPS.com® or call 1-800-PICK-UPS® (800-742-5877) for additional information and Tariff/Terms and Conditions.

TRACKING NUMBER K305 800 862 4

1 SHIPMENT FROM

SHIPPER'S UPS ACCOUNT NO. 1 A F 8 0 2

REFERENCE NUMBER Earth Con Twp Roswell Station 9

NAME Cm Barnhill, PE TELEPHONE 575-626-1615

COMPANY CMB ENVIRONMENTAL

STREET ADDRESS 115 E COLLEGE BLVD 109

CITY AND STATE ROSWELL NM ZIP CODE 88201

2 DELIVERY TO

NAME Sample Receiving TELEPHONE 505-345-3975

COMPANY HALL ENVIRONMENTAL DEPT./FLR.

STREET ADDRESS 4901 HAWKINS NE RM A Residential Delivery ☐

CITY AND STATE ALBUQUERQUE NM ZIP CODE 87109

3 WEIGHT — Weight Whole Lbs. Only | Dimensional Weight If Applicable | Large Package ☐ | **4** Shipper Release ☐ G

		CHARGES
5 Ground S.D.P. Shipping Charges		$
6 Optional Services	☐ Declared Value For Carriage (For declared value over $100, see instructions.) $ Amount	$
	C.O.D. shipping may be available at UPS.com	
7 Additional Handling Charge	☐ An Additional Handling Charge applies for certain items. See instructions.	$
Total Charges		$

8 Method of Payment: Bill Shipper's Account Number (In Section 1) ☐ | Bill Receiver ☒ | Bill Third Party ☐ | Credit Card ☐ (Record Account No. In Section 9) | American Express / Diner's Club / MasterCard / Visa | Check ☐

9 Receiver's/Third Party's UPS Acct. No. or Major Credit Card No. 1 A F 802 — Expiration Date

Third Party's Company Name: Hall Environmental Analysis Lab

Street Address: 4901 Hawkins NE

City and State: Albuquerque NM ZIP Code: 87109

Shipper authorizes UPS to act as forwarding agent for export control and customs purposes. Shipper certifies that these commodities, technology or software, if exported from the United States, were exported in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

10 Shipper's Signature X — Date of Shipment 11 23 2022

All shipments are subject to the terms contained in the UPS Tariff/Terms and Conditions of Service, which are incorporated herein by reference, and are available at UPS.com and local UPS offices.

This form not needed with UPS Internet Shipping at UPS.com

UPS Ground S.D.P.

Shipping Document

See instructions on back. Visit UPS.com® or call 1-800-PICK-UPS® (800-742-5877) for additional information and Tariff/Terms and Conditions.

TRACKING NUMBER: K305 800 864 2

1 SHIPMENT FROM

SHIPPER'S UPS ACCOUNT NO.: 1 A F 8 0 2

REFERENCE NUMBER: Earth Con Consultants, Inc. Twp Roswell Station 9

NAME: CM Barnhill, PE

TELEPHONE: 575-626-1615

COMPANY: CMB ENVIRONMENTAL

STREET ADDRESS: 115 E COLLEGE BLVD 109

CITY AND STATE: ROSWELL NM

ZIP CODE: 88201

2 DELIVERY TO

NAME: Sample Receiving

TELEPHONE: 505-345-3975

COMPANY: HALL ENVIRONMENTAL

DEPT./FLR.:

STREET ADDRESS: 4901 HAWKINS NE RM A

Residential Delivery ☐

CITY AND STATE: ALBUQUERQUE NM

ZIP CODE: 87109

3 WEIGHT

WEIGHT WHOLE LBS. ONLY	DIMENSIONAL WEIGHT If Applicable	LARGE PACKAGE	SHIPPER RELEASE
		☐	☐

		CHARGES
5 GROUND S.D.P. SHIPPING CHARGES		$
6 OPTIONAL SERVICES	☐ DECLARED VALUE FOR CARRIAGE For declared value over $100, see instructions. $ AMOUNT	$
	C.O.D. shipping may be available at UPS.com	
7 ADDITIONAL HANDLING CHARGE	☐ An Additional Handling Charge applies for certain items. See instructions.	$
TOTAL CHARGES		$

8 METHOD OF PAYMENT: BILL SHIPPER'S ACCOUNT NUMBER ☐ IN SECTION 1; BILL RECEIVER ☒; BILL THIRD PARTY ☐; CREDIT CARD ☐ (RECORD ACCOUNT NO. IN SECTION 9); American Express, Diner's Club, MasterCard, Visa; CHECK ☐

9 RECEIVER'S/THIRD PARTY'S UPS ACCT. NO. OR MAJOR CREDIT CARD NO.: 1AF802

EXPIRATION DATE: /

THIRD PARTY'S COMPANY NAME: Hall Environmental Analysis Lab

STREET ADDRESS: 4901 Hawkins NE

CITY AND STATE: Albuquerque NM

ZIP CODE: 87109

Shipper authorizes UPS to act as forwarding agent for export control and customs purposes. Shipper certifies that these commodities, technology or software, if exported from the United States, were exported in accordance with the Export Administration Regulations. Diversion contrary to law is prohibited.

10 SHIPPER'S SIGNATURE: X [signature]

DATE OF SHIPMENT: 12/01/2022

All shipments are subject to the terms contained in the UPS Tariff/Terms and Conditions of Service, which are incorporated herein by reference, and are avaliable at UPS.com and local UPS offices.

UPS COPY

02129509 1/10 RRD

This form not needed with UPS Internet Shipping at UPS.com

Appendix B

Data Validation Report – RPDs and

Analytical Data Packages – Semi-annual Groundwater Sampling

APPENDIX B - Data Validation Report - RPDs
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Xylenes (total)	1,1-Dichloroethane	1,1-Dichloroethene
MW-21	05/15/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
(MW-20 DUP)	05/15/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
	RPD:	--	--	--	--	--	--
MW-39	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	3.1	19
(MW-39 DUP)	05/17/20	< 1.0	< 1.0	< 1.0	< 1.5	3.2	20
	RPD:	--	--	--	--	3.2	5.1
MW-34	05/14/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
(MW-34 DUP)	05/14/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
	RPD:	--	--	--	--	--	--
MW-21	11/18/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
(MW-21 DUP)	11/18/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
	RPD:	--	--	--	--	--	--
MW-27	11/16/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
(MW-27 DUP)	11/16/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
	RPD:	--	--	--	--	--	--
MW-35	11/12/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
(MW-35 DUP)	11/12/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
	RPD:	--	--	--	--	--	--
MW-37	11/12/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
(MW-37 DUP)	11/12/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
	RPD:	--	--	--	--	--	--
MW-24	11/30/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
(MW-24 DUP)	11/30/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
	RPD:	--	--	--	--	--	--
MW-40	11/30/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0
(MW-40 DUP)	11/30/20	< 1.0	< 1.0	< 1.0	< 1.5	< 1.0	< 1.0
	RPD:	--	--	--	--	--	--
MW-22	11/20/20	< 1.0	< 1.0	< 1.0	< 1.5	<1.0	1.4
(MW-22 DUP)	11/20/20	< 1.0	< 1.0	< 1.0	< 1.5	<1.0	1.5
	RPD:	--	--	--	--	--	6.9
MW-26	11/20/20	< 1.0	< 1.0	< 1.0	< 1.5	8.8	41
(MW-26 DUP)	11/20/20	< 1.0	< 1.0	< 1.0	< 1.5	8.7	41
	RPD:	--	--	--	--	1.1	0.0
MW-11	11/23/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
(MW-11 DUP)	11/23/20	< 1.0	< 1.0	< 1.0	< 1.5	NA	NA
	RPD:	--	--	--	--	--	--

NOTES:
Relative Percent Differenct (RPD) = abs([(S-D) / ((S+D)/2)] * 100)
S = Concentration of analyte in Real Sample
D = Concentration of analyte in Duplicate Sample
ug/L - all concentrations reported in micrograms per liter

Prepared by: HRB 2/26/21
Checked by: SWS 3/2/21

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

May 29, 2020

JD Haines
Earth Con
14405 Walters Rd Ste 700
Houston, TX
TEL: (317) 450-6126
FAX

RE: Earth Con Consultants Inc TWP Roswell Station 9 OrderNo.: 2005813

Dear JD Haines:

Hall Environmental Analysis Laboratory received 18 sample(s) on 5/19/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-34
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/14/2020 8:47:00 AM
Lab ID: 2005813-001 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0	P	µg/L	1	5/22/2020 1:52:00 PM	SL69085
Toluene	ND	1.0	P	µg/L	1	5/22/2020 1:52:00 PM	SL69085
Ethylbenzene	ND	1.0	P	µg/L	1	5/22/2020 1:52:00 PM	SL69085
Xylenes, Total	ND	1.5	P	µg/L	1	5/22/2020 1:52:00 PM	SL69085
Surr: 1,2-Dichloroethane-d4	94.9	70-130	P	%Rec	1	5/22/2020 1:52:00 PM	SL69085
Surr: 4-Bromofluorobenzene	91.5	70-130	P	%Rec	1	5/22/2020 1:52:00 PM	SL69085
Surr: Dibromofluoromethane	101	70-130	P	%Rec	1	5/22/2020 1:52:00 PM	SL69085
Surr: Toluene-d8	97.8	70-130	P	%Rec	1	5/22/2020 1:52:00 PM	SL69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-34 Duplicate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/14/2020 8:47:00 AM
Lab ID: 2005813-002 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 3:02:00 PM	SL69085
Toluene	ND	1.0		µg/L	1	5/22/2020 3:02:00 PM	SL69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 3:02:00 PM	SL69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 3:02:00 PM	SL69085
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%Rec	1	5/22/2020 3:02:00 PM	SL69085
Surr: 4-Bromofluorobenzene	89.8	70-130		%Rec	1	5/22/2020 3:02:00 PM	SL69085
Surr: Dibromofluoromethane	106	70-130		%Rec	1	5/22/2020 3:02:00 PM	SL69085
Surr: Toluene-d8	97.1	70-130		%Rec	1	5/22/2020 3:02:00 PM	SL69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-29
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/14/2020 11:06:00 AM
Lab ID: 2005813-003
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 3:25:00 PM	SL69085
Toluene	ND	1.0		µg/L	1	5/22/2020 3:25:00 PM	SL69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 3:25:00 PM	SL69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 3:25:00 PM	SL69085
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	5/22/2020 3:25:00 PM	SL69085
Surr: 4-Bromofluorobenzene	90.5	70-130		%Rec	1	5/22/2020 3:25:00 PM	SL69085
Surr: Dibromofluoromethane	106	70-130		%Rec	1	5/22/2020 3:25:00 PM	SL69085
Surr: Toluene-d8	97.0	70-130		%Rec	1	5/22/2020 3:25:00 PM	SL69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-27
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/14/2020 3:35:00 PM
Lab ID: 2005813-004
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 3:49:00 PM	SL69085
Toluene	ND	1.0		µg/L	1	5/22/2020 3:49:00 PM	SL69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 3:49:00 PM	SL69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 3:49:00 PM	SL69085
Surr: 1,2-Dichloroethane-d4	91.3	70-130		%Rec	1	5/22/2020 3:49:00 PM	SL69085
Surr: 4-Bromofluorobenzene	80.4	70-130		%Rec	1	5/22/2020 3:49:00 PM	SL69085
Surr: Dibromofluoromethane	102	70-130		%Rec	1	5/22/2020 3:49:00 PM	SL69085
Surr: Toluene-d8	104	70-130		%Rec	1	5/22/2020 3:49:00 PM	SL69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-27 Equipment Rinsate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/14/2020 3:00:00 PM
Lab ID: 2005813-005 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 4:13:00 PM	SL69085
Toluene	ND	1.0		µg/L	1	5/22/2020 4:13:00 PM	SL69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 4:13:00 PM	SL69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 4:13:00 PM	SL69085
Surr: 1,2-Dichloroethane-d4	93.4	70-130		%Rec	1	5/22/2020 4:13:00 PM	SL69085
Surr: 4-Bromofluorobenzene	89.1	70-130		%Rec	1	5/22/2020 4:13:00 PM	SL69085
Surr: Dibromofluoromethane	99.8	70-130		%Rec	1	5/22/2020 4:13:00 PM	SL69085
Surr: Toluene-d8	96.3	70-130		%Rec	1	5/22/2020 4:13:00 PM	SL69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-21
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/15/2020 11:35:00 AM
Lab ID: 2005813-006 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 4:36:00 PM	SL69085
Toluene	ND	1.0		µg/L	1	5/22/2020 4:36:00 PM	SL69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 4:36:00 PM	SL69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 4:36:00 PM	SL69085
Surr: 1,2-Dichloroethane-d4	97.0	70-130		%Rec	1	5/22/2020 4:36:00 PM	SL69085
Surr: 4-Bromofluorobenzene	91.2	70-130		%Rec	1	5/22/2020 4:36:00 PM	SL69085
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/22/2020 4:36:00 PM	SL69085
Surr: Toluene-d8	98.9	70-130		%Rec	1	5/22/2020 4:36:00 PM	SL69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-21 Duplicate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/15/2020 11:35:00 AM
Lab ID: 2005813-007 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 5:00:00 PM	SL69085
Toluene	ND	1.0		µg/L	1	5/22/2020 5:00:00 PM	SL69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 5:00:00 PM	SL69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 5:00:00 PM	SL69085
Surr: 1,2-Dichloroethane-d4	94.3	70-130		%Rec	1	5/22/2020 5:00:00 PM	SL69085
Surr: 4-Bromofluorobenzene	91.9	70-130		%Rec	1	5/22/2020 5:00:00 PM	SL69085
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/22/2020 5:00:00 PM	SL69085
Surr: Toluene-d8	96.9	70-130		%Rec	1	5/22/2020 5:00:00 PM	SL69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-22
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 7:56:00 AM
Lab ID: 2005813-008 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/26/2020 1:34:00 PM	52613
Surr: Nitrobenzene-d5	50.5	15-124		%Rec	1	5/26/2020 1:34:00 PM	52613
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 5:47:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 5:47:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 5:47:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,1-Dichloroethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,1-Dichloroethene	2.4	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-22
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 7:56:00 AM
Lab ID: 2005813-008
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 5:47:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 5:47:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 5:47:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 5:47:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%Rec	1	5/22/2020 5:47:00 PM	R69085
Surr: 4-Bromofluorobenzene	89.7	70-130		%Rec	1	5/22/2020 5:47:00 PM	R69085
Surr: Dibromofluoromethane	105	70-130		%Rec	1	5/22/2020 5:47:00 PM	R69085
Surr: Toluene-d8	96.7	70-130		%Rec	1	5/22/2020 5:47:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-22 Equipment Rinsate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 7:20:00 AM
Lab ID: 2005813-009 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 6:11:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 6:11:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 6:11:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,1-Dichloroethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,1-Dichloroethene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 6:11:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-22 Equipment Rinsate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 7:20:00 AM
Lab ID: 2005813-009 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 6:11:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 6:11:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 6:11:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 6:11:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	5/22/2020 6:11:00 PM	R69085
Surr: 4-Bromofluorobenzene	91.0	70-130		%Rec	1	5/22/2020 6:11:00 PM	R69085
Surr: Dibromofluoromethane	102	70-130		%Rec	1	5/22/2020 6:11:00 PM	R69085
Surr: Toluene-d8	98.6	70-130		%Rec	1	5/22/2020 6:11:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-26
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 9:02:00 AM
Lab ID: 2005813-010 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/26/2020 2:18:00 PM	52613
Surr: Nitrobenzene-d5	47.5	15-124		%Rec	1	5/26/2020 2:18:00 PM	52613
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 6:34:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 6:34:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 6:34:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,1-Dichloroethane	8.5	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,1-Dichloroethene	45	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-26
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 9:02:00 AM
Lab ID: 2005813-010
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 6:34:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 6:34:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 6:34:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 6:34:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	94.8	70-130		%Rec	1	5/22/2020 6:34:00 PM	R69085
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	5/22/2020 6:34:00 PM	R69085
Surr: Dibromofluoromethane	105	70-130		%Rec	1	5/22/2020 6:34:00 PM	R69085
Surr: Toluene-d8	97.2	70-130		%Rec	1	5/22/2020 6:34:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-20
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 9:48:00 AM
Lab ID: 2005813-011 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/26/2020 3:03:00 PM	52613
Surr: Nitrobenzene-d5	49.5	15-124		%Rec	1	5/26/2020 3:03:00 PM	52613
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 6:58:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 6:58:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 6:58:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,1-Dichloroethane	6.1	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,1-Dichloroethene	3.0	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-20
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 9:48:00 AM
Lab ID: 2005813-011
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 6:58:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 6:58:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 6:58:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 6:58:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	95.1	70-130		%Rec	1	5/22/2020 6:58:00 PM	R69085
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	5/22/2020 6:58:00 PM	R69085
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/22/2020 6:58:00 PM	R69085
Surr: Toluene-d8	98.9	70-130		%Rec	1	5/22/2020 6:58:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-42
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 11:17:00 AM
Lab ID: 2005813-012
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/26/2020 3:47:00 PM	52613
Surr: Nitrobenzene-d5	63.0	15-124		%Rec	1	5/26/2020 3:47:00 PM	52613
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 7:22:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 7:22:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 7:22:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,1-Dichloroethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,1-Dichloroethene	1.5	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-42
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 11:17:00 AM
Lab ID: 2005813-012
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 7:22:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 7:22:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 7:22:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 7:22:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	96.3	70-130		%Rec	1	5/22/2020 7:22:00 PM	R69085
Surr: 4-Bromofluorobenzene	90.2	70-130		%Rec	1	5/22/2020 7:22:00 PM	R69085
Surr: Dibromofluoromethane	102	70-130		%Rec	1	5/22/2020 7:22:00 PM	R69085
Surr: Toluene-d8	97.1	70-130		%Rec	1	5/22/2020 7:22:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-40
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 12:05:00 PM
Lab ID: 2005813-013 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/26/2020 4:31:00 PM	52613
Surr: Nitrobenzene-d5	51.0	15-124		%Rec	1	5/26/2020 4:31:00 PM	52613
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 7:45:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 7:45:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 7:45:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,1-Dichloroethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,1-Dichloroethene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-40
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 12:05:00 PM
Lab ID: 2005813-013
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 7:45:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 7:45:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 7:45:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 7:45:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	5/22/2020 7:45:00 PM	R69085
Surr: 4-Bromofluorobenzene	92.4	70-130		%Rec	1	5/22/2020 7:45:00 PM	R69085
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/22/2020 7:45:00 PM	R69085
Surr: Toluene-d8	95.8	70-130		%Rec	1	5/22/2020 7:45:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-41
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 1:10:00 PM
Lab ID: 2005813-014 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/26/2020 5:18:00 PM	52613
Surr: Nitrobenzene-d5	68.0	15-124		%Rec	1	5/26/2020 5:18:00 PM	52613
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 8:09:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 8:09:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 8:09:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,1-Dichloroethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,1-Dichloroethene	1.2	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-41
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 1:10:00 PM
Lab ID: 2005813-014
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 8:09:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 8:09:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 8:09:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 8:09:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	94.7	70-130		%Rec	1	5/22/2020 8:09:00 PM	R69085
Surr: 4-Bromofluorobenzene	88.6	70-130		%Rec	1	5/22/2020 8:09:00 PM	R69085
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/22/2020 8:09:00 PM	R69085
Surr: Toluene-d8	96.7	70-130		%Rec	1	5/22/2020 8:09:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-39
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 2:05:00 PM
Lab ID: 2005813-015 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/26/2020 6:09:00 PM	52613
Surr: Nitrobenzene-d5	59.5	15-124		%Rec	1	5/26/2020 6:09:00 PM	52613
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 8:33:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 8:33:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 8:33:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,1-Dichloroethane	3.1	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,1-Dichloroethene	19	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-39
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 2:05:00 PM
Lab ID: 2005813-015
Matrix: AQUEOUS
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 8:33:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 8:33:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 8:33:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 8:33:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%Rec	1	5/22/2020 8:33:00 PM	R69085
Surr: 4-Bromofluorobenzene	89.2	70-130		%Rec	1	5/22/2020 8:33:00 PM	R69085
Surr: Dibromofluoromethane	101	70-130		%Rec	1	5/22/2020 8:33:00 PM	R69085
Surr: Toluene-d8	97.6	70-130		%Rec	1	5/22/2020 8:33:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-39 Duplicate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 2:05:00 PM
Lab ID: 2005813-016 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	5/26/2020 7:10:00 PM	52613
Surr: Nitrobenzene-d5	65.0	15-124		%Rec	1	5/26/2020 7:10:00 PM	52613
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 8:56:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 8:56:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 8:56:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,1-Dichloroethane	3.2	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,1-Dichloroethene	20	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-39 Duplicate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/17/2020 2:05:00 PM
Lab ID: 2005813-016 **Matrix:** AQUEOUS **Received Date:** 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 8:56:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 8:56:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 8:56:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 8:56:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	5/22/2020 8:56:00 PM	R69085
Surr: 4-Bromofluorobenzene	90.1	70-130		%Rec	1	5/22/2020 8:56:00 PM	R69085
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/22/2020 8:56:00 PM	R69085
Surr: Toluene-d8	97.5	70-130		%Rec	1	5/22/2020 8:56:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: TRIP BLANK
Project: Earth Con Consultants Inc TWP Roswell
Collection Date:
Lab ID: 2005813-017
Matrix: TRIP BLANK
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Toluene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Naphthalene	ND	2.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
2-Methylnaphthalene	ND	4.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Acetone	ND	10		µg/L	1	5/22/2020 9:20:00 PM	R69085
Bromobenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Bromodichloromethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Bromoform	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Bromomethane	ND	3.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
2-Butanone	ND	10		µg/L	1	5/22/2020 9:20:00 PM	R69085
Carbon disulfide	ND	10		µg/L	1	5/22/2020 9:20:00 PM	R69085
Carbon Tetrachloride	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Chlorobenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Chloroethane	ND	2.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Chloroform	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Chloromethane	ND	3.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
2-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
4-Chlorotoluene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
cis-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Dibromochloromethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Dibromomethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,3-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,4-Dichlorobenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Dichlorodifluoromethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,1-Dichloroethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,1-Dichloroethene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,3-Dichloropropane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
2,2-Dichloropropane	ND	2.0		µg/L	1	5/22/2020 9:20:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: TRIP BLANK
Project: Earth Con Consultants Inc TWP Roswell
Collection Date:
Lab ID: 2005813-017
Matrix: TRIP BLANK
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Hexachlorobutadiene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
2-Hexanone	ND	10		µg/L	1	5/22/2020 9:20:00 PM	R69085
Isopropylbenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
4-Isopropyltoluene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
4-Methyl-2-pentanone	ND	10		µg/L	1	5/22/2020 9:20:00 PM	R69085
Methylene Chloride	ND	3.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
n-Butylbenzene	ND	3.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
n-Propylbenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
sec-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Styrene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
tert-Butylbenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
trans-1,2-DCE	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,1,1-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,1,2-Trichloroethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Trichloroethene (TCE)	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Trichlorofluoromethane	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
1,2,3-Trichloropropane	ND	2.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Vinyl chloride	ND	1.0		µg/L	1	5/22/2020 9:20:00 PM	R69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 9:20:00 PM	R69085
Surr: 1,2-Dichloroethane-d4	92.9	70-130		%Rec	1	5/22/2020 9:20:00 PM	R69085
Surr: 4-Bromofluorobenzene	90.0	70-130		%Rec	1	5/22/2020 9:20:00 PM	R69085
Surr: Dibromofluoromethane	104	70-130		%Rec	1	5/22/2020 9:20:00 PM	R69085
Surr: Toluene-d8	96.3	70-130		%Rec	1	5/22/2020 9:20:00 PM	R69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2005813**
Date Reported: **5/29/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: TRIP BLANK
Project: Earth Con Consultants Inc TWP Roswell
Collection Date:
Lab ID: 2005813-018
Matrix: TRIP BLANK
Received Date: 5/19/2020 9:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	5/22/2020 5:24:00 PM	SL69085
Toluene	ND	1.0		µg/L	1	5/22/2020 5:24:00 PM	SL69085
Ethylbenzene	ND	1.0		µg/L	1	5/22/2020 5:24:00 PM	SL69085
Xylenes, Total	ND	1.5		µg/L	1	5/22/2020 5:24:00 PM	SL69085
Surr: 1,2-Dichloroethane-d4	96.0	70-130		%Rec	1	5/22/2020 5:24:00 PM	SL69085
Surr: 4-Bromofluorobenzene	90.4	70-130		%Rec	1	5/22/2020 5:24:00 PM	SL69085
Surr: Dibromofluoromethane	103	70-130		%Rec	1	5/22/2020 5:24:00 PM	SL69085
Surr: Toluene-d8	98.5	70-130		%Rec	1	5/22/2020 5:24:00 PM	SL69085

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2005813**
29-May-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **SL69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2392962** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		89.1	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	9.7		10.00		97.2	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **SL69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2393389** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.8	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.4	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.1	70	130			
Surr: Toluene-d8	9.9		10.00		98.6	70	130			

Sample ID: **2005813-001ams** SampType: **MS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-34** Batch ID: **SL69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2394026** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	20	1.0	20.00	0	100	70	130			
Surr: 1,2-Dichloroethane-d4	9.4		10.00		93.7	70	130			
Surr: 4-Bromofluorobenzene	9.2		10.00		91.9	70	130			
Surr: Dibromofluoromethane	10		10.00		102	70	130			
Surr: Toluene-d8	9.8		10.00		97.7	70	130			

Sample ID: **2005813-001amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-34** Batch ID: **SL69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2394027** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	25	1.0	20.00	0	124	70	130	19.1	20	
Toluene	24	1.0	20.00	0	120	70	130	18.0	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2005813**
29-May-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **2005813-001amsd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-34** Batch ID: **SL69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2394027** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.9	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.2		10.00		91.9	70	130	0	0	
Surr: Dibromofluoromethane	10		10.00		104	70	130	0	0	
Surr: Toluene-d8	9.7		10.00		97.3	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2005813**
29-May-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2393390** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	100	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Chlorobenzene	22	1.0	20.00	0	112	70	130			
1,1-Dichloroethene	22	1.0	20.00	0	109	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	98.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.0		10.00		89.9	70	130			
Surr: 4-Bromofluorobenzene	8.9		10.00		89.1	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.3	70	130			
Surr: Toluene-d8	9.7		10.00		97.2	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2393391** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2005813**
29-May-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2393391** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2005813**
29-May-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R69085** RunNo: **69085**
Prep Date: Analysis Date: **5/22/2020** SeqNo: **2393391** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.8	70	130			
Surr: 4-Bromofluorobenzene	9.0		10.00		90.4	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.1	70	130			
Surr: Toluene-d8	9.9		10.00		98.6	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2005813**
29-May-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb-52613** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **52613** RunNo: **69147**
Prep Date: **5/21/2020** Analysis Date: **5/26/2020** SeqNo: **2396516** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.8		4.000		70.0	15	124			
Surr: 4-Terphenyl-d14	5.7		4.000		144	15	203			

Sample ID: **lcs-52613** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **52613** RunNo: **69147**
Prep Date: **5/21/2020** Analysis Date: **5/26/2020** SeqNo: **2396517** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	1.000	0	34.0	15	69.4			
Surr: Nitrobenzene-d5	2.8		4.000		71.0	15	124			
Surr: 4-Terphenyl-d14	5.2		4.000		130	15	203			

Sample ID: **lcsd-52613** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **52613** RunNo: **69147**
Prep Date: **5/21/2020** Analysis Date: **5/26/2020** SeqNo: **2396518** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	1.000	0	32.0	15	69.4	0	20	
Surr: Nitrobenzene-d5	2.6		4.000		66.0	15	124	0	0	
Surr: 4-Terphenyl-d14	5.4		4.000		135	15	203	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: **EARTH CON** Work Order Number: **2005813** RcptNo: **1**

Received By: **Isaiah Ortiz** **5/19/2020 9:30:00 AM** I-OK

Completed By: **Isaiah Ortiz** **5/19/2020 11:31:19 AM** I-OK

Reviewed By: DAD 5/19/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? Courier

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

~~# of preserved bottles checked for pH:~~ ~~05/20/20~~ 05/19/20 IO
~~(<2 or >12 unless noted)~~ IO
~~Adjusted?~~
~~Checked by:~~

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.2	Good	Not Present			
2	4.2	Good	Not Present			

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: EarthCon Consultants, Inc.
ATTN: James Mullooly
Mailing Address: 1880 West Oak Parkway Bldg. 100, Suite 106 Marietta, GA 30062
Phone #: 770-973-2100 x 2896
email or Fax#: jmullooly@earthcon.com
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. TWP Roswell station 9
Project #: 02201200 37 GW Monitoring 2020
Project Manager: JD Haines, PG
Sampler: CM Barnhill, PG
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): 3.3-0.1(cf) 3.2°C (°C) 4.2-0.1(cf) 4.1°C

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2005813	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	BTEX 8260	1-4 Dioxane				
05/14/2020	0847	H_2O	MW-34	3x40mL VOA's	HCL	-001											X					
05/14/2020	0847	H_2O	MW-34 Duplicate	3x40mL VOA's	HCL	-002											X					
05/14/20	11:06	H_2O	MW-29	3x40mL VOA's	HCL	-003											X					
05/14/20	1535	H_2O	MW-27	3x40mL VOA's	HCL	-004											X					
05/14/20	~~1300~~ 1500 per bottles LB 5/26/20	H_2O	MW-27 Equipment Rinsate	3x40mL VOA's	HCL	-005											X					
05/15/20	1135	H_2O	MW-21	3x40mL VOA's	HCL	-006											X					
05/15/20	1135	H_2O	MW-21 Duplicate	3x40mL VOA's	HCL	-007											X					
05/17/20	0756	H_2O	MW-22	3x40mL VOA's 1 Liter AG	HCL / None	-008								X				X				
05/17/20	0720	H_2O	MW-22 Equipment Rinsate	3x40mL VOA's	HCL	-009								X								
05/17/20	0902	H_2O	MW-26	3x40mL VOA's 1 L (AG)	HCL / None	-010								X				X				
05/17/20	0948	H_2O	MW-20	3x40mL VOA's 1 Liter AG	HCL / None	-011								X				X				

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
05/18/20	1530	[signature]	[signature]	UPS	05/19/20	0930
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: * As per phone call between Andy Freeman & James Mullooly @ 10% discount cost needs to be applied *

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: EarthCon Consultants, Inc.
ATTN: James Malloolu
Mailing Address: 1880 West Oak Parkway Bldg 100 Suite 106, Marietta GA 30062
Phone #: 770-903-2100 x2896
email or Fax#: jmalloolu@earthcon.com
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: EarthCon Consultants, Inc. TWP Roswell Station 9
Project #: 022072 0037 GW Monitoring 2020
Project Manager: JD Haines, PG
Sampler: CM Barnhill, PG
On Ice: ☑ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): (°C)

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2005813	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1-4 Dioxane
05/17/20	11:17	H_2O	MW-42	3x40mL VOAs 1L (AG)	HCL / None	-012								X			X
05/17/20	12:05	H_2O	MW-40	3x40mL VOAs 1 Liter AG	HCL / None	-013								X			X
05/17/20	1310	H_2O	MW-41	3x40mL VOAs 1x1L AG	HCL / None	-014								X			X
05/17/20	1405	H_2O	MW-39	3x40mL VOAs 1x1L AG	HCL / None	-015								X			X
05/17/20	1405	H_2O	MW-39 Duplicate	3x40mL VOAs 1x1L AG	HCL / None	-016								X			X
			TRIP Blank	2x40mL HCL	HCL / None	-017											
			TRIP Blank	3x40mL VOAs	HCL / None												

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
05/18/20	1530	[signature]	[signature]	UPS	5/19/20	0930
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: * As per phone call between James Malloolu & Andy Freeman a 10% Discount needs to be applied to Costs *

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

September 28, 2020

Sofie Weber-Snapp
Earth Con
14405 Walters Rd Ste 700
Houston, TX
TEL: (317) 450-6126
FAX:

RE: Earth Con Consultants Inc TWP Roswell Station 9 OrderNo.: 2009662

Dear Sofie Weber-Snapp:

Hall Environmental Analysis Laboratory received 7 sample(s) on 9/11/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-17
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/9/2020 4:17:00 PM
Lab ID: 2009662-001
Matrix: AQUEOUS
Received Date: 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0	P	µg/L	1	9/12/2020 5:26:29 PM	A71800
Toluene	ND	1.0	P	µg/L	1	9/12/2020 5:26:29 PM	A71800
Ethylbenzene	ND	1.0	P	µg/L	1	9/12/2020 5:26:29 PM	A71800
Xylenes, Total	ND	1.5	P	µg/L	1	9/12/2020 5:26:29 PM	A71800
Surr: 1,2-Dichloroethane-d4	96.8	70-130	P	%Rec	1	9/12/2020 5:26:29 PM	A71800
Surr: Dibromofluoromethane	92.8	70-130	P	%Rec	1	9/12/2020 5:26:29 PM	A71800
Surr: Toluene-d8	103	70-130	P	%Rec	1	9/12/2020 5:26:29 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-10
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 8:00:00 AM
Lab ID: 2009662-002
Matrix: AQUEOUS
Received Date: 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0	P	µg/L	1	9/12/2020 5:55:57 PM	A71800
Toluene	ND	1.0	P	µg/L	1	9/12/2020 5:55:57 PM	A71800
Ethylbenzene	ND	1.0	P	µg/L	1	9/12/2020 5:55:57 PM	A71800
Xylenes, Total	ND	1.5	P	µg/L	1	9/12/2020 5:55:57 PM	A71800
Surr: 1,2-Dichloroethane-d4	96.2	70-130	P	%Rec	1	9/12/2020 5:55:57 PM	A71800
Surr: Dibromofluoromethane	91.2	70-130	P	%Rec	1	9/12/2020 5:55:57 PM	A71800
Surr: Toluene-d8	103	70-130	P	%Rec	1	9/12/2020 5:55:57 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-11
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 8:38:00 AM
Lab ID: 2009662-003
Matrix: AQUEOUS
Received Date: 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	9/12/2020 6:25:23 PM	A71800
Toluene	ND	1.0		µg/L	1	9/12/2020 6:25:23 PM	A71800
Ethylbenzene	ND	1.0		µg/L	1	9/12/2020 6:25:23 PM	A71800
Xylenes, Total	ND	1.5		µg/L	1	9/12/2020 6:25:23 PM	A71800
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	9/12/2020 6:25:23 PM	A71800
Surr: Dibromofluoromethane	94.7	70-130		%Rec	1	9/12/2020 6:25:23 PM	A71800
Surr: Toluene-d8	101	70-130		%Rec	1	9/12/2020 6:25:23 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: SVE-30
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 9:05:00 AM
Lab ID: 2009662-004
Matrix: AQUEOUS
Received Date: 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	5.9	2.0		µg/L	1	9/22/2020 1:59:00 PM	55229
Surr: Nitrobenzene-d5	53.0	15-124		%Rec	1	9/22/2020 1:59:00 PM	55229
Surr: 2-Fluorobiphenyl	44.0	15-135		%Rec	1	9/22/2020 1:59:00 PM	55229
Surr: 4-Terphenyl-d14	58.0	15-203		%Rec	1	9/22/2020 1:59:00 PM	55229
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	8.6	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Toluene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Ethylbenzene	20	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Methyl tert-butyl ether (MTBE)	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2,4-Trimethylbenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,3,5-Trimethylbenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2-Dichloroethane (EDC)	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2-Dibromoethane (EDB)	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Naphthalene	ND	10	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1-Methylnaphthalene	ND	20	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
2-Methylnaphthalene	ND	20	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Acetone	ND	50	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Bromobenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Bromodichloromethane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Bromoform	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Bromomethane	ND	15	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
2-Butanone	ND	50	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Carbon disulfide	ND	50	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Carbon Tetrachloride	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Chlorobenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Chloroethane	10	10	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Chloroform	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Chloromethane	ND	15	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
2-Chlorotoluene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
4-Chlorotoluene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
cis-1,2-DCE	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
cis-1,3-Dichloropropene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2-Dibromo-3-chloropropane	ND	10	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Dibromochloromethane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Dibromomethane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2-Dichlorobenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,3-Dichlorobenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,4-Dichlorobenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Dichlorodifluoromethane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: SVE-30
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 9:05:00 AM
Lab ID: 2009662-004
Matrix: AQUEOUS
Received Date: 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethane	25	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,1-Dichloroethene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2-Dichloropropane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,3-Dichloropropane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
2,2-Dichloropropane	ND	10	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,1-Dichloropropene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Hexachlorobutadiene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
2-Hexanone	ND	50	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Isopropylbenzene	5.6	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
4-Isopropyltoluene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
4-Methyl-2-pentanone	ND	50	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Methylene Chloride	ND	15	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
n-Butylbenzene	ND	15	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
n-Propylbenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
sec-Butylbenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Styrene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
tert-Butylbenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,1,1,2-Tetrachloroethane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,1,2,2-Tetrachloroethane	ND	10	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Tetrachloroethene (PCE)	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
trans-1,2-DCE	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
trans-1,3-Dichloropropene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2,3-Trichlorobenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2,4-Trichlorobenzene	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,1,1-Trichloroethane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,1,2-Trichloroethane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Trichloroethene (TCE)	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Trichlorofluoromethane	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
1,2,3-Trichloropropane	ND	10	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Vinyl chloride	ND	5.0	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Xylenes, Total	ND	7.5	D	µg/L	5	9/12/2020 6:54:50 PM	A71800
Surr: 1,2-Dichloroethane-d4	94.4	70-130	D	%Rec	5	9/12/2020 6:54:50 PM	A71800
Surr: 4-Bromofluorobenzene	89.9	70-130	D	%Rec	5	9/12/2020 6:54:50 PM	A71800
Surr: Dibromofluoromethane	92.9	70-130	D	%Rec	5	9/12/2020 6:54:50 PM	A71800
Surr: Toluene-d8	100	70-130	D	%Rec	5	9/12/2020 6:54:50 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: RW-1
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 11:15:00 AM
Lab ID: 2009662-005 **Matrix:** AQUEOUS **Received Date:** 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	9/22/2020 2:43:00 PM	55229
Surr: Nitrobenzene-d5	38.5	15-124		%Rec	1	9/22/2020 2:43:00 PM	55229
Surr: 2-Fluorobiphenyl	37.5	15-135		%Rec	1	9/22/2020 2:43:00 PM	55229
Surr: 4-Terphenyl-d14	47.0	15-203		%Rec	1	9/22/2020 2:43:00 PM	55229
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	25	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Toluene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Ethylbenzene	6.2	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2,4-Trimethylbenzene	3.3	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Naphthalene	5.6	2.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1-Methylnaphthalene	5.0	4.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
2-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Acetone	ND	10		µg/L	1	9/12/2020 7:24:33 PM	A71800
Bromobenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Bromodichloromethane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Bromoform	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Bromomethane	ND	3.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
2-Butanone	ND	10		µg/L	1	9/12/2020 7:24:33 PM	A71800
Carbon disulfide	ND	10		µg/L	1	9/12/2020 7:24:33 PM	A71800
Carbon Tetrachloride	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Chlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Chloroethane	ND	2.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Chloroform	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Chloromethane	ND	3.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
2-Chlorotoluene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
4-Chlorotoluene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
cis-1,2-DCE	1.0	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Dibromochloromethane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Dibromomethane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: RW-1
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 11:15:00 AM
Lab ID: 2009662-005
Matrix: AQUEOUS
Received Date: 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloroethane	3.1	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,1-Dichloroethene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2-Dichloropropane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,3-Dichloropropane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
2,2-Dichloropropane	ND	2.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,1-Dichloropropene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Hexachlorobutadiene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
2-Hexanone	ND	10		µg/L	1	9/12/2020 7:24:33 PM	A71800
Isopropylbenzene	2.5	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
4-Isopropyltoluene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
4-Methyl-2-pentanone	ND	10		µg/L	1	9/12/2020 7:24:33 PM	A71800
Methylene Chloride	ND	3.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
n-Butylbenzene	ND	3.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
n-Propylbenzene	1.8	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
sec-Butylbenzene	1.4	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Styrene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
tert-Butylbenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
trans-1,2-DCE	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Trichlorofluoromethane	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Vinyl chloride	ND	1.0		µg/L	1	9/12/2020 7:24:33 PM	A71800
Xylenes, Total	ND	1.5		µg/L	1	9/12/2020 7:24:33 PM	A71800
Surr: 1,2-Dichloroethane-d4	80.6	70-130		%Rec	1	9/12/2020 7:24:33 PM	A71800
Surr: 4-Bromofluorobenzene	113	70-130		%Rec	1	9/12/2020 7:24:33 PM	A71800
Surr: Dibromofluoromethane	80.0	70-130		%Rec	1	9/12/2020 7:24:33 PM	A71800
Surr: Toluene-d8	100	70-130		%Rec	1	9/12/2020 7:24:33 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: SVE-28
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 11:48:00 AM
Lab ID: 2009662-006
Matrix: AQUEOUS
Received Date: 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	ND	1.0		µg/L	1	9/22/2020 3:27:00 PM	55229
Surr: Nitrobenzene-d5	44.0	15-124		%Rec	1	9/22/2020 3:27:00 PM	55229
Surr: 2-Fluorobiphenyl	32.0	15-135		%Rec	1	9/22/2020 3:27:00 PM	55229
Surr: 4-Terphenyl-d14	40.5	15-203		%Rec	1	9/22/2020 3:27:00 PM	55229

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Field Blank
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 3:00:00 PM
Lab ID: 2009662-007 **Matrix:** AQUEOUS **Received Date:** 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Toluene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Ethylbenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Naphthalene	ND	2.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
2-Methylnaphthalene	ND	4.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Acetone	ND	10		µg/L	1	9/12/2020 7:53:56 PM	A71800
Bromobenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Bromodichloromethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Bromoform	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Bromomethane	ND	3.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
2-Butanone	ND	10		µg/L	1	9/12/2020 7:53:56 PM	A71800
Carbon disulfide	ND	10		µg/L	1	9/12/2020 7:53:56 PM	A71800
Carbon Tetrachloride	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Chlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Chloroethane	ND	2.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Chloroform	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Chloromethane	ND	3.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
2-Chlorotoluene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
4-Chlorotoluene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
cis-1,2-DCE	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Dibromochloromethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Dibromomethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,3-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,4-Dichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Dichlorodifluoromethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,1-Dichloroethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,1-Dichloroethene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2-Dichloropropane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,3-Dichloropropane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
2,2-Dichloropropane	ND	2.0		µg/L	1	9/12/2020 7:53:56 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2009662**
Date Reported: **9/28/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Field Blank
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 9/10/2020 3:00:00 PM
Lab ID: 2009662-007 **Matrix:** AQUEOUS **Received Date:** 9/11/2020 9:50:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Hexachlorobutadiene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
2-Hexanone	ND	10		µg/L	1	9/12/2020 7:53:56 PM	A71800
Isopropylbenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
4-Isopropyltoluene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
4-Methyl-2-pentanone	ND	10		µg/L	1	9/12/2020 7:53:56 PM	A71800
Methylene Chloride	ND	3.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
n-Butylbenzene	ND	3.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
n-Propylbenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
sec-Butylbenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Styrene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
tert-Butylbenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
trans-1,2-DCE	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,1,1-Trichloroethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,1,2-Trichloroethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Trichloroethene (TCE)	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Trichlorofluoromethane	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
1,2,3-Trichloropropane	ND	2.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Vinyl chloride	ND	1.0		µg/L	1	9/12/2020 7:53:56 PM	A71800
Xylenes, Total	ND	1.5		µg/L	1	9/12/2020 7:53:56 PM	A71800
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%Rec	1	9/12/2020 7:53:56 PM	A71800
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	9/12/2020 7:53:56 PM	A71800
Surr: Dibromofluoromethane	95.2	70-130		%Rec	1	9/12/2020 7:53:56 PM	A71800
Surr: Toluene-d8	101	70-130		%Rec	1	9/12/2020 7:53:56 PM	A71800

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009662**
28-Sep-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Statio

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A71800** RunNo: **71800**
Prep Date: Analysis Date: **9/12/2020** SeqNo: **2512127** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009662**
28-Sep-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Statio

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A71800** RunNo: **71800**
Prep Date: Analysis Date: **9/12/2020** SeqNo: **2512127** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.0	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.9	70	130			
Surr: Dibromofluoromethane	9.3		10.00		93.4	70	130			
Surr: Toluene-d8	10		10.00		102	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **A71800** RunNo: **71800**
Prep Date: Analysis Date: **9/12/2020** SeqNo: **2512128** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	17	1.0	20.00	0	86.9	70	130			
Toluene	20	1.0	20.00	0	101	70	130			
Chlorobenzene	19	1.0	20.00	0	94.7	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009662**
28-Sep-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Statio

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **A71800** RunNo: **71800**
Prep Date: Analysis Date: **9/12/2020** SeqNo: **2512128** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	17	1.0	20.00	0	86.9	70	130			
Trichloroethene (TCE)	15	1.0	20.00	0	75.7	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	9.3		10.00		92.5	70	130			
Surr: Toluene-d8	10		10.00		99.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2009662**
28-Sep-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Statio

Sample ID: **mb-55229** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **55229** RunNo: **72061**
Prep Date: **9/17/2020** Analysis Date: **9/22/2020** SeqNo: **2524285** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	1.4		4.000		36.0	15	124			
Surr: 2,4,6-Tribromophenol	3.3		8.000		40.8	15	96.4			
Surr: 2-Fluorobiphenyl	1.4		4.000		35.0	15	135			
Surr: 4-Terphenyl-d14	2.9		4.000		73.5	15	203			

Sample ID: **lcs-55229** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **55229** RunNo: **72061**
Prep Date: **9/17/2020** Analysis Date: **9/22/2020** SeqNo: **2524286** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	1.000	0	46.0	15	69.4			
Surr: Nitrobenzene-d5	2.2		4.000		54.0	15	124			
Surr: 2,4,6-Tribromophenol	1.8		8.000		22.8	15	96.4			
Surr: 2-Fluorobiphenyl	1.7		4.000		43.5	15	135			
Surr: 4-Terphenyl-d14	2.6		4.000		66.0	15	203			

Sample ID: **lcsd-55229** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **55229** RunNo: **72061**
Prep Date: **9/17/2020** Analysis Date: **9/22/2020** SeqNo: **2524287** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	1.000	0	22.0	15	69.4	0	20	R
Surr: Nitrobenzene-d5	1.1		4.000		27.0	15	124	0	0	
Surr: 2,4,6-Tribromophenol	1.5		8.000		19.0	15	96.4	0	0	
Surr: 2-Fluorobiphenyl	0.94		4.000		23.5	15	135	0	0	
Surr: 4-Terphenyl-d14	1.4		4.000		34.5	15	203	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Earth Con Work Order Number: 2009662 RcptNo: 1

Received By: Cheyenne Cason 9/11/2020 9:50:00 AM

Completed By: Emily Mocho 9/11/2020 11:31:22 AM

Reviewed By: CM 9/11/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: EM 9/11/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	3.3	Good	Not Present			

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

Client: EarthCon Consultants, Inc.
ATTN: Sofie Weber Snapp
Mailing Address: 880 West Oak Parkway, Suite 106
Marietta, Ga 30062
Phone #: 770.973.2100
email or Fax#: SWeberSnapp@earthcon.com
QA/QC Package: SDiamond@EarthCon.com
☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. TWP Roswell Station 9
Project #: GW Monitoring 2020 Roswell Station 9
Project Manager: Sofie Weber-Snapp
Sampler: CM Barnhill, PE
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 3.3+0=3.3 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2009662	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4-dioxane using EPA method 8270C SIM			
09/09/20	16:17	H_2O	MW-17	3x40mL VOAs	HCL	001	X							X			X			
09/10/20	0800	H_2O	MW-10	3x40mL VOAs	HCL	002	X							X			X			
09/10/20	0838	H_2O	MW-11	3x40mL VOAs	HCL	003	X							X			X			
9/10	9:05		SVE-30	3x40mL VOAs	HCL	004								X			X			
	per samples		qm 9/11/20	1x1Liter Amber G	None	1														
09/10/20	11:15	H_2O	RW-1	3x40mL VOAs	HCL	005								X			X			
				1Liter Amber G	None	1														
09/10/20	11:48	H_2O	SVE-28	1x1Liter Amber Glass	None	006											X			
09/10/20	15:00	H_2O	Field Blank	3x40mL VOAs	HCL	007														
			(No Trip Blank In Sample Kit)																	

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
09/10/2020	15:05	[signature]	[signature]	UPS	9/11/20	0950
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Any Questions Please Call CMB @ 575.626.1615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

November 25, 2020

Sofie Weber-Snapp
Earth Con
14405 Walters Rd Ste 700
Houston, TX
TEL: (317) 450-6126
FAX

RE: TWP Roswell Station 9 OrderNo.: 2011A76

Dear Sofie Weber-Snapp:

Hall Environmental Analysis Laboratory received 14 sample(s) on 11/20/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-37
Project: TWP Roswell Station 9
Collection Date: 11/12/2020 10:35:00 AM
Lab ID: 2011A76-001
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/22/2020 7:41:47 PM	B73542
Toluene	ND	1.0		µg/L	1	11/22/2020 7:41:47 PM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/22/2020 7:41:47 PM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/22/2020 7:41:47 PM	B73542
Surr: 1,2-Dichloroethane-d4	98.1	70-130		%Rec	1	11/22/2020 7:41:47 PM	B73542
Surr: 4-Bromofluorobenzene	99.0	70-130		%Rec	1	11/22/2020 7:41:47 PM	B73542
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/22/2020 7:41:47 PM	B73542
Surr: Toluene-d8	99.1	70-130		%Rec	1	11/22/2020 7:41:47 PM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-37 Duplicate
Project: TWP Roswell Station 9
Collection Date: 11/12/2020 10:35:00 AM
Lab ID: 2011A76-002
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/22/2020 8:09:02 PM	B73542
Toluene	ND	1.0		µg/L	1	11/22/2020 8:09:02 PM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/22/2020 8:09:02 PM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/22/2020 8:09:02 PM	B73542
Surr: 1,2-Dichloroethane-d4	97.5	70-130		%Rec	1	11/22/2020 8:09:02 PM	B73542
Surr: 4-Bromofluorobenzene	94.0	70-130		%Rec	1	11/22/2020 8:09:02 PM	B73542
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/22/2020 8:09:02 PM	B73542
Surr: Toluene-d8	97.8	70-130		%Rec	1	11/22/2020 8:09:02 PM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-34
Project: TWP Roswell Station 9
Collection Date: 11/12/2020 11:30:00 AM
Lab ID: 2011A76-003
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/22/2020 8:36:23 PM	B73542
Toluene	ND	1.0		µg/L	1	11/22/2020 8:36:23 PM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/22/2020 8:36:23 PM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/22/2020 8:36:23 PM	B73542
Surr: 1,2-Dichloroethane-d4	97.1	70-130		%Rec	1	11/22/2020 8:36:23 PM	B73542
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/22/2020 8:36:23 PM	B73542
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/22/2020 8:36:23 PM	B73542
Surr: Toluene-d8	98.8	70-130		%Rec	1	11/22/2020 8:36:23 PM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-35
Project: TWP Roswell Station 9
Collection Date: 11/12/2020 12:15:00 PM
Lab ID: 2011A76-004
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/22/2020 9:03:35 PM	B73542
Toluene	ND	1.0		µg/L	1	11/22/2020 9:03:35 PM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/22/2020 9:03:35 PM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/22/2020 9:03:35 PM	B73542
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	11/22/2020 9:03:35 PM	B73542
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	11/22/2020 9:03:35 PM	B73542
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/22/2020 9:03:35 PM	B73542
Surr: Toluene-d8	97.5	70-130		%Rec	1	11/22/2020 9:03:35 PM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-35 Duplicate
Project: TWP Roswell Station 9
Collection Date: 11/12/2020 12:15:00 PM
Lab ID: 2011A76-005
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/22/2020 9:30:51 PM	B73542
Toluene	ND	1.0		µg/L	1	11/22/2020 9:30:51 PM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/22/2020 9:30:51 PM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/22/2020 9:30:51 PM	B73542
Surr: 1,2-Dichloroethane-d4	96.2	70-130		%Rec	1	11/22/2020 9:30:51 PM	B73542
Surr: 4-Bromofluorobenzene	97.4	70-130		%Rec	1	11/22/2020 9:30:51 PM	B73542
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/22/2020 9:30:51 PM	B73542
Surr: Toluene-d8	98.2	70-130		%Rec	1	11/22/2020 9:30:51 PM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-32
Project: TWP Roswell Station 9
Collection Date: 11/12/2020 1:46:00 PM
Lab ID: 2011A76-006
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/22/2020 11:46:45 PM	B73542
Toluene	ND	1.0		µg/L	1	11/22/2020 11:46:45 PM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/22/2020 11:46:45 PM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/22/2020 11:46:45 PM	B73542
Surr: 1,2-Dichloroethane-d4	94.1	70-130		%Rec	1	11/22/2020 11:46:45 PM	B73542
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	11/22/2020 11:46:45 PM	B73542
Surr: Dibromofluoromethane	108	70-130		%Rec	1	11/22/2020 11:46:45 PM	B73542
Surr: Toluene-d8	98.1	70-130		%Rec	1	11/22/2020 11:46:45 PM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-29
Project: TWP Roswell Station 9
Collection Date: 11/12/2020 3:00:00 PM
Lab ID: 2011A76-007
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/23/2020 12:13:58 AM	B73542
Toluene	ND	1.0		µg/L	1	11/23/2020 12:13:58 AM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/23/2020 12:13:58 AM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/23/2020 12:13:58 AM	B73542
Surr: 1,2-Dichloroethane-d4	96.5	70-130		%Rec	1	11/23/2020 12:13:58 AM	B73542
Surr: 4-Bromofluorobenzene	99.4	70-130		%Rec	1	11/23/2020 12:13:58 AM	B73542
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/23/2020 12:13:58 AM	B73542
Surr: Toluene-d8	97.8	70-130		%Rec	1	11/23/2020 12:13:58 AM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-27
Project: TWP Roswell Station 9
Collection Date: 11/16/2020 2:20:00 PM
Lab ID: 2011A76-008
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/23/2020 1:35:32 AM	B73542
Toluene	ND	1.0		µg/L	1	11/23/2020 1:35:32 AM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/23/2020 1:35:32 AM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/23/2020 1:35:32 AM	B73542
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	11/23/2020 1:35:32 AM	B73542
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	11/23/2020 1:35:32 AM	B73542
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/23/2020 1:35:32 AM	B73542
Surr: Toluene-d8	102	70-130		%Rec	1	11/23/2020 1:35:32 AM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-21
Project: TWP Roswell Station 9
Collection Date: 11/18/2020 2:27:00 PM
Lab ID: 2011A76-009
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/23/2020 2:02:44 AM	B73542
Toluene	ND	1.0		µg/L	1	11/23/2020 2:02:44 AM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/23/2020 2:02:44 AM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/23/2020 2:02:44 AM	B73542
Surr: 1,2-Dichloroethane-d4	99.3	70-130		%Rec	1	11/23/2020 2:02:44 AM	B73542
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	11/23/2020 2:02:44 AM	B73542
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/23/2020 2:02:44 AM	B73542
Surr: Toluene-d8	96.4	70-130		%Rec	1	11/23/2020 2:02:44 AM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-21 Duplicate
Project: TWP Roswell Station 9
Collection Date: 11/18/2020 2:27:00 PM
Lab ID: 2011A76-010
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/23/2020 2:29:57 AM	B73542
Toluene	ND	1.0		µg/L	1	11/23/2020 2:29:57 AM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/23/2020 2:29:57 AM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/23/2020 2:29:57 AM	B73542
Surr: 1,2-Dichloroethane-d4	96.0	70-130		%Rec	1	11/23/2020 2:29:57 AM	B73542
Surr: 4-Bromofluorobenzene	99.8	70-130		%Rec	1	11/23/2020 2:29:57 AM	B73542
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/23/2020 2:29:57 AM	B73542
Surr: Toluene-d8	96.1	70-130		%Rec	1	11/23/2020 2:29:57 AM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-17
Project: TWP Roswell Station 9
Collection Date: 11/19/2020 11:10:00 AM
Lab ID: 2011A76-011
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/23/2020 2:57:08 AM	B73542
Toluene	ND	1.0		µg/L	1	11/23/2020 2:57:08 AM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/23/2020 2:57:08 AM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/23/2020 2:57:08 AM	B73542
Surr: 1,2-Dichloroethane-d4	97.2	70-130		%Rec	1	11/23/2020 2:57:08 AM	B73542
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	11/23/2020 2:57:08 AM	B73542
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/23/2020 2:57:08 AM	B73542
Surr: Toluene-d8	98.1	70-130		%Rec	1	11/23/2020 2:57:08 AM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-14
Project: TWP Roswell Station 9
Collection Date: 11/19/2020 1:15:00 PM
Lab ID: 2011A76-012
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/23/2020 3:24:21 AM	B73542
Toluene	ND	1.0		µg/L	1	11/23/2020 3:24:21 AM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/23/2020 3:24:21 AM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/23/2020 3:24:21 AM	B73542
Surr: 1,2-Dichloroethane-d4	98.2	70-130		%Rec	1	11/23/2020 3:24:21 AM	B73542
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	11/23/2020 3:24:21 AM	B73542
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/23/2020 3:24:21 AM	B73542
Surr: Toluene-d8	97.9	70-130		%Rec	1	11/23/2020 3:24:21 AM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Trip Blank
Project: TWP Roswell Station 9
Collection Date:
Lab ID: 2011A76-013
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/23/2020 3:51:36 AM	B73542
Toluene	ND	1.0		µg/L	1	11/23/2020 3:51:36 AM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/23/2020 3:51:36 AM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/23/2020 3:51:36 AM	B73542
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	11/23/2020 3:51:36 AM	B73542
Surr: 4-Bromofluorobenzene	98.0	70-130		%Rec	1	11/23/2020 3:51:36 AM	B73542
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/23/2020 3:51:36 AM	B73542
Surr: Toluene-d8	96.7	70-130		%Rec	1	11/23/2020 3:51:36 AM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011A76**
Date Reported: **11/25/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-27 Duplicate
Project: TWP Roswell Station 9
Collection Date: 11/16/2020 2:20:00 PM
Lab ID: 2011A76-014
Matrix: AQUEOUS
Received Date: 11/20/2020 10:35:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	11/23/2020 4:18:48 AM	B73542
Toluene	ND	1.0		µg/L	1	11/23/2020 4:18:48 AM	B73542
Ethylbenzene	ND	1.0		µg/L	1	11/23/2020 4:18:48 AM	B73542
Xylenes, Total	ND	1.5		µg/L	1	11/23/2020 4:18:48 AM	B73542
Surr: 1,2-Dichloroethane-d4	102	70-130		%Rec	1	11/23/2020 4:18:48 AM	B73542
Surr: 4-Bromofluorobenzene	111	70-130		%Rec	1	11/23/2020 4:18:48 AM	B73542
Surr: Dibromofluoromethane	107	70-130		%Rec	1	11/23/2020 4:18:48 AM	B73542
Surr: Toluene-d8	108	70-130		%Rec	1	11/23/2020 4:18:48 AM	B73542

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011A76**
25-Nov-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **B73542** RunNo: **73542**
Prep Date: Analysis Date: **11/22/2020** SeqNo: **2590729** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	9.8		10.00		97.9	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **B73542** RunNo: **73542**
Prep Date: Analysis Date: **11/22/2020** SeqNo: **2590730** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	101	70	130			
Toluene	19	1.0	20.00	0	93.4	70	130			
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.9	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	9.3		10.00		93.0	70	130			

Sample ID: **2011a76-007a ms** SampType: **MS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-29** Batch ID: **B73542** RunNo: **73542**
Prep Date: Analysis Date: **11/23/2020** SeqNo: **2590738** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130			
Toluene	19	1.0	20.00	0	96.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		97.6	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	9.4		10.00		93.8	70	130			

Sample ID: **2011a76-007a msd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-29** Batch ID: **B73542** RunNo: **73542**
Prep Date: Analysis Date: **11/23/2020** SeqNo: **2590739** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.6	70	130	3.80	20	
Toluene	18	1.0	20.00	0	88.8	70	130	7.99	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011A76**
25-Nov-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **2011a76-007a msd** SampType: **MSD** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **MW-29** Batch ID: **B73542** RunNo: **73542**
Prep Date: Analysis Date: **11/23/2020** SeqNo: **2590739** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.7	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.9		10.00		99.4	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		111	70	130	0	0	
Surr: Toluene-d8	9.4		10.00		93.7	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: **Earth Con** Work Order Number: **2011A76** RcptNo: **1**

Received By: **Sean Livingston** **11/20/2020 10:35:00 AM** Sean Livingston

Completed By: **Desiree Dominguez** **11/20/2020 11:25:12 AM** DD

Reviewed By: JR 11/20/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: SGL 11/20/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date:
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.7	Good	Yes			

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

Client: EarthCon Consultants Inc.
ATTN: Sofie Weber-Snapp
Mailing Address: 1800 West Oak Parkway Suite 106
Marietta, Ga 30062
Phone #: 775.973.2108
email or Fax#: sweber snapp@earthcon.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush
Project Name: EarthCon Consultants, Inc. TWP Roswell Station #9
Project #: GW Monitoring 2020 TWP Roswell Station 9
Project Manager: Sofie Weber-Snapp
Sampler: CM Barnhill, PG
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp(including CF): 2.8-0.1=2.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2011A76	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA)	8270 (Semi-VOA)	Total Coliform (Present/Absent)	BTEX 8260
11/2/2020	10:35	H_2O	MW-37	3x40mL VOAs	HCL	-001											X
11/2/2020	10:35	H_2O	MW-37 Duplicate			-002											X
11/2/2020	11:30	H_2O	MW-34			-003											X
11/2/2020	12:15	H_2O	MW-35			-004											X
11/2/2020	12:15	H_2O	MW-35 Duplicate			-005											X
11/2/2020	13:46	H_2O	MW-32			-006											X
11/2/2020	15:08	H_2O	MW-29			-007											X
11/6/2020	14:20	H_2O	MW-27			-008											X
11/18/2020	14:27	H_2O	MW-21			-009											X
11/18/20	14:27	H_2O	MW-21 Duplicate			-010											X
11/19/20	11:10	H_2O	MW-17			-011											X
11/19/20	13:15	H_2O	MW-14			-012											X
			TripBlank			-013											

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/19/2020	14:45		SGZ	UPS	11/20/20	10:35
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
Any Questions? Please Call CMBC 575.626.1615
MW-27 Duplicate -014

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 09, 2020

Sofie Weber-Snapp
Earth Con
14405 Walters Rd Ste 700
Houston, TX
TEL: (317) 450-6126
FAX:

RE: TWP Roswell Station 9 OrderNo.: 2011B69

Dear Sofie Weber-Snapp:

Hall Environmental Analysis Laboratory received 15 sample(s) on 11/24/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-22
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 1:30:00 PM
Lab ID: 2011B69-001
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2020 5:10:00 PM	56660
Surr: Nitrobenzene-d5	57.5	15-124		%Rec	1	12/1/2020 5:10:00 PM	56660
Surr: 2,4,6-Tribromophenol	53.8	15-96.4		%Rec	1	12/1/2020 5:10:00 PM	56660
Surr: 2-Fluorobiphenyl	46.0	15-135		%Rec	1	12/1/2020 5:10:00 PM	56660
Surr: 4-Terphenyl-d14	95.0	15-203		%Rec	1	12/1/2020 5:10:00 PM	56660
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Toluene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Ethylbenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Naphthalene	ND	2.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Acetone	ND	10		µg/L	1	11/24/2020 11:18:26 PM	R73609
Bromobenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Bromodichloromethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Bromoform	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Bromomethane	ND	3.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
2-Butanone	ND	10		µg/L	1	11/24/2020 11:18:26 PM	R73609
Carbon disulfide	ND	10		µg/L	1	11/24/2020 11:18:26 PM	R73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Chlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Chloroethane	ND	2.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Chloroform	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Chloromethane	ND	3.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
cis-1,2-DCE	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Dibromochloromethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Dibromomethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-22
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 1:30:00 PM
Lab ID: 2011B69-001
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,1-Dichloroethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,1-Dichloroethene	1.4	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,1-Dichloropropene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
2-Hexanone	ND	10		µg/L	1	11/24/2020 11:18:26 PM	R73609
Isopropylbenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/24/2020 11:18:26 PM	R73609
Methylene Chloride	ND	3.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
n-Butylbenzene	ND	3.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
n-Propylbenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
sec-Butylbenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Styrene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Vinyl chloride	ND	1.0		µg/L	1	11/24/2020 11:18:26 PM	R73609
Xylenes, Total	ND	1.5		µg/L	1	11/24/2020 11:18:26 PM	R73609
Surr: 1,2-Dichloroethane-d4	92.6	70-130		%Rec	1	11/24/2020 11:18:26 PM	R73609
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	11/24/2020 11:18:26 PM	R73609
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/24/2020 11:18:26 PM	R73609
Surr: Toluene-d8	95.5	70-130		%Rec	1	11/24/2020 11:18:26 PM	R73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-22 Duplicate
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 1:30:00 PM
Lab ID: 2011B69-002
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2020 5:54:00 PM	56660
Surr: Nitrobenzene-d5	74.0	15-124		%Rec	1	12/1/2020 5:54:00 PM	56660
Surr: 2,4,6-Tribromophenol	77.8	15-96.4		%Rec	1	12/1/2020 5:54:00 PM	56660
Surr: 2-Fluorobiphenyl	62.5	15-135		%Rec	1	12/1/2020 5:54:00 PM	56660
Surr: 4-Terphenyl-d14	101	15-203		%Rec	1	12/1/2020 5:54:00 PM	56660
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Toluene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Ethylbenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Naphthalene	ND	2.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Acetone	ND	10		µg/L	1	11/24/2020 11:45:33 PM	R73609
Bromobenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Bromodichloromethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Bromoform	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Bromomethane	ND	3.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
2-Butanone	ND	10		µg/L	1	11/24/2020 11:45:33 PM	R73609
Carbon disulfide	ND	10		µg/L	1	11/24/2020 11:45:33 PM	R73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Chlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Chloroethane	ND	2.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Chloroform	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Chloromethane	ND	3.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
cis-1,2-DCE	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Dibromochloromethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Dibromomethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Project: TWP Roswell Station 9
Lab ID: 2011B69-002 **Matrix:** AQUEOUS

Client Sample ID: MW-22 Duplicate
Collection Date: 11/20/2020 1:30:00 PM
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,1-Dichloroethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,1-Dichloroethene	1.5	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,1-Dichloropropene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
2-Hexanone	ND	10		µg/L	1	11/24/2020 11:45:33 PM	R73609
Isopropylbenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/24/2020 11:45:33 PM	R73609
Methylene Chloride	ND	3.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
n-Butylbenzene	ND	3.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
n-Propylbenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
sec-Butylbenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Styrene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Vinyl chloride	ND	1.0		µg/L	1	11/24/2020 11:45:33 PM	R73609
Xylenes, Total	ND	1.5		µg/L	1	11/24/2020 11:45:33 PM	R73609
Surr: 1,2-Dichloroethane-d4	97.9	70-130		%Rec	1	11/24/2020 11:45:33 PM	R73609
Surr: 4-Bromofluorobenzene	97.6	70-130		%Rec	1	11/24/2020 11:45:33 PM	R73609
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/24/2020 11:45:33 PM	R73609
Surr: Toluene-d8	94.7	70-130		%Rec	1	11/24/2020 11:45:33 PM	R73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-20
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 2:30:00 PM
Lab ID: 2011B69-003
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2020 6:38:00 PM	56660
Surr: Nitrobenzene-d5	66.5	15-124		%Rec	1	12/1/2020 6:38:00 PM	56660
Surr: 2,4,6-Tribromophenol	65.8	15-96.4		%Rec	1	12/1/2020 6:38:00 PM	56660
Surr: 2-Fluorobiphenyl	61.5	15-135		%Rec	1	12/1/2020 6:38:00 PM	56660
Surr: 4-Terphenyl-d14	79.5	15-203		%Rec	1	12/1/2020 6:38:00 PM	56660
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Toluene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Naphthalene	ND	2.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Acetone	ND	10		µg/L	1	11/25/2020 12:12:39 AM	R73609
Bromobenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Bromoform	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Bromomethane	ND	3.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
2-Butanone	ND	10		µg/L	1	11/25/2020 12:12:39 AM	R73609
Carbon disulfide	ND	10		µg/L	1	11/25/2020 12:12:39 AM	R73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Chlorobenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Chloroethane	ND	2.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Chloroform	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Chloromethane	ND	3.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Dibromomethane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-20
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 2:30:00 PM
Lab ID: 2011B69-003
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,1-Dichloroethane	5.9	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,1-Dichloroethene	3.0	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
2-Hexanone	ND	10		µg/L	1	11/25/2020 12:12:39 AM	R73609
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2020 12:12:39 AM	R73609
Methylene Chloride	ND	3.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Styrene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Vinyl chloride	ND	1.0		µg/L	1	11/25/2020 12:12:39 AM	R73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 12:12:39 AM	R73609
Surr: 1,2-Dichloroethane-d4	96.1	70-130		%Rec	1	11/25/2020 12:12:39 AM	R73609
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	11/25/2020 12:12:39 AM	R73609
Surr: Dibromofluoromethane	108	70-130		%Rec	1	11/25/2020 12:12:39 AM	R73609
Surr: Toluene-d8	93.6	70-130		%Rec	1	11/25/2020 12:12:39 AM	R73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-26
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 3:01:00 PM
Lab ID: 2011B69-005
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2020 7:21:00 PM	56660
Surr: Nitrobenzene-d5	48.5	15-124		%Rec	1	12/1/2020 7:21:00 PM	56660
Surr: 2,4,6-Tribromophenol	39.5	15-96.4		%Rec	1	12/1/2020 7:21:00 PM	56660
Surr: 2-Fluorobiphenyl	43.0	15-135		%Rec	1	12/1/2020 7:21:00 PM	56660
Surr: 4-Terphenyl-d14	76.0	15-203		%Rec	1	12/1/2020 7:21:00 PM	56660
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Toluene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Naphthalene	ND	2.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Acetone	ND	10		µg/L	1	11/25/2020 2:27:55 AM	W73609
Bromobenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Bromoform	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Bromomethane	ND	3.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
2-Butanone	ND	10		µg/L	1	11/25/2020 2:27:55 AM	W73609
Carbon disulfide	ND	10		µg/L	1	11/25/2020 2:27:55 AM	W73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Chlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Chloroethane	ND	2.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Chloroform	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Chloromethane	ND	3.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Dibromomethane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-26
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 3:01:00 PM
Lab ID: 2011B69-005
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,1-Dichloroethane	8.8	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,1-Dichloroethene	41	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
2-Hexanone	ND	10		µg/L	1	11/25/2020 2:27:55 AM	W73609
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2020 2:27:55 AM	W73609
Methylene Chloride	ND	3.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Styrene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Vinyl chloride	ND	1.0		µg/L	1	11/25/2020 2:27:55 AM	W73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 2:27:55 AM	W73609
Surr: 1,2-Dichloroethane-d4	94.4	70-130		%Rec	1	11/25/2020 2:27:55 AM	W73609
Surr: 4-Bromofluorobenzene	92.8	70-130		%Rec	1	11/25/2020 2:27:55 AM	W73609
Surr: Dibromofluoromethane	110	70-130		%Rec	1	11/25/2020 2:27:55 AM	W73609
Surr: Toluene-d8	91.5	70-130		%Rec	1	11/25/2020 2:27:55 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-26 Duplicate
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 3:01:00 PM
Lab ID: 2011B69-006
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2020 8:04:00 PM	56660
Surr: Nitrobenzene-d5	66.5	15-124		%Rec	1	12/1/2020 8:04:00 PM	56660
Surr: 2,4,6-Tribromophenol	67.5	15-96.4		%Rec	1	12/1/2020 8:04:00 PM	56660
Surr: 2-Fluorobiphenyl	62.5	15-135		%Rec	1	12/1/2020 8:04:00 PM	56660
Surr: 4-Terphenyl-d14	88.0	15-203		%Rec	1	12/1/2020 8:04:00 PM	56660
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Toluene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Naphthalene	ND	2.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Acetone	ND	10		µg/L	1	11/25/2020 2:54:55 AM	W73609
Bromobenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Bromoform	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Bromomethane	ND	3.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
2-Butanone	ND	10		µg/L	1	11/25/2020 2:54:55 AM	W73609
Carbon disulfide	ND	10		µg/L	1	11/25/2020 2:54:55 AM	W73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Chlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Chloroethane	ND	2.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Chloroform	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Chloromethane	ND	3.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Dibromomethane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-26 Duplicate
Project: TWP Roswell Station 9
Collection Date: 11/20/2020 3:01:00 PM
Lab ID: 2011B69-006
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,1-Dichloroethane	8.7	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,1-Dichloroethene	41	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
2-Hexanone	ND	10		µg/L	1	11/25/2020 2:54:55 AM	W73609
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2020 2:54:55 AM	W73609
Methylene Chloride	ND	3.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Styrene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Vinyl chloride	ND	1.0		µg/L	1	11/25/2020 2:54:55 AM	W73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 2:54:55 AM	W73609
Surr: 1,2-Dichloroethane-d4	93.0	70-130		%Rec	1	11/25/2020 2:54:55 AM	W73609
Surr: 4-Bromofluorobenzene	92.7	70-130		%Rec	1	11/25/2020 2:54:55 AM	W73609
Surr: Dibromofluoromethane	112	70-130		%Rec	1	11/25/2020 2:54:55 AM	W73609
Surr: Toluene-d8	92.5	70-130		%Rec	1	11/25/2020 2:54:55 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-11
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 7:50:00 AM
Lab ID: 2011B69-007
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 3:21:56 AM	S73609
Toluene	ND	1.0		µg/L	1	11/25/2020 3:21:56 AM	S73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 3:21:56 AM	S73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 3:21:56 AM	S73609
Surr: 1,2-Dichloroethane-d4	95.0	70-130		%Rec	1	11/25/2020 3:21:56 AM	S73609
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	11/25/2020 3:21:56 AM	S73609
Surr: Dibromofluoromethane	114	70-130		%Rec	1	11/25/2020 3:21:56 AM	S73609
Surr: Toluene-d8	89.7	70-130		%Rec	1	11/25/2020 3:21:56 AM	S73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Project: TWP Roswell Station 9
Lab ID: 2011B69-008 **Matrix:** AQUEOUS

Client Sample ID: MW-11 Duplicate
Collection Date: 11/23/2020 7:50:00 AM
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 3:48:57 AM	S73609
Toluene	ND	1.0		µg/L	1	11/25/2020 3:48:57 AM	S73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 3:48:57 AM	S73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 3:48:57 AM	S73609
Surr: 1,2-Dichloroethane-d4	97.6	70-130		%Rec	1	11/25/2020 3:48:57 AM	S73609
Surr: 4-Bromofluorobenzene	96.4	70-130		%Rec	1	11/25/2020 3:48:57 AM	S73609
Surr: Dibromofluoromethane	120	70-130		%Rec	1	11/25/2020 3:48:57 AM	S73609
Surr: Toluene-d8	93.8	70-130		%Rec	1	11/25/2020 3:48:57 AM	S73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-10
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 8:15:00 AM
Lab ID: 2011B69-009
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 4:15:56 AM	S73609
Toluene	ND	1.0		µg/L	1	11/25/2020 4:15:56 AM	S73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 4:15:56 AM	S73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 4:15:56 AM	S73609
Surr: 1,2-Dichloroethane-d4	94.9	70-130		%Rec	1	11/25/2020 4:15:56 AM	S73609
Surr: 4-Bromofluorobenzene	94.9	70-130		%Rec	1	11/25/2020 4:15:56 AM	S73609
Surr: Dibromofluoromethane	113	70-130		%Rec	1	11/25/2020 4:15:56 AM	S73609
Surr: Toluene-d8	91.9	70-130		%Rec	1	11/25/2020 4:15:56 AM	S73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-13
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 8:40:00 AM
Lab ID: 2011B69-010
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 4:42:56 AM	S73609
Toluene	ND	1.0		µg/L	1	11/25/2020 4:42:56 AM	S73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 4:42:56 AM	S73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 4:42:56 AM	S73609
Surr: 1,2-Dichloroethane-d4	97.4	70-130		%Rec	1	11/25/2020 4:42:56 AM	S73609
Surr: 4-Bromofluorobenzene	96.9	70-130		%Rec	1	11/25/2020 4:42:56 AM	S73609
Surr: Dibromofluoromethane	115	70-130		%Rec	1	11/25/2020 4:42:56 AM	S73609
Surr: Toluene-d8	93.8	70-130		%Rec	1	11/25/2020 4:42:56 AM	S73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: SVE-30
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 9:05:00 AM
Lab ID: 2011B69-011
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	6.0	0.67	D	µg/L	1	12/1/2020 8:47:00 PM	56660
Surr: Nitrobenzene-d5	67.5	15-124	D	%Rec	1	12/1/2020 8:47:00 PM	56660
Surr: 2,4,6-Tribromophenol	80.8	15-96.4	D	%Rec	1	12/1/2020 8:47:00 PM	56660
Surr: 2-Fluorobiphenyl	60.5	15-135	D	%Rec	1	12/1/2020 8:47:00 PM	56660
Surr: 4-Terphenyl-d14	101	15-203	D	%Rec	1	12/1/2020 8:47:00 PM	56660
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	5.7	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Toluene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Ethylbenzene	8.0	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Naphthalene	ND	2.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Acetone	ND	10		µg/L	1	11/25/2020 5:09:56 AM	W73609
Bromobenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Bromoform	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Bromomethane	ND	3.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
2-Butanone	ND	10		µg/L	1	11/25/2020 5:09:56 AM	W73609
Carbon disulfide	ND	10		µg/L	1	11/25/2020 5:09:56 AM	W73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Chlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Chloroethane	4.0	2.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Chloroform	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Chloromethane	ND	3.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Dibromomethane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: SVE-30
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 9:05:00 AM
Lab ID: 2011B69-011
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,1-Dichloroethane	33	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
2-Hexanone	ND	10		µg/L	1	11/25/2020 5:09:56 AM	W73609
Isopropylbenzene	4.1	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2020 5:09:56 AM	W73609
Methylene Chloride	ND	3.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
n-Propylbenzene	3.1	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
sec-Butylbenzene	2.1	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Styrene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2,4-Trichlorobenzene	3.3	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,1,1-Trichloroethane	2.1	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Vinyl chloride	ND	1.0		µg/L	1	11/25/2020 5:09:56 AM	W73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 5:09:56 AM	W73609
Surr: 1,2-Dichloroethane-d4	89.1	70-130		%Rec	1	11/25/2020 5:09:56 AM	W73609
Surr: 4-Bromofluorobenzene	107	70-130		%Rec	1	11/25/2020 5:09:56 AM	W73609
Surr: Dibromofluoromethane	106	70-130		%Rec	1	11/25/2020 5:09:56 AM	W73609
Surr: Toluene-d8	92.4	70-130		%Rec	1	11/25/2020 5:09:56 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: SVE-28
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 9:30:00 AM
Lab ID: 2011B69-012
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	ND	1.0		µg/L	1	12/1/2020 9:29:00 PM	56660
Surr: Nitrobenzene-d5	78.5	15-124		%Rec	1	12/1/2020 9:29:00 PM	56660
Surr: 2,4,6-Tribromophenol	73.8	15-96.4		%Rec	1	12/1/2020 9:29:00 PM	56660
Surr: 2-Fluorobiphenyl	62.0	15-135		%Rec	1	12/1/2020 9:29:00 PM	56660
Surr: 4-Terphenyl-d14	83.5	15-203		%Rec	1	12/1/2020 9:29:00 PM	56660
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	1.3	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Toluene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Naphthalene	ND	2.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Acetone	ND	10		µg/L	1	11/25/2020 5:36:52 AM	W73609
Bromobenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Bromoform	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Bromomethane	ND	3.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
2-Butanone	ND	10		µg/L	1	11/25/2020 5:36:52 AM	W73609
Carbon disulfide	ND	10		µg/L	1	11/25/2020 5:36:52 AM	W73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Chlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Chloroethane	ND	2.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Chloroform	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Chloromethane	ND	3.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Dibromomethane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: SVE-28
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 9:30:00 AM
Lab ID: 2011B69-012
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,1-Dichloroethane	1.3	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
2-Hexanone	ND	10		µg/L	1	11/25/2020 5:36:52 AM	W73609
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2020 5:36:52 AM	W73609
Methylene Chloride	ND	3.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Styrene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Vinyl chloride	ND	1.0		µg/L	1	11/25/2020 5:36:52 AM	W73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 5:36:52 AM	W73609
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	11/25/2020 5:36:52 AM	W73609
Surr: 4-Bromofluorobenzene	97.7	70-130		%Rec	1	11/25/2020 5:36:52 AM	W73609
Surr: Dibromofluoromethane	111	70-130		%Rec	1	11/25/2020 5:36:52 AM	W73609
Surr: Toluene-d8	92.3	70-130		%Rec	1	11/25/2020 5:36:52 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: SVE-31
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 9:50:00 AM
Lab ID: 2011B69-013
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 6:57:50 AM	T73609
Toluene	ND	1.0		µg/L	1	11/25/2020 6:57:50 AM	T73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 6:57:50 AM	T73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 6:57:50 AM	T73609
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%Rec	1	11/25/2020 6:57:50 AM	T73609
Surr: 4-Bromofluorobenzene	94.8	70-130		%Rec	1	11/25/2020 6:57:50 AM	T73609
Surr: Dibromofluoromethane	109	70-130		%Rec	1	11/25/2020 6:57:50 AM	T73609
Surr: Toluene-d8	90.7	70-130		%Rec	1	11/25/2020 6:57:50 AM	T73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: RW-1
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 10:30:00 AM
Lab ID: 2011B69-014
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst: **DAM**	
1,4-Dioxane	ND	25	D	µg/L	10	12/4/2020 9:25:00 PM	56660
Surr: Nitrobenzene-d5	110	15-124	D	%Rec	10	12/4/2020 9:25:00 PM	56660
Surr: 2,4,6-Tribromophenol	97.5	15-96.4	SD	%Rec	10	12/4/2020 9:25:00 PM	56660
Surr: 2-Fluorobiphenyl	80.0	15-135	D	%Rec	10	12/4/2020 9:25:00 PM	56660
Surr: 4-Terphenyl-d14	110	15-203	D	%Rec	10	12/4/2020 9:25:00 PM	56660
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	38	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Toluene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Ethylbenzene	13	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2,4-Trimethylbenzene	13	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,3,5-Trimethylbenzene	2.3	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Naphthalene	4.0	2.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1-Methylnaphthalene	4.2	4.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Acetone	ND	10		µg/L	1	11/25/2020 7:24:51 AM	W73609
Bromobenzene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Bromoform	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Bromomethane	ND	3.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
2-Butanone	ND	10		µg/L	1	11/25/2020 7:24:51 AM	W73609
Carbon disulfide	ND	10		µg/L	1	11/25/2020 7:24:51 AM	W73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Chlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Chloroethane	ND	2.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Chloroform	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Chloromethane	ND	3.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
cis-1,2-DCE	3.6	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Dibromomethane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: RW-1
Project: TWP Roswell Station 9
Collection Date: 11/23/2020 10:30:00 AM
Lab ID: 2011B69-014
Matrix: AQUEOUS
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,1-Dichloroethane	3.5	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
2-Hexanone	ND	10		µg/L	1	11/25/2020 7:24:51 AM	W73609
Isopropylbenzene	3.9	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2020 7:24:51 AM	W73609
Methylene Chloride	ND	3.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
n-Propylbenzene	3.2	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
sec-Butylbenzene	2.9	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Styrene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Vinyl chloride	ND	1.0		µg/L	1	11/25/2020 7:24:51 AM	W73609
Xylenes, Total	7.9	1.5		µg/L	1	11/25/2020 7:24:51 AM	W73609
Surr: 1,2-Dichloroethane-d4	73.9	70-130		%Rec	1	11/25/2020 7:24:51 AM	W73609
Surr: 4-Bromofluorobenzene	128	70-130		%Rec	1	11/25/2020 7:24:51 AM	W73609
Surr: Dibromofluoromethane	84.9	70-130		%Rec	1	11/25/2020 7:24:51 AM	W73609
Surr: Toluene-d8	104	70-130		%Rec	1	11/25/2020 7:24:51 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Trip Blank
Project: TWP Roswell Station 9
Collection Date:
Lab ID: 2011B69-015
Matrix: TRIP BLANK
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Toluene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Ethylbenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Naphthalene	ND	2.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
2-Methylnaphthalene	ND	4.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Acetone	ND	10		µg/L	1	11/25/2020 7:51:51 AM	W73609
Bromobenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Bromodichloromethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Bromoform	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Bromomethane	ND	3.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
2-Butanone	ND	10		µg/L	1	11/25/2020 7:51:51 AM	W73609
Carbon disulfide	ND	10		µg/L	1	11/25/2020 7:51:51 AM	W73609
Carbon Tetrachloride	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Chlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Chloroethane	ND	2.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Chloroform	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Chloromethane	ND	3.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
2-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
4-Chlorotoluene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
cis-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Dibromochloromethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Dibromomethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,3-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,4-Dichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Dichlorodifluoromethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,1-Dichloroethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,1-Dichloroethene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,3-Dichloropropane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
2,2-Dichloropropane	ND	2.0		µg/L	1	11/25/2020 7:51:51 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2011B69**
Date Reported: **12/9/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Trip Blank
Project: TWP Roswell Station 9
Collection Date:
Lab ID: 2011B69-015
Matrix: TRIP BLANK
Received Date: 11/24/2020 9:05:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
1,1-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Hexachlorobutadiene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
2-Hexanone	ND	10		µg/L	1	11/25/2020 7:51:51 AM	W73609
Isopropylbenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
4-Isopropyltoluene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
4-Methyl-2-pentanone	ND	10		µg/L	1	11/25/2020 7:51:51 AM	W73609
Methylene Chloride	ND	3.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
n-Butylbenzene	ND	3.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
n-Propylbenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
sec-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Styrene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
tert-Butylbenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
trans-1,2-DCE	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,1,1-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,1,2-Trichloroethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Trichloroethene (TCE)	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Trichlorofluoromethane	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
1,2,3-Trichloropropane	ND	2.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Vinyl chloride	ND	1.0		µg/L	1	11/25/2020 7:51:51 AM	W73609
Xylenes, Total	ND	1.5		µg/L	1	11/25/2020 7:51:51 AM	W73609
Surr: 1,2-Dichloroethane-d4	93.8	70-130		%Rec	1	11/25/2020 7:51:51 AM	W73609
Surr: 4-Bromofluorobenzene	91.6	70-130		%Rec	1	11/25/2020 7:51:51 AM	W73609
Surr: Dibromofluoromethane	118	70-130		%Rec	1	11/25/2020 7:51:51 AM	W73609
Surr: Toluene-d8	90.7	70-130		%Rec	1	11/25/2020 7:51:51 AM	W73609

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **S73609** RunNo: **73609**
Prep Date: Analysis Date: **11/24/2020** SeqNo: **2593765** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	20	1.0	20.00	0	98.9	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.3	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.2	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	9.4		10.00		93.6	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **T73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593766** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	113	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.6	70	130			
Surr: Dibromofluoromethane	11		10.00		113	70	130			
Surr: Toluene-d8	9.1		10.00		91.4	70	130			

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **S73609** RunNo: **73609**
Prep Date: Analysis Date: **11/24/2020** SeqNo: **2593767** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.8	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.1	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **T73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593768** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **T73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593768** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.4	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.1	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	9.2		10.00		92.4	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R73609** RunNo: **73609**
Prep Date: Analysis Date: **11/24/2020** SeqNo: **2593730** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	109	70	130			
Toluene	20	1.0	20.00	0	98.9	70	130			
Chlorobenzene	20	1.0	20.00	0	100	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.4	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	110	70	130			
Surr: 1,2-Dichloroethane-d4	9.8		10.00		98.3	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		98.2	70	130			
Surr: Dibromofluoromethane	11		10.00		112	70	130			
Surr: Toluene-d8	9.4		10.00		93.6	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **W73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593731** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	0	113	70	130			
Toluene	19	1.0	20.00	0	97.2	70	130			
Chlorobenzene	19	1.0	20.00	0	95.3	70	130			
1,1-Dichloroethene	20	1.0	20.00	0	98.1	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	112	70	130			
Surr: 1,2-Dichloroethane-d4	9.7		10.00		96.6	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		98.6	70	130			
Surr: Dibromofluoromethane	11		10.00		113	70	130			
Surr: Toluene-d8	9.1		10.00		91.4	70	130			

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R73609** RunNo: **73609**
Prep Date: Analysis Date: **11/24/2020** SeqNo: **2593732** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R73609** RunNo: **73609**
Prep Date: Analysis Date: **11/24/2020** SeqNo: **2593732** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R73609** RunNo: **73609**
Prep Date: Analysis Date: **11/24/2020** SeqNo: **2593732** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		95.8	70	130			
Surr: 4-Bromofluorobenzene	9.9		10.00		99.1	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	9.8		10.00		97.8	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593733** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593733** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593733** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.6		10.00		96.4	70	130			
Surr: 4-Bromofluorobenzene	9.6		10.00		96.1	70	130			
Surr: Dibromofluoromethane	11		10.00		110	70	130			
Surr: Toluene-d8	9.2		10.00		92.4	70	130			

Sample ID: **2011b69-012ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SVE-28** Batch ID: **W73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593759** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	1.304	109	70	130			
Toluene	19	1.0	20.00	0	93.2	70	130			
Chlorobenzene	18	1.0	20.00	0	89.0	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	93.6	70	130			
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.6	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.2	70	130			
Surr: Dibromofluoromethane	11		10.00		111	70	130			
Surr: Toluene-d8	9.1		10.00		91.4	70	130			

Sample ID: **2011b69-012amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SVE-28** Batch ID: **W73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593760** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	23	1.0	20.00	1.304	109	70	130	0.450	20	
Toluene	18	1.0	20.00	0	91.8	70	130	1.42	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **2011b69-012amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **SVE-28** Batch ID: **W73609** RunNo: **73609**
Prep Date: Analysis Date: **11/25/2020** SeqNo: **2593760** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chlorobenzene	18	1.0	20.00	0	90.9	70	130	2.10	20	
1,1-Dichloroethene	18	1.0	20.00	0	91.8	70	130	2.02	20	
Trichloroethene (TCE)	20	1.0	20.00	0	102	70	130	0.866	20	
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130	0	0	
Surr: Dibromofluoromethane	12		10.00		116	70	130	0	0	
Surr: Toluene-d8	9.3		10.00		93.4	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2011B69**
09-Dec-20

Client: Earth Con
Project: TWP Roswell Station 9

Sample ID: **mb-56660** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **56660** RunNo: **73723**
Prep Date: **11/25/2020** Analysis Date: **12/1/2020** SeqNo: **2598646** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.6		4.000		65.5	15	124			
Surr: 2,4,6-Tribromophenol	5.0		8.000		62.5	15	96.4			
Surr: 2-Fluorobiphenyl	1.9		4.000		46.5	15	135			
Surr: 4-Terphenyl-d14	3.5		4.000		86.5	15	203			

Sample ID: **lcs-56660** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **56660** RunNo: **73723**
Prep Date: **11/25/2020** Analysis Date: **12/1/2020** SeqNo: **2598647** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	1.000	0	24.0	15	69.4			
Surr: Nitrobenzene-d5	2.1		4.000		53.5	15	124			
Surr: 2,4,6-Tribromophenol	3.8		8.000		48.0	15	96.4			
Surr: 2-Fluorobiphenyl	1.4		4.000		34.5	15	135			
Surr: 4-Terphenyl-d14	4.4		4.000		110	15	203			

Sample ID: **lcsd-56660** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **56660** RunNo: **73723**
Prep Date: **11/25/2020** Analysis Date: **12/1/2020** SeqNo: **2598648** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	1.000	0	32.0	15	69.4	0	20	R
Surr: Nitrobenzene-d5	3.2		4.000		81.0	15	124	0	0	
Surr: 2,4,6-Tribromophenol	5.3		8.000		66.0	15	96.4	0	0	
Surr: 2-Fluorobiphenyl	2.5		4.000		61.5	15	135	0	0	
Surr: 4-Terphenyl-d14	4.4		4.000		110	15	203	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Earth Con Work Order Number: 2011B69 RcptNo: 1

Received By: Sean Livingston 11/24/2020 9:05:00 AM Sean Livingston

Completed By: Emily Mocho 11/24/2020 10:15:19 AM

Reviewed By: JR 11/24/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: (<2 or >12 unless noted)
Adjusted?
Checked by: SPA 11.24.20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☒ No ☐ NA ☑

Person Notified: Clayton B. Date: 11/24/20
By Whom: Erin Melendrez Via: ☐ eMail ☒ Phone ☐ Fax ☐ In Person
Regarding: No samples for -004 received.
Client Instructions: Remove -004 from being analyzed.

16. Additional remarks: ENM 11/24/20

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	5.3	Good				
2	3.4	Good				

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: EarthCon Consultants, Inc
ATTN: Sofie Weber-Snapp
Mailing Address: 1880 West Oak Parkway Suite 106, Marietta, Ga 30062
Phone #: 775.973.2108
email or Fax#: sweber@snapp@earthcon.com
QA/QC Package: ☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: ☒ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. TWP Roswell Station 9
Project #: GW Monitoring 2020 TWP Roswell Station 9
Project Manager: Sofie Weber-Snapp
Sampler: Cm Barnhill, PG
On Ice: ☒ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): See remarks

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2011B69	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4-Dioxane 8270C SIM	BTEX 8260			
11/20/2020	1330	H_2O	MW-22	3x40mL VOAs 1 Liter AG	HCl None	001								X			X				
11/20/20	1330	H_2O	MW-22 Duplicate	3x40mL VOAs 1 Liter AG	HCl None	002								X			X				
11/20/20	1430	H_2O	MW-20			003								X			X				
11/20/20	1430	H_2O	MW-20 Duplicate			004								X			X				
11/20/20	15:01	H_2O	MW-26			005								X			X				
11/20/20	15:01	H_2O	MW-26 Duplicate			006								X			X				
11/23/20	0750	H_2O	MW-11	3x40mL VOAs	HCl	007												X			
11/23/20	0750	H_2O	MW-11 Duplicate	3x40mL VOAs	HCl	008												X			
11/23/20	0815	H_2O	MW-18	3x40mL VOAs	HCl	009												X			
11/23/20	0840	H_2O	MW-13	3x40mL VOAs	HCl	010												X			
11/23/20	0905	H_2O	SVE-30	3x40mL VOAs 1 Liter AG	HCl None	011								X			X				
11/23/20	0930	H_2O	SVE-28	3x40mL VOAs 1 Liter AG	HCl None	012								X			X				

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/23/2020	1530		SGL	UPS	11/24/20	9:05
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
5.1+0.2=5.3°C
3.2+0.2=3.4°C
-004 not sampled
Any Questions Please Call CMB @ 575.626.1615
Per Clayton B. - ENM 11/24/20

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Client: EarthCon Consultants, Inc.
ATTN: Sofie Weber-Snapp
Mailing Address: 1880 West Oak Parkway Suite 100 Marietta, GA 30062
Phone #: 775.973.2108
email or Fax#: Sweberssnapp@earthcon.com
QA/QC Package: ☑ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance ☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time: ☑ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. Twp Roswell Station 9
Project #: GW Monitoring 2020 Twp Roswell Station 9
Project Manager: Sofie Weber-Snapp
Sampler: CM Barnhill, PE
On Ice: ☑ Yes ☐ No
# of Coolers: 2
Cooler Temp (including CF): See remarks

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2011B69	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	1,4 Dioxane 8270C SIM	BTEX 8260			
11/23/2020	0950	H_2O	SVE-31	3x40mL VOAs	HCl	013												X			
11/23/2020	1030	H_2O	RW-1	3x40mL VOAs 1x1Liter AG	HCl None	014								X			X				
						015															
			Trip Blank	2x40mL VOAs	HCl	016															

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
11/23/2020	1530	[signature]	SGL	UPS	11/24/20	9:05
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks:
5.1+0.2=5.3°C
3.2+0.2=3.4°C
Any Questions Please Call CMBC 575.626.1615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

December 18, 2020

Sofie Weber-Snapp
Earth Con
14405 Walters Rd Ste 700
Houston, TX
TEL: (317) 450-6126
FAX:

RE: Earth Con Consultants Inc TWP Roswell Station 9 OrderNo.: 2012200

Dear Sofie Weber-Snapp:

Hall Environmental Analysis Laboratory received 9 sample(s) on 12/3/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: ESP Rinsate Pre-Sampling
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 8:00:00 AM
Lab ID: 2012200-001 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	12/4/2020 3:31:01 AM	SL73766
Toluene	ND	1.0		µg/L	1	12/4/2020 3:31:01 AM	SL73766
Ethylbenzene	ND	1.0		µg/L	1	12/4/2020 3:31:01 AM	SL73766
Xylenes, Total	ND	1.5		µg/L	1	12/4/2020 3:31:01 AM	SL73766
Surr: 1,2-Dichloroethane-d4	88.3	70-130		%Rec	1	12/4/2020 3:31:01 AM	SL73766
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	12/4/2020 3:31:01 AM	SL73766
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/4/2020 3:31:01 AM	SL73766
Surr: Toluene-d8	89.6	70-130		%Rec	1	12/4/2020 3:31:01 AM	SL73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-24D
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 10:35:00 AM
Lab ID: 2012200-002
Matrix: AQUEOUS
Received Date: 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	12/4/2020 3:58:24 AM	SL73766
Toluene	ND	1.0		µg/L	1	12/4/2020 3:58:24 AM	SL73766
Ethylbenzene	ND	1.0		µg/L	1	12/4/2020 3:58:24 AM	SL73766
Xylenes, Total	ND	1.5		µg/L	1	12/4/2020 3:58:24 AM	SL73766
Surr: 1,2-Dichloroethane-d4	89.2	70-130		%Rec	1	12/4/2020 3:58:24 AM	SL73766
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/4/2020 3:58:24 AM	SL73766
Surr: Dibromofluoromethane	106	70-130		%Rec	1	12/4/2020 3:58:24 AM	SL73766
Surr: Toluene-d8	90.4	70-130		%Rec	1	12/4/2020 3:58:24 AM	SL73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-24D Duplicate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 10:35:00 AM
Lab ID: 2012200-003 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **JMR**	
Benzene	ND	1.0		µg/L	1	12/4/2020 4:25:36 AM	SL73766
Toluene	ND	1.0		µg/L	1	12/4/2020 4:25:36 AM	SL73766
Ethylbenzene	ND	1.0		µg/L	1	12/4/2020 4:25:36 AM	SL73766
Xylenes, Total	ND	1.5		µg/L	1	12/4/2020 4:25:36 AM	SL73766
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%Rec	1	12/4/2020 4:25:36 AM	SL73766
Surr: 4-Bromofluorobenzene	103	70-130		%Rec	1	12/4/2020 4:25:36 AM	SL73766
Surr: Dibromofluoromethane	105	70-130		%Rec	1	12/4/2020 4:25:36 AM	SL73766
Surr: Toluene-d8	91.1	70-130		%Rec	1	12/4/2020 4:25:36 AM	SL73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-39
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 12:40:00 PM
Lab ID: 2012200-004
Matrix: AQUEOUS
Received Date: 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/15/2020 5:33:00 PM	56818
Surr: 2-Fluorobiphenyl	52.0	15-135		%Rec	1	12/15/2020 5:33:00 PM	56818
EPA METHOD 8260B: VOLATILES						Analyst:	**JMR**
Benzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Toluene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Ethylbenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Naphthalene	ND	2.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1-Methylnaphthalene	ND	4.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
2-Methylnaphthalene	ND	4.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Acetone	ND	10		µg/L	1	12/4/2020 4:52:41 AM	W73766
Bromobenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Bromodichloromethane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Bromoform	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Bromomethane	ND	3.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
2-Butanone	ND	10		µg/L	1	12/4/2020 4:52:41 AM	W73766
Carbon disulfide	ND	10		µg/L	1	12/4/2020 4:52:41 AM	W73766
Carbon Tetrachloride	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Chlorobenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Chloroethane	ND	2.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Chloroform	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Chloromethane	ND	3.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
2-Chlorotoluene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
4-Chlorotoluene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
cis-1,2-DCE	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Dibromochloromethane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Dibromomethane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,1-Dichloroethane	3.7	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,1-Dichloroethene	22	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-39
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 12:40:00 PM
Lab ID: 2012200-004 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
1,2-Dichloropropane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,3-Dichloropropane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
2,2-Dichloropropane	ND	2.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,1-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Hexachlorobutadiene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
2-Hexanone	ND	10		µg/L	1	12/4/2020 4:52:41 AM	W73766
Isopropylbenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
4-Isopropyltoluene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
4-Methyl-2-pentanone	ND	10		µg/L	1	12/4/2020 4:52:41 AM	W73766
Methylene Chloride	ND	3.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
n-Butylbenzene	ND	3.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
n-Propylbenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
sec-Butylbenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Styrene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
tert-Butylbenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
trans-1,2-DCE	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Trichlorofluoromethane	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Vinyl chloride	ND	1.0		µg/L	1	12/4/2020 4:52:41 AM	W73766
Xylenes, Total	ND	1.5		µg/L	1	12/4/2020 4:52:41 AM	W73766
Surr: 1,2-Dichloroethane-d4	90.5	70-130		%Rec	1	12/4/2020 4:52:41 AM	W73766
Surr: 4-Bromofluorobenzene	102	70-130		%Rec	1	12/4/2020 4:52:41 AM	W73766
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/4/2020 4:52:41 AM	W73766
Surr: Toluene-d8	90.9	70-130		%Rec	1	12/4/2020 4:52:41 AM	W73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-40
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 11:50:00 AM
Lab ID: 2012200-005 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/15/2020 6:18:00 PM	56818
Surr: 2-Fluorobiphenyl	62.5	15-135		%Rec	1	12/15/2020 6:18:00 PM	56818
EPA METHOD 8260B: VOLATILES						Analyst:	**JMR**
Benzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Toluene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Ethylbenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Naphthalene	ND	2.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1-Methylnaphthalene	ND	4.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
2-Methylnaphthalene	ND	4.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Acetone	ND	10		µg/L	1	12/4/2020 5:19:58 AM	W73766
Bromobenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Bromodichloromethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Bromoform	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Bromomethane	ND	3.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
2-Butanone	ND	10		µg/L	1	12/4/2020 5:19:58 AM	W73766
Carbon disulfide	ND	10		µg/L	1	12/4/2020 5:19:58 AM	W73766
Carbon Tetrachloride	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Chlorobenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Chloroethane	ND	2.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Chloroform	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Chloromethane	ND	3.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
2-Chlorotoluene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
4-Chlorotoluene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
cis-1,2-DCE	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Dibromochloromethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Dibromomethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,1-Dichloroethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,1-Dichloroethene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-40
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 11:50:00 AM
Lab ID: 2012200-005 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
1,2-Dichloropropane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,3-Dichloropropane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
2,2-Dichloropropane	ND	2.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,1-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Hexachlorobutadiene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
2-Hexanone	ND	10		µg/L	1	12/4/2020 5:19:58 AM	W73766
Isopropylbenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
4-Isopropyltoluene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
4-Methyl-2-pentanone	ND	10		µg/L	1	12/4/2020 5:19:58 AM	W73766
Methylene Chloride	ND	3.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
n-Butylbenzene	ND	3.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
n-Propylbenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
sec-Butylbenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Styrene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
tert-Butylbenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
trans-1,2-DCE	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Trichlorofluoromethane	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Vinyl chloride	ND	1.0		µg/L	1	12/4/2020 5:19:58 AM	W73766
Xylenes, Total	ND	1.5		µg/L	1	12/4/2020 5:19:58 AM	W73766
Surr: 1,2-Dichloroethane-d4	90.1	70-130		%Rec	1	12/4/2020 5:19:58 AM	W73766
Surr: 4-Bromofluorobenzene	100	70-130		%Rec	1	12/4/2020 5:19:58 AM	W73766
Surr: Dibromofluoromethane	104	70-130		%Rec	1	12/4/2020 5:19:58 AM	W73766
Surr: Toluene-d8	92.8	70-130		%Rec	1	12/4/2020 5:19:58 AM	W73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-40 Duplicate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 11:50:00 AM
Lab ID: 2012200-006 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/15/2020 7:03:00 PM	56818
Surr: 2-Fluorobiphenyl	66.5	15-135		%Rec	1	12/15/2020 7:03:00 PM	56818
EPA METHOD 8260B: VOLATILES						Analyst:	**JMR**
Benzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Toluene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Ethylbenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Naphthalene	ND	2.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1-Methylnaphthalene	ND	4.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
2-Methylnaphthalene	ND	4.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Acetone	ND	10		µg/L	1	12/4/2020 7:52:55 AM	W73766
Bromobenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Bromodichloromethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Bromoform	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Bromomethane	ND	3.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
2-Butanone	ND	10		µg/L	1	12/4/2020 7:52:55 AM	W73766
Carbon disulfide	ND	10		µg/L	1	12/4/2020 7:52:55 AM	W73766
Carbon Tetrachloride	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Chlorobenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Chloroethane	ND	2.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Chloroform	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Chloromethane	ND	3.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
2-Chlorotoluene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
4-Chlorotoluene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
cis-1,2-DCE	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Dibromochloromethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Dibromomethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,1-Dichloroethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,1-Dichloroethene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-40 Duplicate
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 11:50:00 AM
Lab ID: 2012200-006 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **JMR**	
1,2-Dichloropropane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,3-Dichloropropane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
2,2-Dichloropropane	ND	2.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,1-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Hexachlorobutadiene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
2-Hexanone	ND	10		µg/L	1	12/4/2020 7:52:55 AM	W73766
Isopropylbenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
4-Isopropyltoluene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
4-Methyl-2-pentanone	ND	10		µg/L	1	12/4/2020 7:52:55 AM	W73766
Methylene Chloride	ND	3.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
n-Butylbenzene	ND	3.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
n-Propylbenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
sec-Butylbenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Styrene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
tert-Butylbenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
trans-1,2-DCE	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Trichlorofluoromethane	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Vinyl chloride	ND	1.0		µg/L	1	12/4/2020 7:52:55 AM	W73766
Xylenes, Total	ND	1.5		µg/L	1	12/4/2020 7:52:55 AM	W73766
Surr: 1,2-Dichloroethane-d4	87.0	70-130		%Rec	1	12/4/2020 7:52:55 AM	W73766
Surr: 4-Bromofluorobenzene	105	70-130		%Rec	1	12/4/2020 7:52:55 AM	W73766
Surr: Dibromofluoromethane	102	70-130		%Rec	1	12/4/2020 7:52:55 AM	W73766
Surr: Toluene-d8	90.5	70-130		%Rec	1	12/4/2020 7:52:55 AM	W73766

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-41
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 12:10:00 PM
Lab ID: 2012200-007 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/15/2020 7:48:00 PM	56818
Surr: 2-Fluorobiphenyl	68.0	15-135		%Rec	1	12/15/2020 7:48:00 PM	56818
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Toluene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Ethylbenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Naphthalene	ND	2.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1-Methylnaphthalene	ND	4.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
2-Methylnaphthalene	ND	4.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Acetone	ND	10		µg/L	1	12/4/2020 10:28:10 PM	W73804
Bromobenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Bromodichloromethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Bromoform	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Bromomethane	ND	3.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
2-Butanone	ND	10		µg/L	1	12/4/2020 10:28:10 PM	W73804
Carbon disulfide	ND	10		µg/L	1	12/4/2020 10:28:10 PM	W73804
Carbon Tetrachloride	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Chlorobenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Chloroethane	ND	2.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Chloroform	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Chloromethane	ND	3.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
2-Chlorotoluene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
4-Chlorotoluene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
cis-1,2-DCE	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Dibromochloromethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Dibromomethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,1-Dichloroethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,1-Dichloroethene	1.1	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-41
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 12:10:00 PM
Lab ID: 2012200-007 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2-Dichloropropane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,3-Dichloropropane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
2,2-Dichloropropane	ND	2.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,1-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Hexachlorobutadiene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
2-Hexanone	ND	10		µg/L	1	12/4/2020 10:28:10 PM	W73804
Isopropylbenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
4-Isopropyltoluene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
4-Methyl-2-pentanone	ND	10		µg/L	1	12/4/2020 10:28:10 PM	W73804
Methylene Chloride	ND	3.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
n-Butylbenzene	ND	3.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
n-Propylbenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
sec-Butylbenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Styrene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
tert-Butylbenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
trans-1,2-DCE	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Trichlorofluoromethane	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Vinyl chloride	ND	1.0		µg/L	1	12/4/2020 10:28:10 PM	W73804
Xylenes, Total	ND	1.5		µg/L	1	12/4/2020 10:28:10 PM	W73804
Surr: 1,2-Dichloroethane-d4	91.4	70-130		%Rec	1	12/4/2020 10:28:10 PM	W73804
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/4/2020 10:28:10 PM	W73804
Surr: Dibromofluoromethane	105	70-130		%Rec	1	12/4/2020 10:28:10 PM	W73804
Surr: Toluene-d8	90.8	70-130		%Rec	1	12/4/2020 10:28:10 PM	W73804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-42
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 11:20:00 AM
Lab ID: 2012200-008
Matrix: AQUEOUS
Received Date: 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8270SIM						Analyst:	**DAM**
1,4-Dioxane	ND	1.0		µg/L	1	12/15/2020 8:32:00 PM	56818
Surr: 2-Fluorobiphenyl	66.5	15-135		%Rec	1	12/15/2020 8:32:00 PM	56818
EPA METHOD 8260B: VOLATILES						Analyst:	**DJF**
Benzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Toluene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Ethylbenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Naphthalene	ND	2.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Acetone	ND	10		µg/L	1	12/5/2020 1:11:45 AM	W73804
Bromobenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Bromoform	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Bromomethane	ND	3.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
2-Butanone	ND	10		µg/L	1	12/5/2020 1:11:45 AM	W73804
Carbon disulfide	ND	10		µg/L	1	12/5/2020 1:11:45 AM	W73804
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Chlorobenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Chloroethane	ND	2.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Chloroform	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Chloromethane	ND	3.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Dibromomethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,1-Dichloroethene	1.9	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: MW-42
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 11:20:00 AM
Lab ID: 2012200-008 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
2-Hexanone	ND	10		µg/L	1	12/5/2020 1:11:45 AM	W73804
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2020 1:11:45 AM	W73804
Methylene Chloride	ND	3.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Styrene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Vinyl chloride	ND	1.0		µg/L	1	12/5/2020 1:11:45 AM	W73804
Xylenes, Total	ND	1.5		µg/L	1	12/5/2020 1:11:45 AM	W73804
Surr: 1,2-Dichloroethane-d4	90.9	70-130		%Rec	1	12/5/2020 1:11:45 AM	W73804
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/5/2020 1:11:45 AM	W73804
Surr: Dibromofluoromethane	108	70-130		%Rec	1	12/5/2020 1:11:45 AM	W73804
Surr: Toluene-d8	90.9	70-130		%Rec	1	12/5/2020 1:11:45 AM	W73804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Field Blank
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 2:50:00 PM
Lab ID: 2012200-009
Matrix: AQUEOUS
Received Date: 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
Benzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Toluene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Ethylbenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Naphthalene	ND	2.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
2-Methylnaphthalene	ND	4.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Acetone	ND	10		µg/L	1	12/5/2020 2:33:17 AM	W73804
Bromobenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Bromodichloromethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Bromoform	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Bromomethane	ND	3.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
2-Butanone	ND	10		µg/L	1	12/5/2020 2:33:17 AM	W73804
Carbon disulfide	ND	10		µg/L	1	12/5/2020 2:33:17 AM	W73804
Carbon Tetrachloride	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Chlorobenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Chloroethane	ND	2.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Chloroform	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Chloromethane	ND	3.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
2-Chlorotoluene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
4-Chlorotoluene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
cis-1,2-DCE	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Dibromochloromethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Dibromomethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,3-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,4-Dichlorobenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Dichlorodifluoromethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,1-Dichloroethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,1-Dichloroethene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2-Dichloropropane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,3-Dichloropropane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
2,2-Dichloropropane	ND	2.0		µg/L	1	12/5/2020 2:33:17 AM	W73804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2012200**
Date Reported: **12/18/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Field Blank
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 11/30/2020 2:50:00 PM
Lab ID: 2012200-009 **Matrix:** AQUEOUS **Received Date:** 12/3/2020 10:30:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **DJF**	
1,1-Dichloropropene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Hexachlorobutadiene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
2-Hexanone	ND	10		µg/L	1	12/5/2020 2:33:17 AM	W73804
Isopropylbenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
4-Isopropyltoluene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
4-Methyl-2-pentanone	ND	10		µg/L	1	12/5/2020 2:33:17 AM	W73804
Methylene Chloride	ND	3.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
n-Butylbenzene	ND	3.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
n-Propylbenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
sec-Butylbenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Styrene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
tert-Butylbenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
trans-1,2-DCE	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,1,1-Trichloroethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,1,2-Trichloroethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Trichloroethene (TCE)	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Trichlorofluoromethane	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
1,2,3-Trichloropropane	ND	2.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Vinyl chloride	ND	1.0		µg/L	1	12/5/2020 2:33:17 AM	W73804
Xylenes, Total	ND	1.5		µg/L	1	12/5/2020 2:33:17 AM	W73804
Surr: 1,2-Dichloroethane-d4	91.9	70-130		%Rec	1	12/5/2020 2:33:17 AM	W73804
Surr: 4-Bromofluorobenzene	101	70-130		%Rec	1	12/5/2020 2:33:17 AM	W73804
Surr: Dibromofluoromethane	107	70-130		%Rec	1	12/5/2020 2:33:17 AM	W73804
Surr: Toluene-d8	91.4	70-130		%Rec	1	12/5/2020 2:33:17 AM	W73804

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012200**
18-Dec-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **SL73766** RunNo: **73766**
Prep Date: Analysis Date: **12/3/2020** SeqNo: **2600861** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.4	70	130			
Surr: Toluene-d8	9.1		10.00		90.6	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **SL73766** RunNo: **73766**
Prep Date: Analysis Date: **12/3/2020** SeqNo: **2600862** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.7	70	130			
Toluene	19	1.0	20.00	0	95.9	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	9.0		10.00		89.5	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012200**
18-Dec-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W73766** RunNo: **73766**
Prep Date: Analysis Date: **12/3/2020** SeqNo: **2600848** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012200**
18-Dec-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb1** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W73766** RunNo: **73766**
Prep Date: Analysis Date: **12/3/2020** SeqNo: **2600848** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.7		10.00		87.3	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		101	70	130			
Surr: Dibromofluoromethane	9.9		10.00		99.4	70	130			
Surr: Toluene-d8	9.1		10.00		90.6	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **W73766** RunNo: **73766**
Prep Date: Analysis Date: **12/3/2020** SeqNo: **2600849** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	99.7	70	130			
Toluene	19	1.0	20.00	0	95.9	70	130			
Chlorobenzene	19	1.0	20.00	0	95.9	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012200**
18-Dec-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **W73766** RunNo: **73766**
Prep Date: Analysis Date: **12/3/2020** SeqNo: **2600849** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18	1.0	20.00	0	91.1	70	130			
Trichloroethene (TCE)	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		104	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	9.0		10.00		89.5	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W73804** RunNo: **73804**
Prep Date: Analysis Date: **12/5/2020** SeqNo: **2601592** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012200**
18-Dec-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W73804** RunNo: **73804**
Prep Date: Analysis Date: **12/5/2020** SeqNo: **2601592** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.8		10.00		87.8	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012200**
18-Dec-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **W73804** RunNo: **73804**
Prep Date: Analysis Date: **12/5/2020** SeqNo: **2601592** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 4-Bromofluorobenzene	11		10.00		105	70	130			
Surr: Dibromofluoromethane	10		10.00		103	70	130			
Surr: Toluene-d8	9.2		10.00		92.1	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **W73804** RunNo: **73804**
Prep Date: Analysis Date: **12/5/2020** SeqNo: **2601593** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	105	70	130			
Toluene	19	1.0	20.00	0	92.8	70	130			
Chlorobenzene	19	1.0	20.00	0	94.6	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	94.3	70	130			
Trichloroethene (TCE)	22	1.0	20.00	0	109	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.5	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		103	70	130			
Surr: Dibromofluoromethane	11		10.00		108	70	130			
Surr: Toluene-d8	8.8		10.00		88.2	70	130			

Sample ID: **2012200-008a ms** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-42** Batch ID: **W73804** RunNo: **73804**
Prep Date: Analysis Date: **12/5/2020** SeqNo: **2601596** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	22	1.0	20.00	0	112	70	130			
Toluene	19	1.0	20.00	0	95.9	70	130			
Chlorobenzene	20	1.0	20.00	0	98.2	70	130			
1,1-Dichloroethene	21	1.0	20.00	1.908	97.3	70	130			
Trichloroethene (TCE)	23	1.0	20.00	0	115	70	130			
Surr: 1,2-Dichloroethane-d4	9.1		10.00		91.0	70	130			
Surr: 4-Bromofluorobenzene	10		10.00		102	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	8.8		10.00		88.2	70	130			

Sample ID: **2012200-008a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-42** Batch ID: **W73804** RunNo: **73804**
Prep Date: Analysis Date: **12/5/2020** SeqNo: **2601597** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	21	1.0	20.00	0	103	70	130	7.79	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012200**
18-Dec-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **2012200-008a msd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **MW-42** Batch ID: **W73804** RunNo: **73804**
Prep Date: Analysis Date: **12/5/2020** SeqNo: **2601597** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Toluene	18	1.0	20.00	0	89.1	70	130	7.32	20	
Chlorobenzene	18	1.0	20.00	0	90.4	70	130	8.26	20	
1,1-Dichloroethene	20	1.0	20.00	1.908	91.5	70	130	5.60	20	
Trichloroethene (TCE)	21	1.0	20.00	0	104	70	130	9.72	20	
Surr: 1,2-Dichloroethane-d4	9.2		10.00		92.0	70	130	0	0	
Surr: 4-Bromofluorobenzene	10		10.00		100	70	130	0	0	
Surr: Dibromofluoromethane	11		10.00		109	70	130	0	0	
Surr: Toluene-d8	8.8		10.00		88.3	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2012200**
18-Dec-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb-56818** SampType: **MBLK** TestCode: **EPA Method 8270SIM**
Client ID: **PBW** Batch ID: **56818** RunNo: **74027**
Prep Date: **12/7/2020** Analysis Date: **12/15/2020** SeqNo: **2612099** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0								
Surr: Nitrobenzene-d5	2.3		4.000		57.5	15	124			
Surr: 2,4,6-Tribromophenol	1.5		8.000		19.2	15	96.4			
Surr: 2-Fluorobiphenyl	2.1		4.000		52.0	15	135			
Surr: 4-Terphenyl-d14	3.7		4.000		92.5	15	203			

Sample ID: **lcs-56818** SampType: **LCS** TestCode: **EPA Method 8270SIM**
Client ID: **LCSW** Batch ID: **56818** RunNo: **74027**
Prep Date: **12/7/2020** Analysis Date: **12/15/2020** SeqNo: **2612100** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	1.000	0	44.0	15	69.4			
Surr: Nitrobenzene-d5	2.9		4.000		71.5	15	124			
Surr: 2,4,6-Tribromophenol	1.5		8.000		19.0	15	96.4			
Surr: 2-Fluorobiphenyl	2.7		4.000		66.5	15	135			
Surr: 4-Terphenyl-d14	4.3		4.000		108	15	203			

Sample ID: **lcsd-56818** SampType: **LCSD** TestCode: **EPA Method 8270SIM**
Client ID: **LCSS02** Batch ID: **56818** RunNo: **74027**
Prep Date: **12/7/2020** Analysis Date: **12/15/2020** SeqNo: **2612101** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,4-Dioxane	ND	1.0	1.000	0	52.0	15	69.4	0	20	
Surr: Nitrobenzene-d5	3.3		4.000		82.5	15	124	0	0	
Surr: 2,4,6-Tribromophenol	2.3		8.000		28.3	15	96.4	0	0	
Surr: 2-Fluorobiphenyl	2.9		4.000		72.0	15	135	0	0	
Surr: 4-Terphenyl-d14	4.3		4.000		108	15	203	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: clients.hallenvironmental.com

Sample Log-In Check List

Client Name: Earth Con Work Order Number: 2012200 RcptNo: 1

Received By: **Isaiah Ortiz** 12/2/2020 10:30:00 AM I-OK

Completed By: **Erin Melendrez** 12/3/2020 12:47:54 PM

Reviewed By: JR 12/3/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: _____ (<2 or >12 unless noted)
Adjusted? _____
Checked by: SGL 12/3/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: _____ Date: _____
By Whom: _____ Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding: _____
Client Instructions: _____

16. Additional remarks:

17. **Cooler Information**

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	2.6	Good				

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

Client: EarthCon Consultants, Inc
ATTN: Sofie Weber-Snapp
Mailing Address: 1880 West Oak Parkway Suite 106
Marietta GA 30062
Phone #: 775.973.2100
email or Fax#: sweber@snappearthcon.com
QA/QC Package:
☒ Standard ☐ Level 4 (Full Validation)
Accreditation
☐ NELAP ☐ Other _____
☐ EDD (Type) _____

Turn-Around Time:
☒ Standard ☐ Rush _____
Project Name: EarthCon Consultants, Inc. TWP Roswell Station 9
Project #: GW Monitoring 2020 TWP Roswell Station #9
Project Manager: Sofie Weber-Snapp
Sampler: CM Barnhill, PG
On Ice: ☒ Yes ☐ No
Sample Temperature: 24+0.2 / 2.6°C

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Request ID	Container Type and #	Preservative Type	HEAL No. 2012200	BTEX + MTBE + TMB's (8021)	BTEX + MTBE + TPH (Gas only)	TPH 8015B (GRO / DRO / MRO)	TPH (Method 418.1)	EDB (Method 504.1)	PAH's (8310 or 8270 SIMS)	RCRA 8 Metals	Anions (F,Cl,NO_3,NO_2,PO_4,SO_4)	8081 Pesticides / 8082 PCB's	8260B (VOA) Full List	8270 (Semi-VOA)	BTEX 8260	1,4-Dioxane 8270SIM			Air Bubbles (Y or N)
11/30/20	0800	H_2O	ESP Rinsate, Pre-Sampling	3x 40mL VOA's	HCL	-001												X				
11/30/2020	1035	H_2O	MW-24D	3x 40mL VOA's	HCL	-002												X				
11/30/2020	1035	H_2O	MW-24D Duplicate	3x 40mL VOA's	$HgCl_2$	-003												X				
11/30/2020	12:40	H_2O	MW-39	3x 40mL 1 Liter AG	None / HCL	-004										X			X			
11/30/20	11:50	H_2O	MW-40	3x 40mL 1 Liter AG	HCL / None	-005										X			X			
11/30/20	11:50	H_2O	MW-40 Duplicate	3x 40mL 1 & 1L AG	HCL / None	-006										X			X			
11/30/20	12:10	H_2O	MW-41	" "	" "	-007										X			X			
11/30/20	11:20	H_2O	MW-42	" "	" "	-008										X			X			
11/30/20	14:50	H_2O	Field Blank	3x 40mL VOAs	HCL	-009																

Date:	Time:	Relinquished by:	Received by:	Date	Time
12/01/2020	1500	[signature]	[signature] ups	12/03/20 TO 12/3/20	1030
Date:	Time:	Relinquished by:	Received by:	Date	Time

Remarks: Any Questions? Please Call CMBe 575.626.6615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

Appendix C

Analytical Data Packages – SVE and Groundwater Treatment System Sampling

06-Apr-2020

Steve Diamond
EarthCon
188 West Oak Parkway
Suite 106
Marietta, GA 30062

Tel: (678) 569-2892
Fax: (770) 973-7395

Re: TWP Roswell Station 9; Thermal Oxidizer SVE Influent Work Order: **20031162**

Dear Steve,

ALS Environmental received 2 samples on 27-Mar-2020 03:08 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 18.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Shawn Smythe

Electronically approved by: Shawn Smythe

Shawn Smythe
Project Manager

ALS Environmental

Date: 06-Apr-20

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influent
Work Order: **20031162**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
20031162-01	TWP West Baker Furnace	Air		3/23/2020 14:50	3/27/2020 03:08	☐
20031162-02	TWP East Baker Furnace	Air		3/23/2020 15:00	3/27/2020 03:08	☐

ALS Environmental

Date: 06-Apr-20

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influent
Work Order: 20031162

Case Narrative

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Results relate only to the items tested and are not blank corrected unless indicated.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

ALS Environmental

Date: *06-Apr-20*

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
Work Order: 20031162
Sample ID: TWP West Baker Furnace
Lab ID: 20031162-01
Collection Date: 3/23/2020 02:50 PM
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		250	ppbv	500	4/1/2020 10:05 AM
1,1,2,2-Tetrachloroethane	ND		250	ppbv	500	4/1/2020 10:05 AM
1,1,2-Trichloroethane	ND		250	ppbv	500	4/1/2020 10:05 AM
1,1-Dichloroethane	ND		250	ppbv	500	4/1/2020 10:05 AM
1,1-Dichloroethene	ND		250	ppbv	500	4/1/2020 10:05 AM
1,2,4-Trichlorobenzene	ND		250	ppbv	500	4/1/2020 10:05 AM
1,2,4-Trimethylbenzene	ND		250	ppbv	500	4/1/2020 10:05 AM
1,2-Dibromoethane	ND		250	ppbv	500	4/1/2020 10:05 AM
1,2-Dichlorobenzene	ND		250	ppbv	500	4/1/2020 10:05 AM
1,2-Dichloroethane	ND		250	ppbv	500	4/1/2020 10:05 AM
1,2-Dichloropropane	ND		250	ppbv	500	4/1/2020 10:05 AM
1,3,5-Trimethylbenzene	ND		250	ppbv	500	4/1/2020 10:05 AM
1,3-Butadiene	ND		250	ppbv	500	4/1/2020 10:05 AM
1,3-Dichlorobenzene	ND		500	ppbv	500	4/1/2020 10:05 AM
1,4-Dichlorobenzene	ND		500	ppbv	500	4/1/2020 10:05 AM
1,4-Dioxane	ND		500	ppbv	500	4/1/2020 10:05 AM
2-Butanone	ND		500	ppbv	500	4/1/2020 10:05 AM
2-Hexanone	ND		500	ppbv	500	4/1/2020 10:05 AM
2-Propanol	ND		500	ppbv	500	4/1/2020 10:05 AM
4-Ethyltoluene	ND		250	ppbv	500	4/1/2020 10:05 AM
4-Methyl-2-pentanone	ND		500	ppbv	500	4/1/2020 10:05 AM
Acetone	ND		500	ppbv	500	4/1/2020 10:05 AM
Benzene	**780**		**250**	**ppbv**	500	4/1/2020 10:05 AM
Benzyl chloride	ND		500	ppbv	500	4/1/2020 10:05 AM
Bromodichloromethane	ND		250	ppbv	500	4/1/2020 10:05 AM
Bromoform	ND		250	ppbv	500	4/1/2020 10:05 AM
Bromomethane	ND		250	ppbv	500	4/1/2020 10:05 AM
Carbon disulfide	ND		250	ppbv	500	4/1/2020 10:05 AM
Carbon tetrachloride	ND		250	ppbv	500	4/1/2020 10:05 AM
Chlorobenzene	ND		250	ppbv	500	4/1/2020 10:05 AM
Chloroethane	ND		250	ppbv	500	4/1/2020 10:05 AM
Chloroform	ND		100	ppbv	500	4/1/2020 10:05 AM
Chloromethane	ND		250	ppbv	500	4/1/2020 10:05 AM
cis-1,2-Dichloroethene	ND		250	ppbv	500	4/1/2020 10:05 AM
cis-1,3-Dichloropropene	ND		250	ppbv	500	4/1/2020 10:05 AM
Cumene	ND		250	ppbv	500	4/1/2020 10:05 AM
Cyclohexane	**26,000**		**2,500**	**ppbv**	5000	4/1/2020 11:34 AM
Dibromochloromethane	ND		250	ppbv	500	4/1/2020 10:05 AM
Dichlorodifluoromethane	ND		250	ppbv	500	4/1/2020 10:05 AM

Note:

ALS Environmental

Date: *06-Apr-20*

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
Work Order: 20031162
Sample ID: TWP West Baker Furnace
Lab ID: 20031162-01
Collection Date: 3/23/2020 02:50 PM
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Ethyl acetate	ND		250	ppbv	500	4/1/2020 10:05 AM
Ethylbenzene	ND		250	ppbv	500	4/1/2020 10:05 AM
Freon 113	ND		250	ppbv	500	4/1/2020 10:05 AM
Freon 114	ND		250	ppbv	500	4/1/2020 10:05 AM
Heptane	**19,000**		**2,500**	**ppbv**	5000	4/1/2020 11:34 AM
Hexachlorobutadiene	ND		250	ppbv	500	4/1/2020 10:05 AM
Hexane	**43,000**		**2,500**	**ppbv**	5000	4/1/2020 11:34 AM
m,p-Xylene	**540**		**250**	**ppbv**	500	4/1/2020 10:05 AM
Methylene chloride	ND		1,000	ppbv	500	4/1/2020 10:05 AM
MTBE	ND		250	ppbv	500	4/1/2020 10:05 AM
Naphthalene	ND		100	ppbv	500	4/1/2020 10:05 AM
o-Xylene	ND		250	ppbv	500	4/1/2020 10:05 AM
Propene	ND		250	ppbv	500	4/1/2020 10:05 AM
Styrene	ND		250	ppbv	500	4/1/2020 10:05 AM
Tetrachloroethene	ND		250	ppbv	500	4/1/2020 10:05 AM
Tetrahydrofuran	ND		250	ppbv	500	4/1/2020 10:05 AM
Toluene	**1,000**		**250**	**ppbv**	500	4/1/2020 10:05 AM
trans-1,2-Dichloroethene	ND		250	ppbv	500	4/1/2020 10:05 AM
trans-1,3-Dichloropropene	ND		250	ppbv	500	4/1/2020 10:05 AM
Trichloroethene	ND		100	ppbv	500	4/1/2020 10:05 AM
Trichlorofluoromethane	ND		250	ppbv	500	4/1/2020 10:05 AM
Vinyl acetate	ND		250	ppbv	500	4/1/2020 10:05 AM
Vinyl chloride	ND		250	ppbv	500	4/1/2020 10:05 AM
Surr: Bromofluorobenzene	*99.0*		*60-140*	*%REC*	500	4/1/2020 10:05 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		1,360	µg/m3	500	4/1/2020 10:05 AM
1,1,2,2-Tetrachloroethane	ND		1,720	µg/m3	500	4/1/2020 10:05 AM
1,1,2-Trichloroethane	ND		1,360	µg/m3	500	4/1/2020 10:05 AM
1,1-Dichloroethane	ND		1,010	µg/m3	500	4/1/2020 10:05 AM
1,1-Dichloroethene	ND		991	µg/m3	500	4/1/2020 10:05 AM
1,2,4-Trichlorobenzene	ND		1,860	µg/m3	500	4/1/2020 10:05 AM
1,2,4-Trimethylbenzene	ND		1,230	µg/m3	500	4/1/2020 10:05 AM
1,2-Dibromoethane	ND		1,920	µg/m3	500	4/1/2020 10:05 AM
1,2-Dichlorobenzene	ND		1,500	µg/m3	500	4/1/2020 10:05 AM
1,2-Dichloroethane	ND		1,010	µg/m3	500	4/1/2020 10:05 AM
1,2-Dichloropropane	ND		1,160	µg/m3	500	4/1/2020 10:05 AM
1,3,5-Trimethylbenzene	ND		1,230	µg/m3	500	4/1/2020 10:05 AM
1,3-Butadiene	ND		553	µg/m3	500	4/1/2020 10:05 AM
1,3-Dichlorobenzene	ND		3,010	µg/m3	500	4/1/2020 10:05 AM
1,4-Dichlorobenzene	ND		3,010	µg/m3	500	4/1/2020 10:05 AM

Note:

ALS Environmental

Date: *06-Apr-20*

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
Work Order: 20031162
Sample ID: TWP West Baker Furnace
Lab ID: 20031162-01
Collection Date: 3/23/2020 02:50 PM
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dioxane	ND		1,800	µg/m3	500	4/1/2020 10:05 AM
2-Butanone	ND		1,470	µg/m3	500	4/1/2020 10:05 AM
2-Hexanone	ND		2,050	µg/m3	500	4/1/2020 10:05 AM
2-Propanol	ND		1,230	µg/m3	500	4/1/2020 10:05 AM
4-Ethyltoluene	ND		1,230	µg/m3	500	4/1/2020 10:05 AM
4-Methyl-2-pentanone	ND		2,050	µg/m3	500	4/1/2020 10:05 AM
Acetone	ND		1,190	µg/m3	500	4/1/2020 10:05 AM
Benzene	**2,510**		**799**	**µg/m3**	500	4/1/2020 10:05 AM
Benzyl chloride	ND		2,590	µg/m3	500	4/1/2020 10:05 AM
Bromodichloromethane	ND		1,680	µg/m3	500	4/1/2020 10:05 AM
Bromoform	ND		2,580	µg/m3	500	4/1/2020 10:05 AM
Bromomethane	ND		971	µg/m3	500	4/1/2020 10:05 AM
Carbon disulfide	ND		778	µg/m3	500	4/1/2020 10:05 AM
Carbon tetrachloride	ND		1,570	µg/m3	500	4/1/2020 10:05 AM
Chlorobenzene	ND		1,150	µg/m3	500	4/1/2020 10:05 AM
Chloroethane	ND		660	µg/m3	500	4/1/2020 10:05 AM
Chloroform	ND		488	µg/m3	500	4/1/2020 10:05 AM
Chloromethane	ND		516	µg/m3	500	4/1/2020 10:05 AM
cis-1,2-Dichloroethene	ND		991	µg/m3	500	4/1/2020 10:05 AM
cis-1,3-Dichloropropene	ND		1,130	µg/m3	500	4/1/2020 10:05 AM
Cumene	ND		1,230	µg/m3	500	4/1/2020 10:05 AM
Cyclohexane	**88,300**		**8,610**	**µg/m3**	5000	4/1/2020 11:34 AM
Dibromochloromethane	ND		2,130	µg/m3	500	4/1/2020 10:05 AM
Dichlorodifluoromethane	ND		1,240	µg/m3	500	4/1/2020 10:05 AM
Ethyl acetate	ND		901	µg/m3	500	4/1/2020 10:05 AM
Ethylbenzene	ND		1,090	µg/m3	500	4/1/2020 10:05 AM
Freon 113	ND		1,920	µg/m3	500	4/1/2020 10:05 AM
Freon 114	ND		1,750	µg/m3	500	4/1/2020 10:05 AM
Heptane	**79,700**		**10,200**	**µg/m3**	5000	4/1/2020 11:34 AM
Hexachlorobutadiene	ND		2,670	µg/m3	500	4/1/2020 10:05 AM
Hexane	**151,000**		**8,810**	**µg/m3**	5000	4/1/2020 11:34 AM
m,p-Xylene	**2,320**		**1,090**	**µg/m3**	500	4/1/2020 10:05 AM
Methylene chloride	ND		3,500	µg/m3	500	4/1/2020 10:05 AM
MTBE	ND		901	µg/m3	500	4/1/2020 10:05 AM
Naphthalene	ND		524	µg/m3	500	4/1/2020 10:05 AM
o-Xylene	ND		1,090	µg/m3	500	4/1/2020 10:05 AM
Propene	ND		430	µg/m3	500	4/1/2020 10:05 AM
Styrene	ND		1,060	µg/m3	500	4/1/2020 10:05 AM
Tetrachloroethene	ND		1,700	µg/m3	500	4/1/2020 10:05 AM
Tetrahydrofuran	ND		737	µg/m3	500	4/1/2020 10:05 AM

Note:

ALS Environmental

Date: *06-Apr-20*

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
Work Order: 20031162
Sample ID: TWP West Baker Furnace
Lab ID: 20031162-01
Collection Date: 3/23/2020 02:50 PM
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	**3,820**		**942**	**µg/m3**	500	4/1/2020 10:05 AM
trans-1,2-Dichloroethene	ND		991	µg/m3	500	4/1/2020 10:05 AM
trans-1,3-Dichloropropene	ND		1,130	µg/m3	500	4/1/2020 10:05 AM
Trichloroethene	ND		537	µg/m3	500	4/1/2020 10:05 AM
Trichlorofluoromethane	ND		1,400	µg/m3	500	4/1/2020 10:05 AM
Vinyl acetate	ND		880	µg/m3	500	4/1/2020 10:05 AM
Vinyl chloride	ND		639	µg/m3	500	4/1/2020 10:05 AM
Surr: Bromofluorobenzene	*99.0*		*60-140*	*%REC*	500	4/1/2020 10:05 AM

Note:

ALS Environmental

Date: *06-Apr-20*

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
Work Order: 20031162
Sample ID: TWP East Baker Furnace
Lab ID: 20031162-02
Collection Date: 3/23/2020 03:00 PM
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		250	ppbv	500	4/1/2020 01:34 PM
1,1,2,2-Tetrachloroethane	ND		250	ppbv	500	4/1/2020 01:34 PM
1,1,2-Trichloroethane	ND		250	ppbv	500	4/1/2020 01:34 PM
1,1-Dichloroethane	ND		250	ppbv	500	4/1/2020 01:34 PM
1,1-Dichloroethene	ND		250	ppbv	500	4/1/2020 01:34 PM
1,2,4-Trichlorobenzene	ND		250	ppbv	500	4/1/2020 01:34 PM
1,2,4-Trimethylbenzene	ND		250	ppbv	500	4/1/2020 01:34 PM
1,2-Dibromoethane	ND		250	ppbv	500	4/1/2020 01:34 PM
1,2-Dichlorobenzene	ND		250	ppbv	500	4/1/2020 01:34 PM
1,2-Dichloroethane	ND		250	ppbv	500	4/1/2020 01:34 PM
1,2-Dichloropropane	ND		250	ppbv	500	4/1/2020 01:34 PM
1,3,5-Trimethylbenzene	ND		250	ppbv	500	4/1/2020 01:34 PM
1,3-Butadiene	ND		250	ppbv	500	4/1/2020 01:34 PM
1,3-Dichlorobenzene	ND		500	ppbv	500	4/1/2020 01:34 PM
1,4-Dichlorobenzene	ND		500	ppbv	500	4/1/2020 01:34 PM
1,4-Dioxane	ND		500	ppbv	500	4/1/2020 01:34 PM
2-Butanone	ND		500	ppbv	500	4/1/2020 01:34 PM
2-Hexanone	ND		500	ppbv	500	4/1/2020 01:34 PM
2-Propanol	ND		500	ppbv	500	4/1/2020 01:34 PM
4-Ethyltoluene	ND		250	ppbv	500	4/1/2020 01:34 PM
4-Methyl-2-pentanone	ND		500	ppbv	500	4/1/2020 01:34 PM
Acetone	ND		500	ppbv	500	4/1/2020 01:34 PM
Benzene	ND		250	ppbv	500	4/1/2020 01:34 PM
Benzyl chloride	ND		500	ppbv	500	4/1/2020 01:34 PM
Bromodichloromethane	ND		250	ppbv	500	4/1/2020 01:34 PM
Bromoform	ND		250	ppbv	500	4/1/2020 01:34 PM
Bromomethane	ND		250	ppbv	500	4/1/2020 01:34 PM
Carbon disulfide	ND		250	ppbv	500	4/1/2020 01:34 PM
Carbon tetrachloride	ND		250	ppbv	500	4/1/2020 01:34 PM
Chlorobenzene	ND		250	ppbv	500	4/1/2020 01:34 PM
Chloroethane	ND		250	ppbv	500	4/1/2020 01:34 PM
Chloroform	ND		100	ppbv	500	4/1/2020 01:34 PM
Chloromethane	ND		250	ppbv	500	4/1/2020 01:34 PM
cis-1,2-Dichloroethene	ND		250	ppbv	500	4/1/2020 01:34 PM
cis-1,3-Dichloropropene	ND		250	ppbv	500	4/1/2020 01:34 PM
Cumene	ND		250	ppbv	500	4/1/2020 01:34 PM
Cyclohexane	**11,000**		**250**	**ppbv**	500	4/1/2020 01:34 PM
Dibromochloromethane	ND		250	ppbv	500	4/1/2020 01:34 PM
Dichlorodifluoromethane	ND		250	ppbv	500	4/1/2020 01:34 PM

Note:

ALS Environmental

Date: *06-Apr-20*

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
Work Order: 20031162
Sample ID: TWP East Baker Furnace
Lab ID: 20031162-02
Collection Date: 3/23/2020 03:00 PM
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Ethyl acetate	ND		250	ppbv	500	4/1/2020 01:34 PM
Ethylbenzene	ND		250	ppbv	500	4/1/2020 01:34 PM
Freon 113	ND		250	ppbv	500	4/1/2020 01:34 PM
Freon 114	ND		250	ppbv	500	4/1/2020 01:34 PM
Heptane	**8,800**		**250**	**ppbv**	500	4/1/2020 01:34 PM
Hexachlorobutadiene	ND		250	ppbv	500	4/1/2020 01:34 PM
Hexane	**16,000**		**2,500**	**ppbv**	5000	4/1/2020 12:19 PM
m,p-Xylene	ND		250	ppbv	500	4/1/2020 01:34 PM
Methylene chloride	ND		1,000	ppbv	500	4/1/2020 01:34 PM
MTBE	ND		250	ppbv	500	4/1/2020 01:34 PM
Naphthalene	ND		100	ppbv	500	4/1/2020 01:34 PM
o-Xylene	ND		250	ppbv	500	4/1/2020 01:34 PM
Propene	ND		250	ppbv	500	4/1/2020 01:34 PM
Styrene	ND		250	ppbv	500	4/1/2020 01:34 PM
Tetrachloroethene	ND		250	ppbv	500	4/1/2020 01:34 PM
Tetrahydrofuran	ND		250	ppbv	500	4/1/2020 01:34 PM
Toluene	ND		250	ppbv	500	4/1/2020 01:34 PM
trans-1,2-Dichloroethene	ND		250	ppbv	500	4/1/2020 01:34 PM
trans-1,3-Dichloropropene	ND		250	ppbv	500	4/1/2020 01:34 PM
Trichloroethene	ND		100	ppbv	500	4/1/2020 01:34 PM
Trichlorofluoromethane	ND		250	ppbv	500	4/1/2020 01:34 PM
Vinyl acetate	ND		250	ppbv	500	4/1/2020 01:34 PM
Vinyl chloride	ND		250	ppbv	500	4/1/2020 01:34 PM
Surr: Bromofluorobenzene	*96.9*		*60-140*	*%REC*	500	4/1/2020 01:34 PM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		1,360	µg/m3	500	4/1/2020 01:34 PM
1,1,2,2-Tetrachloroethane	ND		1,720	µg/m3	500	4/1/2020 01:34 PM
1,1,2-Trichloroethane	ND		1,360	µg/m3	500	4/1/2020 01:34 PM
1,1-Dichloroethane	ND		1,010	µg/m3	500	4/1/2020 01:34 PM
1,1-Dichloroethene	ND		991	µg/m3	500	4/1/2020 01:34 PM
1,2,4-Trichlorobenzene	ND		1,860	µg/m3	500	4/1/2020 01:34 PM
1,2,4-Trimethylbenzene	ND		1,230	µg/m3	500	4/1/2020 01:34 PM
1,2-Dibromoethane	ND		1,920	µg/m3	500	4/1/2020 01:34 PM
1,2-Dichlorobenzene	ND		1,500	µg/m3	500	4/1/2020 01:34 PM
1,2-Dichloroethane	ND		1,010	µg/m3	500	4/1/2020 01:34 PM
1,2-Dichloropropane	ND		1,160	µg/m3	500	4/1/2020 01:34 PM
1,3,5-Trimethylbenzene	ND		1,230	µg/m3	500	4/1/2020 01:34 PM
1,3-Butadiene	ND		553	µg/m3	500	4/1/2020 01:34 PM
1,3-Dichlorobenzene	ND		3,010	µg/m3	500	4/1/2020 01:34 PM
1,4-Dichlorobenzene	ND		3,010	µg/m3	500	4/1/2020 01:34 PM

Note:

ALS Environmental

Date: *06-Apr-20*

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
Work Order: 20031162
Sample ID: TWP East Baker Furnace
Lab ID: 20031162-02
Collection Date: 3/23/2020 03:00 PM
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dioxane	ND		1,800	µg/m3	500	4/1/2020 01:34 PM
2-Butanone	ND		1,470	µg/m3	500	4/1/2020 01:34 PM
2-Hexanone	ND		2,050	µg/m3	500	4/1/2020 01:34 PM
2-Propanol	ND		1,230	µg/m3	500	4/1/2020 01:34 PM
4-Ethyltoluene	ND		1,230	µg/m3	500	4/1/2020 01:34 PM
4-Methyl-2-pentanone	ND		2,050	µg/m3	500	4/1/2020 01:34 PM
Acetone	ND		1,190	µg/m3	500	4/1/2020 01:34 PM
Benzene	ND		799	µg/m3	500	4/1/2020 01:34 PM
Benzyl chloride	ND		2,590	µg/m3	500	4/1/2020 01:34 PM
Bromodichloromethane	ND		1,680	µg/m3	500	4/1/2020 01:34 PM
Bromoform	ND		2,580	µg/m3	500	4/1/2020 01:34 PM
Bromomethane	ND		971	µg/m3	500	4/1/2020 01:34 PM
Carbon disulfide	ND		778	µg/m3	500	4/1/2020 01:34 PM
Carbon tetrachloride	ND		1,570	µg/m3	500	4/1/2020 01:34 PM
Chlorobenzene	ND		1,150	µg/m3	500	4/1/2020 01:34 PM
Chloroethane	ND		660	µg/m3	500	4/1/2020 01:34 PM
Chloroform	ND		488	µg/m3	500	4/1/2020 01:34 PM
Chloromethane	ND		516	µg/m3	500	4/1/2020 01:34 PM
cis-1,2-Dichloroethene	ND		991	µg/m3	500	4/1/2020 01:34 PM
cis-1,3-Dichloropropene	ND		1,130	µg/m3	500	4/1/2020 01:34 PM
Cumene	ND		1,230	µg/m3	500	4/1/2020 01:34 PM
Cyclohexane	**39,300**		**861**	**µg/m3**	500	4/1/2020 01:34 PM
Dibromochloromethane	ND		2,130	µg/m3	500	4/1/2020 01:34 PM
Dichlorodifluoromethane	ND		1,240	µg/m3	500	4/1/2020 01:34 PM
Ethyl acetate	ND		901	µg/m3	500	4/1/2020 01:34 PM
Ethylbenzene	ND		1,090	µg/m3	500	4/1/2020 01:34 PM
Freon 113	ND		1,920	µg/m3	500	4/1/2020 01:34 PM
Freon 114	ND		1,750	µg/m3	500	4/1/2020 01:34 PM
Heptane	**36,100**		**1,020**	**µg/m3**	500	4/1/2020 01:34 PM
Hexachlorobutadiene	ND		2,670	µg/m3	500	4/1/2020 01:34 PM
Hexane	**57,300**		**8,810**	**µg/m3**	5000	4/1/2020 12:19 PM
m,p-Xylene	ND		1,090	µg/m3	500	4/1/2020 01:34 PM
Methylene chloride	ND		3,500	µg/m3	500	4/1/2020 01:34 PM
MTBE	ND		901	µg/m3	500	4/1/2020 01:34 PM
Naphthalene	ND		524	µg/m3	500	4/1/2020 01:34 PM
o-Xylene	ND		1,090	µg/m3	500	4/1/2020 01:34 PM
Propene	ND		430	µg/m3	500	4/1/2020 01:34 PM
Styrene	ND		1,060	µg/m3	500	4/1/2020 01:34 PM
Tetrachloroethene	ND		1,700	µg/m3	500	4/1/2020 01:34 PM
Tetrahydrofuran	ND		737	µg/m3	500	4/1/2020 01:34 PM

Note:

ALS Environmental

Date: *06-Apr-20*

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
Work Order: 20031162
Sample ID: TWP East Baker Furnace
Lab ID: 20031162-02
Collection Date: 3/23/2020 03:00 PM
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	ND		942	µg/m3	500	4/1/2020 01:34 PM
trans-1,2-Dichloroethene	ND		991	µg/m3	500	4/1/2020 01:34 PM
trans-1,3-Dichloropropene	ND		1,130	µg/m3	500	4/1/2020 01:34 PM
Trichloroethene	ND		537	µg/m3	500	4/1/2020 01:34 PM
Trichlorofluoromethane	ND		1,400	µg/m3	500	4/1/2020 01:34 PM
Vinyl acetate	ND		880	µg/m3	500	4/1/2020 01:34 PM
Vinyl chloride	ND		639	µg/m3	500	4/1/2020 01:34 PM
Surr: Bromofluorobenzene	*96.9*		*60-140*	*%REC*	500	4/1/2020 01:34 PM

Note:

ALS Environmental

Date: 06-Apr-20

Client: EarthCon
Work Order: 20031162
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Infl

QC BATCH REPORT

Batch ID: **R176404** Instrument ID **VMS3** Method: **ETO-15**

mblk Sample ID **MBLK-R176404** Units: **ppbv** Analysis Date: **3/31/2020 03:28 PM**
Client ID: Run ID: **VMS3_200331A** SeqNo: **2220993** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	0.50								
1,1,2,2-Tetrachloroethane	ND	0.50								
1,1,2-Trichloroethane	ND	0.50								
1,1-Dichloroethane	ND	0.50								
1,1-Dichloroethene	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.50								
1,2,4-Trimethylbenzene	ND	0.50								
1,2-Dibromoethane	ND	0.50								
1,2-Dichlorobenzene	ND	0.50								
1,2-Dichloroethane	ND	0.50								
1,2-Dichloropropane	ND	0.50								
1,3,5-Trimethylbenzene	ND	0.50								
1,3-Butadiene	ND	0.50								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
1,4-Dioxane	ND	1.0								
2-Butanone	ND	1.0								
2-Hexanone	ND	1.0								
2-Propanol	ND	1.0								
4-Ethyltoluene	ND	0.50								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	1.0								
Benzene	ND	0.50								
Benzyl chloride	ND	1.0								
Bromodichloromethane	ND	0.50								
Bromoform	ND	0.50								
Bromomethane	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.50								
Chlorobenzene	ND	0.50								
Chloroethane	ND	0.50								
Chloroform	ND	0.20								
Chloromethane	ND	0.50								
cis-1,2-Dichloroethene	ND	0.50								
cis-1,3-Dichloropropene	ND	0.50								
Cumene	ND	0.50								
Cyclohexane	ND	0.50								
Dibromochloromethane	ND	0.50								
Dichlorodifluoromethane	ND	0.50								
Ethyl acetate	ND	0.50								
Ethylbenzene	ND	0.50								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20031162
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Infl

QC BATCH REPORT

Batch ID: **R176404** Instrument ID **VMS3** Method: **ETO-15**

Freon 113	ND	0.50						
Freon 114	ND	0.50						
Heptane	ND	0.50						
Hexachlorobutadiene	ND	0.50						
Hexane	ND	0.50						
m,p-Xylene	ND	0.50						
Methylene chloride	ND	2.0						
MTBE	ND	0.50						
Naphthalene	ND	0.20						
o-Xylene	ND	0.50						
Propene	ND	0.50						
Styrene	ND	0.50						
Tetrachloroethene	ND	0.50						
Tetrahydrofuran	ND	0.50						
Toluene	ND	0.50						
trans-1,2-Dichloroethene	ND	0.50						
trans-1,3-Dichloropropene	ND	0.50						
Trichloroethene	ND	0.20						
Trichlorofluoromethane	ND	0.50						
Vinyl acetate	ND	0.50						
Vinyl chloride	ND	0.50						
Surr: Bromofluorobenzene	9.35	0	*10*	0	*93.5*	*60-140*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20031162
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Infl

QC BATCH REPORT

Batch ID: **R176404** Instrument ID **VMS3** Method: **ETO-15**

lcs Sample ID **LCS-R176404** Units: **ppbv** Analysis Date: **3/31/2020 02:44 PM**
Client ID: Run ID: **VMS3_200331A** SeqNo: **2220992** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	10.14	0.50	10	0	101	58.8-163	0			
1,1,2,2-Tetrachloroethane	10.5	0.50	10	0	105	60-140	0			
1,1,2-Trichloroethane	10.03	0.50	10	0	100	60-140	0			
1,1-Dichloroethane	10.28	0.50	10	0	103	60-140	0			
1,1-Dichloroethene	10.42	0.50	10	0	104	60-140	0			
1,2,4-Trichlorobenzene	9.32	0.50	10	0	93.2	49.3-150	0			
1,2,4-Trimethylbenzene	11.07	0.50	10	0	111	50.1-162	0			
1,2-Dibromoethane	9.87	0.50	10	0	98.7	60-140	0			
1,2-Dichlorobenzene	10.39	0.50	10	0	104	41.9-141	0			
1,2-Dichloroethane	10.21	0.50	10	0	102	60-140	0			
1,2-Dichloropropane	10.24	0.50	10	0	102	60-140	0			
1,3,5-Trimethylbenzene	10.79	0.50	10	0	108	60-140	0			
1,3-Butadiene	9.31	0.50	10	0	93.1	50.6-140	0			
1,3-Dichlorobenzene	10.53	1.0	10	0	105	60-140	0			
1,4-Dichlorobenzene	10.08	1.0	10	0	101	55.1-145	0			
1,4-Dioxane	10.47	1.0	10	0	105	60-140	0			
2-Butanone	10.19	1.0	10	0	102	60-140	0			
2-Hexanone	10.52	1.0	10	0	105	56.2-162	0			
2-Propanol	9.93	1.0	10	0	99.3	60-140	0			
4-Ethyltoluene	11.21	0.50	10	0	112	60-140	0			
4-Methyl-2-pentanone	10.82	1.0	10	0	108	60-140	0			
Acetone	9.96	1.0	10	0	99.6	60-140	0			
Benzene	10.1	0.50	10	0	101	60-140	0			
Benzyl chloride	10.92	1.0	10	0	109	31.9-174	0			
Bromodichloromethane	10.23	0.50	10	0	102	60-140	0			
Bromoform	10.24	0.50	10	0	102	60-140	0			
Bromomethane	10.39	0.50	10	0	104	60-140	0			
Carbon disulfide	10.17	0.50	10	0	102	60-140	0			
Carbon tetrachloride	10.15	0.50	10	0	102	60-140	0			
Chlorobenzene	9.77	0.50	10	0	97.7	60-140	0			
Chloroethane	10.19	0.50	10	0	102	60-140	0			
Chloroform	10.11	0.20	10	0	101	60-140	0			
Chloromethane	10.29	0.50	10	0	103	60-140	0			
cis-1,2-Dichloroethene	10.69	0.50	10	0	107	60-140	0			
cis-1,3-Dichloropropene	10.33	0.50	10	0	103	60-140	0			
Cumene	10.59	0.50	10	0	106	60-140	0			
Cyclohexane	10.19	0.50	10	0	102	60-140	0			
Dibromochloromethane	10.06	0.50	10	0	101	60-140	0			
Dichlorodifluoromethane	10.3	0.50	10	0	103	60-140	0			
Ethyl acetate	10.51	0.50	10	0	105	60-140	0			
Ethylbenzene	10.15	0.50	10	0	102	60-140	0			
Freon 113	10.25	0.50	10	0	102	60-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20031162
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Infl

QC BATCH REPORT

Batch ID: **R176404** Instrument ID **VMS3** Method: **ETO-15**

Freon 114	10.31	0.50	10	0	103	60-140	0
Heptane	10.44	0.50	10	0	104	60-140	0
Hexachlorobutadiene	10.28	0.50	10	0	103	60-140	0
Hexane	10.47	0.50	10	0	105	60-140	0
m,p-Xylene	20.76	0.50	20	0	104	60-140	0
Methylene chloride	9.51	2.0	10	0	95.1	60-140	0
MTBE	10.01	0.50	10	0	100	60.8-151	0
Naphthalene	9.02	0.20	10	0	90.2	53.1-152	0
o-Xylene	10.41	0.50	10	0	104	60-140	0
Propene	10.1	0.50	10	0	101	34.4-139	0
Styrene	10.41	0.50	10	0	104	60-140	0
Tetrachloroethene	9.89	0.50	10	0	98.9	60-140	0
Tetrahydrofuran	9.69	0.50	10	0	96.9	60-140	0
Toluene	10.17	0.50	10	0	102	60-140	0
trans-1,2-Dichloroethene	10.19	0.50	10	0	102	60-140	0
trans-1,3-Dichloropropene	10.05	0.50	10	0	100	60-140	0
Trichloroethene	10.21	0.20	10	0	102	60-140	0
Trichlorofluoromethane	10.25	0.50	10	0	102	60-140	0
Vinyl acetate	9.37	0.50	10	0	93.7	48.4-145	0
Vinyl chloride	9.83	0.50	10	0	98.3	60-140	0
Surr: Bromofluorobenzene	10.05	0	*10*	0	*100*	*60-140*	0

The following samples were analyzed in this batch:

20031162-01A	20031162-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Laboratory Group
4388 Glendale-Milford Rd
Cincinnati, OH 45242
Ph: 513-733-5336
Fax: 513-733-5347
www.alsglobal.com

TVOC **

Client: Earthcon
Client Sample ID: TWP Roswell West Baker Furnaces
ALS Sample # 20031162-01A
Method: EPA TO-15

		Estimated Concentration	Units
	TVOC**	207145	PPBV
	TVOC**	730049	ug/m3

Client: Earthcon
Client Sample ID: TWP Roswell East Baker Furnaces
ALS Sample # 20031162-02A
Method: EPA TO-15

		Estimated Concentration	Units
	TVOC**	88703	PPBV
	TVOC**	312619	ug/m3

**TVOC calculation based on response factor and molecular weight of hexane.
****Results should be considered estimated.

ALS Environmental

Date: 06-Apr-20

Client: EarthCon
Project: TWP Roswell Station 9; Thermal Oxidizer SVE Influe
WorkOrder: **20031162**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/m3	
ppbv	

ALS Environmental

Sample Receipt Checklist

Client Name: **EARTHCON-MARIETTA** Date/Time Received: **27-Mar-20 03:08**

Work Order: **20031162** Received by: **JNW**

Checklist completed by Hannah Ponder (eSignature) 27-Mar-20 (Date) Reviewed by: Shawn Smythe (eSignature) 30-Mar-20 (Date)

Matrices: air
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	n/a		
Cooler(s)/Kit(s):			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:	_		

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

April 23, 2020

JD Haines
Earth Con
14405 Walters Rd Ste 700
Houston, TX
TEL: (317) 450-6126
FAX:

RE: TWP Roswell Station 9 Monthly GW Discharge Sampling OrderNo.: 2004689

Dear JD Haines:

Hall Environmental Analysis Laboratory received 5 sample(s) on 4/15/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2004689**
Date Reported: **4/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Pre-Treatment
Project: TWP Roswell Station 9 Monthly GW Dis
Collection Date: 4/14/2020 7:15:00 AM
Lab ID: 2004689-001
Matrix: AQUEOUS
Received Date: 4/15/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	3400	100		µg/L	100	4/19/2020 7:57:00 PM	SL68244
Toluene	5500	100		µg/L	100	4/19/2020 7:57:00 PM	SL68244
Ethylbenzene	150	100		µg/L	100	4/19/2020 7:57:00 PM	SL68244
Xylenes, Total	2700	150		µg/L	100	4/19/2020 7:57:00 PM	SL68244
Surr: 1,2-Dichloroethane-d4	101	70-130		%Rec	1	4/19/2020 5:11:00 AM	B68220
Surr: 4-Bromofluorobenzene	95.4	70-130		%Rec	1	4/19/2020 5:11:00 AM	B68220
Surr: Dibromofluoromethane	108	70-130		%Rec	1	4/19/2020 5:11:00 AM	B68220
Surr: Toluene-d8	122	70-130		%Rec	1	4/19/2020 5:11:00 AM	B68220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004689**
Date Reported: **4/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Post Air Stripper
Project: TWP Roswell Station 9 Monthly GW Dis
Collection Date: 4/14/2020 7:20:00 AM
Lab ID: 2004689-002
Matrix: AQUEOUS
Received Date: 4/15/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	2.8	1.0		µg/L	1	4/19/2020 7:33:00 PM	SL68244
Toluene	5.5	1.0		µg/L	1	4/19/2020 7:33:00 PM	SL68244
Ethylbenzene	ND	1.0		µg/L	1	4/19/2020 7:33:00 PM	SL68244
Xylenes, Total	4.0	1.5		µg/L	1	4/19/2020 7:33:00 PM	SL68244
Surr: 1,2-Dichloroethane-d4	91.5	70-130		%Rec	1	4/19/2020 7:33:00 PM	SL68244
Surr: 4-Bromofluorobenzene	98.5	70-130		%Rec	1	4/19/2020 7:33:00 PM	SL68244
Surr: Dibromofluoromethane	93.5	70-130		%Rec	1	4/19/2020 7:33:00 PM	SL68244
Surr: Toluene-d8	106	70-130		%Rec	1	4/19/2020 7:33:00 PM	SL68244

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004689**
Date Reported: **4/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Between GAC's
Project: TWP Roswell Station 9 Monthly GW Dis
Collection Date: 4/14/2020 7:25:00 AM
Lab ID: 2004689-003
Matrix: AQUEOUS
Received Date: 4/15/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	4/19/2020 5:58:00 AM	B68220
Toluene	1.4	1.0		µg/L	1	4/19/2020 5:58:00 AM	B68220
Ethylbenzene	ND	1.0		µg/L	1	4/19/2020 5:58:00 AM	B68220
Xylenes, Total	ND	1.5		µg/L	1	4/19/2020 5:58:00 AM	B68220
Surr: 1,2-Dichloroethane-d4	95.6	70-130		%Rec	1	4/19/2020 5:58:00 AM	B68220
Surr: 4-Bromofluorobenzene	97.5	70-130		%Rec	1	4/19/2020 5:58:00 AM	B68220
Surr: Dibromofluoromethane	96.3	70-130		%Rec	1	4/19/2020 5:58:00 AM	B68220
Surr: Toluene-d8	104	70-130		%Rec	1	4/19/2020 5:58:00 AM	B68220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004689**
Date Reported: **4/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Project: TWP Roswell Station 9 Monthly GW Dis
Lab ID: 2004689-004 **Matrix:** AQUEOUS

Client Sample ID: Post-Treatment
Collection Date: 4/14/2020 7:30:00 AM
Received Date: 4/15/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**MRA**
Fluoride	1.6	0.50		mg/L	5	4/16/2020 2:27:54 AM	A68163
Chloride	400	10	*	mg/L	20	4/16/2020 2:40:46 AM	A68163
Nitrogen, Nitrite (As N)	ND	0.50		mg/L	5	4/16/2020 2:27:54 AM	A68163
Bromide	0.54	0.50		mg/L	5	4/16/2020 2:27:54 AM	A68163
Nitrogen, Nitrate (As N)	12	0.50	*	mg/L	5	4/16/2020 2:27:54 AM	A68163
Phosphorus, Orthophosphate (As P)	ND	2.5		mg/L	5	4/16/2020 2:27:54 AM	A68163
Sulfate	750	10	*	mg/L	20	4/16/2020 2:40:46 AM	A68163
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**pmf**
Calcium	290	5.0		mg/L	5	4/17/2020 3:29:06 AM	B68192
Magnesium	110	5.0		mg/L	5	4/17/2020 3:29:06 AM	B68192
Potassium	2.4	1.0		mg/L	1	4/16/2020 7:31:43 AM	B68191
Sodium	200	5.0		mg/L	5	4/17/2020 3:29:06 AM	B68192
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Toluene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Ethylbenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Naphthalene	ND	2.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Acetone	ND	10		µg/L	1	4/19/2020 6:21:00 AM	A68220
Bromobenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Bromoform	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Bromomethane	ND	3.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
2-Butanone	ND	10		µg/L	1	4/19/2020 6:21:00 AM	A68220
Carbon disulfide	ND	10		µg/L	1	4/19/2020 6:21:00 AM	A68220
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Chlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Chloroethane	ND	2.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Chloroform	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Chloromethane	ND	3.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004689**
Date Reported: **4/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Project: TWP Roswell Station 9 Monthly GW Dis
Lab ID: 2004689-004 **Matrix:** AQUEOUS

Client Sample ID: Post-Treatment
Collection Date: 4/14/2020 7:30:00 AM
Received Date: 4/15/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Dibromomethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,1-Dichloroethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2-Dichloropropane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,3-Dichloropropane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
2,2-Dichloropropane	ND	2.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,1-Dichloropropene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Hexachlorobutadiene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
2-Hexanone	ND	10		µg/L	1	4/19/2020 6:21:00 AM	A68220
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
4-Isopropyltoluene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2020 6:21:00 AM	A68220
Methylene Chloride	ND	3.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
n-Butylbenzene	ND	3.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
n-Propylbenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
sec-Butylbenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Styrene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
tert-Butylbenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
trans-1,2-DCE	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Trichlorofluoromethane	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/19/2020 6:21:00 AM	A68220
Vinyl chloride	ND	1.0		µg/L	1	4/19/2020 6:21:00 AM	A68220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004689**
Date Reported: **4/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Post-Treatment
Project: TWP Roswell Station 9 Monthly GW Dis
Collection Date: 4/14/2020 7:30:00 AM
Lab ID: 2004689-004
Matrix: AQUEOUS
Received Date: 4/15/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Xylenes, Total	ND	1.5		µg/L	1	4/19/2020 6:21:00 AM	A68220
Surr: 1,2-Dichloroethane-d4	95.2	70-130		%Rec	1	4/19/2020 6:21:00 AM	A68220
Surr: 4-Bromofluorobenzene	96.1	70-130		%Rec	1	4/19/2020 6:21:00 AM	A68220
Surr: Dibromofluoromethane	96.5	70-130		%Rec	1	4/19/2020 6:21:00 AM	A68220
Surr: Toluene-d8	106	70-130		%Rec	1	4/19/2020 6:21:00 AM	A68220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004689**
Date Reported: **4/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con **Client Sample ID:** Trip Blank
Project: TWP Roswell Station 9 Monthly GW Dis **Collection Date:**
Lab ID: 2004689-005 **Matrix:** TRIP BLANK **Received Date:** 4/15/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Toluene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Ethylbenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Naphthalene	ND	2.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
2-Methylnaphthalene	ND	4.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Acetone	ND	10		µg/L	1	4/19/2020 6:45:00 AM	A68220
Bromobenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Bromodichloromethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Bromoform	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Bromomethane	ND	3.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
2-Butanone	ND	10		µg/L	1	4/19/2020 6:45:00 AM	A68220
Carbon disulfide	ND	10		µg/L	1	4/19/2020 6:45:00 AM	A68220
Carbon Tetrachloride	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Chlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Chloroethane	ND	2.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Chloroform	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Chloromethane	ND	3.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
2-Chlorotoluene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
4-Chlorotoluene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
cis-1,2-DCE	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Dibromochloromethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Dibromomethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,3-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,4-Dichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Dichlorodifluoromethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,1-Dichloroethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,1-Dichloroethene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2-Dichloropropane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,3-Dichloropropane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
2,2-Dichloropropane	ND	2.0		µg/L	1	4/19/2020 6:45:00 AM	A68220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2004689**
Date Reported: **4/23/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con **Client Sample ID:** Trip Blank
Project: TWP Roswell Station 9 Monthly GW Dis **Collection Date:**
Lab ID: 2004689-005 **Matrix:** TRIP BLANK **Received Date:** 4/15/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Hexachlorobutadiene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
2-Hexanone	ND	10		µg/L	1	4/19/2020 6:45:00 AM	A68220
Isopropylbenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
4-Isopropyltoluene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
4-Methyl-2-pentanone	ND	10		µg/L	1	4/19/2020 6:45:00 AM	A68220
Methylene Chloride	ND	3.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
n-Butylbenzene	ND	3.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
n-Propylbenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
sec-Butylbenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Styrene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
tert-Butylbenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
trans-1,2-DCE	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,1,1-Trichloroethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,1,2-Trichloroethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Trichloroethene (TCE)	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Trichlorofluoromethane	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
1,2,3-Trichloropropane	ND	2.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Vinyl chloride	ND	1.0		µg/L	1	4/19/2020 6:45:00 AM	A68220
Xylenes, Total	ND	1.5		µg/L	1	4/19/2020 6:45:00 AM	A68220
Surr: 1,2-Dichloroethane-d4	96.9	70-130		%Rec	1	4/19/2020 6:45:00 AM	A68220
Surr: 4-Bromofluorobenzene	96.0	70-130		%Rec	1	4/19/2020 6:45:00 AM	A68220
Surr: Dibromofluoromethane	98.1	70-130		%Rec	1	4/19/2020 6:45:00 AM	A68220
Surr: Toluene-d8	105	70-130		%Rec	1	4/19/2020 6:45:00 AM	A68220

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004689**
23-Apr-20

Client: Earth Con
Project: TWP Roswell Station 9 Monthly GW Discharge

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B68191** RunNo: **68191**
Prep Date: Analysis Date: **4/16/2020** SeqNo: **2357449** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	ND	1.0								

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B68191** RunNo: **68191**
Prep Date: Analysis Date: **4/16/2020** SeqNo: **2357450** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	ND	1.0	0.5000	0	105	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B68191** RunNo: **68191**
Prep Date: Analysis Date: **4/16/2020** SeqNo: **2357451** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	51	1.0	50.00	0	102	85	115			

Sample ID: **2004689-004CMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **Post-Treatment** Batch ID: **B68191** RunNo: **68191**
Prep Date: Analysis Date: **4/16/2020** SeqNo: **2357511** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	53	1.0	50.00	2.398	101	70	130			

Sample ID: **2004689-004CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **Post-Treatment** Batch ID: **B68191** RunNo: **68191**
Prep Date: Analysis Date: **4/16/2020** SeqNo: **2357512** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	58	1.0	50.00	2.398	111	70	130	9.25	20	

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B68192** RunNo: **68192**
Prep Date: Analysis Date: **4/17/2020** SeqNo: **2357549** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Sodium	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004689**
23-Apr-20

Client: Earth Con
Project: TWP Roswell Station 9 Monthly GW Discharge

Sample ID: **LLLCS** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B68192** RunNo: **68192**
Prep Date: Analysis Date: **4/17/2020** SeqNo: **2357551** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0	0.5000	0	100	50	150			
Magnesium	ND	1.0	0.5000	0	102	50	150			
Sodium	ND	1.0	0.5000	0	131	50	150			

Sample ID: **LCS** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B68192** RunNo: **68192**
Prep Date: Analysis Date: **4/17/2020** SeqNo: **2357553** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	52	1.0	50.00	0	104	85	115			
Magnesium	51	1.0	50.00	0	102	85	115			
Sodium	50	1.0	50.00	0	100	85	115			

Sample ID: **2004689-004CMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **Post-Treatment** Batch ID: **B68192** RunNo: **68192**
Prep Date: Analysis Date: **4/17/2020** SeqNo: **2360251** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	370	5.0	250.0	108.2	104	70	130			
Sodium	450	5.0	250.0	197.8	103	70	130			

Sample ID: **2004689-004CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **Post-Treatment** Batch ID: **B68192** RunNo: **68192**
Prep Date: Analysis Date: **4/17/2020** SeqNo: **2360252** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	360	5.0	250.0	108.2	100	70	130	2.27	20	
Sodium	440	5.0	250.0	197.8	98.3	70	130	2.39	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004689**
23-Apr-20

Client: Earth Con
Project: TWP Roswell Station 9 Monthly GW Discharge

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **A68163** RunNo: **68163**
Prep Date: Analysis Date: **4/15/2020** SeqNo: **2356414** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Nitrogen, Nitrite (As N)	ND	0.10								
Bromide	ND	0.10								
Nitrogen, Nitrate (As N)	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **A68163** RunNo: **68163**
Prep Date: Analysis Date: **4/15/2020** SeqNo: **2356415** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.50	0.10	0.5000	0	99.7	90	110			
Chloride	4.9	0.50	5.000	0	98.9	90	110			
Nitrogen, Nitrite (As N)	1.0	0.10	1.000	0	100	90	110			
Bromide	2.5	0.10	2.500	0	101	90	110			
Nitrogen, Nitrate (As N)	2.6	0.10	2.500	0	103	90	110			
Phosphorus, Orthophosphate (As P	5.0	0.50	5.000	0	100	90	110			
Sulfate	10	0.50	10.00	0	100	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004689**
23-Apr-20

Client: Earth Con
Project: TWP Roswell Station 9 Monthly GW Discharge

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **B68220** RunNo: **68220**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360068** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.7	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **B68220** RunNo: **68220**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360069** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.9	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.2	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.4	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **SL68244** RunNo: **68244**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360548** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.6	70	130			
Toluene	21	1.0	20.00	0	107	70	130			
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.0	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.1	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **SL68244** RunNo: **68244**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360549** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004689**
23-Apr-20

Client: Earth Con
Project: TWP Roswell Station 9 Monthly GW Discharge

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **SL68244** RunNo: **68244**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360549** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.4	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004689**
23-Apr-20

Client: Earth Con
Project: TWP Roswell Station 9 Monthly GW Discharge

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **A68220** RunNo: **68220**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360126** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	92.7	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	22	1.0	20.00	0	108	70	130			
1,1-Dichloroethene	18	1.0	20.00	0	89.3	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.2	70	130			
Surr: 1,2-Dichloroethane-d4	10		10.00		100	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.1	70	130			
Surr: Dibromofluoromethane	9.9		10.00		98.6	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A68220** RunNo: **68220**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360127** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004689**
23-Apr-20

Client: Earth Con
Project: TWP Roswell Station 9 Monthly GW Discharge

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A68220** RunNo: **68220**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360127** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2004689**
23-Apr-20

Client: Earth Con
Project: TWP Roswell Station 9 Monthly GW Discharge

Sample ID: **mb2** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **A68220** RunNo: **68220**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360127** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	9.9		10.00		98.9	70	130			
Surr: 4-Bromofluorobenzene	9.5		10.00		95.2	70	130			
Surr: Dibromofluoromethane	9.6		10.00		96.4	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R68244** RunNo: **68244**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360523** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		95.2	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		97.0	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.1	70	130			
Surr: Toluene-d8	10		10.00		105	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R68244** RunNo: **68244**
Prep Date: Analysis Date: **4/19/2020** SeqNo: **2360524** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	9.5		10.00		94.5	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.7	70	130			
Surr: Dibromofluoromethane	9.7		10.00		97.4	70	130			
Surr: Toluene-d8	10		10.00		104	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EARTH CON Work Order Number: 2004689 RcptNo: 1

Received By: Isaiah Ortiz 4/15/2020 9:15:00 AM I-OX

Completed By: Desiree Dominguez 4/15/2020 10:17:12 AM DD

Reviewed By: DAD 4/15/20

Chain of Custody

1. Is Chain of Custody sufficiently complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☑ No ☐ NA ☐
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☑ No ☐ NA ☐
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 1 (<2 or >12 unless noted)
Adjusted?
Checked by: SPA 4/15/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: Date
By Whom: Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person
Regarding:
Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	0.7	Good	Not Present			

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

Client: EarthCon Consultants, Inc.
ATTN: James Mullooly
Mailing Address: 1880 West Oak Parkway Bldg. 100 Suite 106, Marietta, Ga 30062
Phone #: 770-973-2100, X 2896
email or Fax#: Jmullooly@earthcon.com
QA/QC Package: Sdiamond@earthcon.com
☒ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☒ Standard ☐ Rush

Project Name: EarthCon Consultants Inc. TWP Roswell Station 9
Project #: 02.2012.0037.00 Monthly Discharge Water April 2020
Project Manager: J.D. Haines, PG
Sampler: Cm Barnhill, PG
On Ice: ☒ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 0.9 - 0.2 (cf) 0.7 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2004689	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Dissolved Metals:	Ca, Mg, K, Na	O-Phosphorus	Bromide	* Field Filtered *
04/14/2020	7:15	H_2O	Pre-Treatment	3x 40mL VOAs	HCL	-001	X														
	7:20	H_2O	Post Airstripper	3x 40mL VOAs	HCL	-002	X														
	7:25	H_2O	Between GACs	3x 40mL VOAs	HCL	-003	X														
	7:30	H_2O	Post Treatment	3x 40mL VOAs	HCL	-004							X	X			X	X	X	X	X
				1x 500mL HDPE	H_2SO_4																
				2x 125mL HDPE	None HNO_3																
			TRIP Blank	2x 40mL VOAs	HCL	-005															

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
04/14/2020		[signature]	T-Q	ups	4/15/20	0915
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Any Questions? Please Call CMB @ 575.626.1415
Send Results ASAP TO: JHaines@earthcon.com
Jmullooly@earthcon.com

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

June 10, 2020

JD Haines
Earth Con
14405 Walters Rd Ste 700
Houston, TX
TEL: (317) 450-6126
FAX:

RE: Earth Con Consultants Inc TWP Roswell Station 9 OrderNo.: 2006097

Dear JD Haines:

Hall Environmental Analysis Laboratory received 5 sample(s) on 6/2/2020 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites. In order to properly interpret your results, it is imperative that you review this report in its entirety. See the sample checklist and/or the Chain of Custody for information regarding the sample receipt temperature and preservation. Data qualifiers or a narrative will be provided if the sample analysis or analytical quality control parameters require a flag. When necessary, data qualifiers are provided on both the sample analysis report and the QC summary report, both sections should be reviewed. All samples are reported, as received, unless otherwise indicated. Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH and residual chlorine are qualified as being analyzed outside of the recommended holding time.

Please don't hesitate to contact HEAL for any additional information or clarifications.

ADHS Cert #AZ0682 -- NMED-DWB Cert #NM9425 -- NMED-Micro Cert #NM0901

Sincerely,

Andy Freeman
Laboratory Manager
4901 Hawkins NE
Albuquerque, NM 87109

Analytical Report
Lab Order **2006097**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Pre-Treatment
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/31/2020 7:30:00 AM
Lab ID: 2006097-001
Matrix: AQUEOUS
Received Date: 6/2/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	3100	100		µg/L	100	6/6/2020 6:31:00 PM	SL69443
Toluene	4400	100		µg/L	100	6/6/2020 6:31:00 PM	SL69443
Ethylbenzene	170	100		µg/L	100	6/6/2020 6:31:00 PM	SL69443
Xylenes, Total	2200	150		µg/L	100	6/6/2020 6:31:00 PM	SL69443
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	100	6/6/2020 6:31:00 PM	SL69443
Surr: Dibromofluoromethane	101	70-130		%Rec	100	6/6/2020 6:31:00 PM	SL69443
Surr: Toluene-d8	104	70-130		%Rec	100	6/6/2020 6:31:00 PM	SL69443

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006097**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Project: Earth Con Consultants Inc TWP Roswell
Lab ID: 2006097-002 **Matrix:** AQUEOUS

Client Sample ID: Post Air Stripper
Collection Date: 5/31/2020 7:35:00 AM
Received Date: 6/2/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/6/2020 6:55:00 PM	SL69443
Toluene	ND	1.0		µg/L	1	6/6/2020 6:55:00 PM	SL69443
Ethylbenzene	ND	1.0		µg/L	1	6/6/2020 6:55:00 PM	SL69443
Xylenes, Total	ND	1.5		µg/L	1	6/6/2020 6:55:00 PM	SL69443
Surr: 1,2-Dichloroethane-d4	108	70-130		%Rec	1	6/6/2020 6:55:00 PM	SL69443
Surr: Dibromofluoromethane	103	70-130		%Rec	1	6/6/2020 6:55:00 PM	SL69443
Surr: Toluene-d8	104	70-130		%Rec	1	6/6/2020 6:55:00 PM	SL69443

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006097**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Between GACs
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/31/2020 7:45:00 AM
Lab ID: 2006097-003
Matrix: AQUEOUS
Received Date: 6/2/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260: VOLATILES SHORT LIST						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/6/2020 7:19:00 PM	SL69443
Toluene	ND	1.0		µg/L	1	6/6/2020 7:19:00 PM	SL69443
Ethylbenzene	ND	1.0		µg/L	1	6/6/2020 7:19:00 PM	SL69443
Xylenes, Total	ND	1.5		µg/L	1	6/6/2020 7:19:00 PM	SL69443
Surr: 1,2-Dichloroethane-d4	105	70-130		%Rec	1	6/6/2020 7:19:00 PM	SL69443
Surr: Dibromofluoromethane	101	70-130		%Rec	1	6/6/2020 7:19:00 PM	SL69443
Surr: Toluene-d8	103	70-130		%Rec	1	6/6/2020 7:19:00 PM	SL69443

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006097**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Project: Earth Con Consultants Inc TWP Roswell
Lab ID: 2006097-004 **Matrix:** AQUEOUS

Client Sample ID: Post Treatment
Collection Date: 5/31/2020 7:50:00 AM
Received Date: 6/2/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 300.0: ANIONS						Analyst:	**CAS**
Fluoride	2.4	0.10		mg/L	1	6/8/2020 11:15:51 PM	A69502
Chloride	510	25	*	mg/L	50	6/8/2020 11:28:44 PM	A69502
Bromide	0.35	0.10		mg/L	1	6/8/2020 11:15:51 PM	A69502
Phosphorus, Orthophosphate (As P)	ND	0.50	H	mg/L	1	6/8/2020 11:15:51 PM	A69502
Sulfate	790	25	*	mg/L	50	6/8/2020 11:28:44 PM	A69502
Nitrate+Nitrite as N	ND	1.0		mg/L	5	6/2/2020 11:38:09 PM	A69351
EPA METHOD 200.7: DISSOLVED METALS						Analyst:	**pmf**
Calcium	350	5.0		mg/L	5	6/3/2020 4:15:05 AM	B69332
Magnesium	100	5.0		mg/L	5	6/3/2020 4:15:05 AM	B69332
Potassium	2.1	1.0		mg/L	1	6/3/2020 4:03:33 AM	B69332
Sodium	200	5.0		mg/L	5	6/3/2020 4:15:05 AM	B69332
EPA METHOD 8260B: VOLATILES						Analyst:	**CCM**
Benzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Toluene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Ethylbenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Naphthalene	ND	2.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1-Methylnaphthalene	ND	4.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
2-Methylnaphthalene	ND	4.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Acetone	ND	10		µg/L	1	6/5/2020 7:43:00 PM	R69410
Bromobenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Bromodichloromethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Bromoform	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Bromomethane	ND	3.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
2-Butanone	ND	10		µg/L	1	6/5/2020 7:43:00 PM	R69410
Carbon disulfide	ND	10		µg/L	1	6/5/2020 7:43:00 PM	R69410
Carbon Tetrachloride	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Chlorobenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Chloroethane	ND	2.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Chloroform	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Chloromethane	ND	3.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
2-Chlorotoluene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
4-Chlorotoluene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
cis-1,2-DCE	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006097**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Project: Earth Con Consultants Inc TWP Roswell
Lab ID: 2006097-004 **Matrix:** AQUEOUS

Client Sample ID: Post Treatment
Collection Date: 5/31/2020 7:50:00 AM
Received Date: 6/2/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Dibromochloromethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Dibromomethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,1-Dichloroethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,1-Dichloroethene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2-Dichloropropane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,3-Dichloropropane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
2,2-Dichloropropane	ND	2.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,1-Dichloropropene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Hexachlorobutadiene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
2-Hexanone	ND	10		µg/L	1	6/5/2020 7:43:00 PM	R69410
Isopropylbenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
4-Isopropyltoluene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
4-Methyl-2-pentanone	ND	10		µg/L	1	6/5/2020 7:43:00 PM	R69410
Methylene Chloride	ND	3.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
n-Butylbenzene	ND	3.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
n-Propylbenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
sec-Butylbenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Styrene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
tert-Butylbenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
trans-1,2-DCE	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Trichlorofluoromethane	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Vinyl chloride	ND	1.0		µg/L	1	6/5/2020 7:43:00 PM	R69410
Xylenes, Total	ND	1.5		µg/L	1	6/5/2020 7:43:00 PM	R69410

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006097**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: Post Treatment
Project: Earth Con Consultants Inc TWP Roswell
Collection Date: 5/31/2020 7:50:00 AM
Lab ID: 2006097-004
Matrix: AQUEOUS
Received Date: 6/2/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Surr: 1,2-Dichloroethane-d4	91.2	70-130		%Rec	1	6/5/2020 7:43:00 PM	R69410
Surr: 4-Bromofluorobenzene	92.6	70-130		%Rec	1	6/5/2020 7:43:00 PM	R69410
Surr: Dibromofluoromethane	102	70-130		%Rec	1	6/5/2020 7:43:00 PM	R69410
Surr: Toluene-d8	106	70-130		%Rec	1	6/5/2020 7:43:00 PM	R69410

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006097**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con **Client Sample ID:** TRIP BLANK
Project: Earth Con Consultants Inc TWP Roswell **Collection Date:**
Lab ID: 2006097-005 **Matrix:** TRIP BLANK **Received Date:** 6/2/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
Benzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Toluene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Ethylbenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Methyl tert-butyl ether (MTBE)	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2,4-Trimethylbenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,3,5-Trimethylbenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2-Dichloroethane (EDC)	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2-Dibromoethane (EDB)	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Naphthalene	ND	2.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1-Methylnaphthalene	ND	4.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
2-Methylnaphthalene	ND	4.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Acetone	ND	10		µg/L	1	6/5/2020 8:07:00 PM	R69410
Bromobenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Bromodichloromethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Bromoform	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Bromomethane	ND	3.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
2-Butanone	ND	10		µg/L	1	6/5/2020 8:07:00 PM	R69410
Carbon disulfide	ND	10		µg/L	1	6/5/2020 8:07:00 PM	R69410
Carbon Tetrachloride	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Chlorobenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Chloroethane	ND	2.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Chloroform	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Chloromethane	ND	3.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
2-Chlorotoluene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
4-Chlorotoluene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
cis-1,2-DCE	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
cis-1,3-Dichloropropene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2-Dibromo-3-chloropropane	ND	2.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Dibromochloromethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Dibromomethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2-Dichlorobenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,3-Dichlorobenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,4-Dichlorobenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Dichlorodifluoromethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,1-Dichloroethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,1-Dichloroethene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2-Dichloropropane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,3-Dichloropropane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
2,2-Dichloropropane	ND	2.0		µg/L	1	6/5/2020 8:07:00 PM	R69410

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

Analytical Report
Lab Order **2006097**
Date Reported: **6/10/2020**

Hall Environmental Analysis Laboratory, Inc.

CLIENT: Earth Con
Client Sample ID: TRIP BLANK
Project: Earth Con Consultants Inc TWP Roswell
Collection Date:
Lab ID: 2006097-005
Matrix: TRIP BLANK
Received Date: 6/2/2020 9:15:00 AM

Analyses	Result	RL	Qual	Units	DF	Date Analyzed	Batch
EPA METHOD 8260B: VOLATILES						Analyst: **CCM**	
1,1-Dichloropropene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Hexachlorobutadiene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
2-Hexanone	ND	10		µg/L	1	6/5/2020 8:07:00 PM	R69410
Isopropylbenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
4-Isopropyltoluene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
4-Methyl-2-pentanone	ND	10		µg/L	1	6/5/2020 8:07:00 PM	R69410
Methylene Chloride	ND	3.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
n-Butylbenzene	ND	3.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
n-Propylbenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
sec-Butylbenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Styrene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
tert-Butylbenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,1,1,2-Tetrachloroethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,1,2,2-Tetrachloroethane	ND	2.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Tetrachloroethene (PCE)	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
trans-1,2-DCE	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
trans-1,3-Dichloropropene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2,3-Trichlorobenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2,4-Trichlorobenzene	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,1,1-Trichloroethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,1,2-Trichloroethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Trichloroethene (TCE)	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Trichlorofluoromethane	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
1,2,3-Trichloropropane	ND	2.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Vinyl chloride	ND	1.0		µg/L	1	6/5/2020 8:07:00 PM	R69410
Xylenes, Total	ND	1.5		µg/L	1	6/5/2020 8:07:00 PM	R69410
Surr: 1,2-Dichloroethane-d4	90.0	70-130		%Rec	1	6/5/2020 8:07:00 PM	R69410
Surr: 4-Bromofluorobenzene	93.2	70-130		%Rec	1	6/5/2020 8:07:00 PM	R69410
Surr: Dibromofluoromethane	104	70-130		%Rec	1	6/5/2020 8:07:00 PM	R69410
Surr: Toluene-d8	109	70-130		%Rec	1	6/5/2020 8:07:00 PM	R69410

Refer to the QC Summary report and sample login checklist for flagged QC data and preservation information.

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006097**
10-Jun-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **MB-B** SampType: **MBLK** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **PBW** Batch ID: **B69332** RunNo: **69332**
Prep Date: Analysis Date: **6/3/2020** SeqNo: **2404464** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0								
Magnesium	ND	1.0								
Potassium	ND	1.0								
Sodium	ND	1.0								

Sample ID: **LLLCS-B** SampType: **LCSLL** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **BatchQC** Batch ID: **B69332** RunNo: **69332**
Prep Date: Analysis Date: **6/3/2020** SeqNo: **2404465** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	ND	1.0	0.5000	0	128	50	150			
Magnesium	ND	1.0	0.5000	0	110	50	150			
Potassium	ND	1.0	0.5000	0	111	50	150			
Sodium	ND	1.0	0.5000	0	51.0	50	150			

Sample ID: **LCS-B** SampType: **LCS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **LCSW** Batch ID: **B69332** RunNo: **69332**
Prep Date: Analysis Date: **6/3/2020** SeqNo: **2404470** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	51	1.0	50.00	0	102	85	115			
Magnesium	51	1.0	50.00	0	102	85	115			
Potassium	50	1.0	50.00	0	101	85	115			
Sodium	51	1.0	50.00	0	101	85	115			

Sample ID: **2006097-004CMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **Post Treatment** Batch ID: **B69332** RunNo: **69332**
Prep Date: Analysis Date: **6/3/2020** SeqNo: **2404526** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	55	1.0	50.00	2.077	106	70	130			

Sample ID: **2006097-004CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **Post Treatment** Batch ID: **B69332** RunNo: **69332**
Prep Date: Analysis Date: **6/3/2020** SeqNo: **2404527** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	54	1.0	50.00	2.077	104	70	130	1.43	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006097**
10-Jun-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **2006097-004CMS** SampType: **MS** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **Post Treatment** Batch ID: **B69332** RunNo: **69332**
Prep Date: Analysis Date: **6/3/2020** SeqNo: **2404529** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	370	5.0	250.0	104.1	106	70	130			
Sodium	470	5.0	250.0	202.9	105	70	130			

Sample ID: **2006097-004CMSD** SampType: **MSD** TestCode: **EPA Method 200.7: Dissolved Metals**
Client ID: **Post Treatment** Batch ID: **B69332** RunNo: **69332**
Prep Date: Analysis Date: **6/3/2020** SeqNo: **2404530** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	360	5.0	250.0	104.1	103	70	130	1.95	20	
Sodium	460	5.0	250.0	202.9	101	70	130	1.96	20	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006097**
10-Jun-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **A69351** RunNo: **69351**
Prep Date: Analysis Date: **6/2/2020** SeqNo: **2405150** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	ND	0.20								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **A69351** RunNo: **69351**
Prep Date: Analysis Date: **6/2/2020** SeqNo: **2405151** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Nitrate+Nitrite as N	3.4	0.20	3.500	0	96.9	90	110			

Sample ID: **MB** SampType: **mblk** TestCode: **EPA Method 300.0: Anions**
Client ID: **PBW** Batch ID: **A69502** RunNo: **69502**
Prep Date: Analysis Date: **6/8/2020** SeqNo: **2412339** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	ND	0.10								
Chloride	ND	0.50								
Bromide	ND	0.10								
Phosphorus, Orthophosphate (As P	ND	0.50								
Sulfate	ND	0.50								

Sample ID: **LCS** SampType: **lcs** TestCode: **EPA Method 300.0: Anions**
Client ID: **LCSW** Batch ID: **A69502** RunNo: **69502**
Prep Date: Analysis Date: **6/8/2020** SeqNo: **2412340** Units: **mg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Fluoride	0.49	0.10	0.5000	0	97.6	90	110			
Chloride	4.9	0.50	5.000	0	97.1	90	110			
Bromide	2.4	0.10	2.500	0	96.9	90	110			
Phosphorus, Orthophosphate (As P	4.8	0.50	5.000	0	96.5	90	110			
Sulfate	9.9	0.50	10.00	0	98.6	90	110			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006097**
10-Jun-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **LCSW** Batch ID: **SL69443** RunNo: **69443**
Prep Date: Analysis Date: **6/6/2020** SeqNo: **2409133** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	20	1.0	20.00	0	102	70	130			
Toluene	21	1.0	20.00	0	105	70	130			
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260: Volatiles Short List**
Client ID: **PBW** Batch ID: **SL69443** RunNo: **69443**
Prep Date: Analysis Date: **6/6/2020** SeqNo: **2409134** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006097**
10-Jun-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R69410** RunNo: **69410**
Prep Date: Analysis Date: **6/5/2020** SeqNo: **2408560** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	ND	1.0								
Toluene	ND	1.0								
Ethylbenzene	ND	1.0								
Methyl tert-butyl ether (MTBE)	ND	1.0								
1,2,4-Trimethylbenzene	ND	1.0								
1,3,5-Trimethylbenzene	ND	1.0								
1,2-Dichloroethane (EDC)	ND	1.0								
1,2-Dibromoethane (EDB)	ND	1.0								
Naphthalene	ND	2.0								
1-Methylnaphthalene	ND	4.0								
2-Methylnaphthalene	ND	4.0								
Acetone	ND	10								
Bromobenzene	ND	1.0								
Bromodichloromethane	ND	1.0								
Bromoform	ND	1.0								
Bromomethane	ND	3.0								
2-Butanone	ND	10								
Carbon disulfide	ND	10								
Carbon Tetrachloride	ND	1.0								
Chlorobenzene	ND	1.0								
Chloroethane	ND	2.0								
Chloroform	ND	1.0								
Chloromethane	ND	3.0								
2-Chlorotoluene	ND	1.0								
4-Chlorotoluene	ND	1.0								
cis-1,2-DCE	ND	1.0								
cis-1,3-Dichloropropene	ND	1.0								
1,2-Dibromo-3-chloropropane	ND	2.0								
Dibromochloromethane	ND	1.0								
Dibromomethane	ND	1.0								
1,2-Dichlorobenzene	ND	1.0								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
Dichlorodifluoromethane	ND	1.0								
1,1-Dichloroethane	ND	1.0								
1,1-Dichloroethene	ND	1.0								
1,2-Dichloropropane	ND	1.0								
1,3-Dichloropropane	ND	1.0								
2,2-Dichloropropane	ND	2.0								

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006097**
10-Jun-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R69410** RunNo: **69410**
Prep Date: Analysis Date: **6/5/2020** SeqNo: **2408560** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloropropene	ND	1.0								
Hexachlorobutadiene	ND	1.0								
2-Hexanone	ND	10								
Isopropylbenzene	ND	1.0								
4-Isopropyltoluene	ND	1.0								
4-Methyl-2-pentanone	ND	10								
Methylene Chloride	ND	3.0								
n-Butylbenzene	ND	3.0								
n-Propylbenzene	ND	1.0								
sec-Butylbenzene	ND	1.0								
Styrene	ND	1.0								
tert-Butylbenzene	ND	1.0								
1,1,1,2-Tetrachloroethane	ND	1.0								
1,1,2,2-Tetrachloroethane	ND	2.0								
Tetrachloroethene (PCE)	ND	1.0								
trans-1,2-DCE	ND	1.0								
trans-1,3-Dichloropropene	ND	1.0								
1,2,3-Trichlorobenzene	ND	1.0								
1,2,4-Trichlorobenzene	ND	1.0								
1,1,1-Trichloroethane	ND	1.0								
1,1,2-Trichloroethane	ND	1.0								
Trichloroethene (TCE)	ND	1.0								
Trichlorofluoromethane	ND	1.0								
1,2,3-Trichloropropane	ND	2.0								
Vinyl chloride	ND	1.0								
Xylenes, Total	ND	1.5								
Surr: 1,2-Dichloroethane-d4	8.6		10.00		86.4	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.0	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.0	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R69410** RunNo: **69410**
Prep Date: Analysis Date: **6/5/2020** SeqNo: **2408561** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.8	70	130			
Toluene	21	1.0	20.00	0	104	70	130			
Chlorobenzene	22	1.0	20.00	0	112	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006097**
10-Jun-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **100ng lcs2** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R69410** RunNo: **69410**
Prep Date: Analysis Date: **6/5/2020** SeqNo: **2408561** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethene	18	1.0	20.00	0	90.6	70	130			
Trichloroethene (TCE)	18	1.0	20.00	0	89.0	70	130			
Surr: 1,2-Dichloroethane-d4	8.9		10.00		88.7	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		93.8	70	130			
Surr: Dibromofluoromethane	9.8		10.00		98.1	70	130			
Surr: Toluene-d8	11		10.00		107	70	130			

Sample ID: **2006097-004ams** SampType: **MS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **Post Treatment** Batch ID: **R69410** RunNo: **69410**
Prep Date: Analysis Date: **6/5/2020** SeqNo: **2408565** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	19	1.0	20.00	0	95.1	70	130			
Toluene	22	1.0	20.00	0	108	70	130			
Chlorobenzene	23	1.0	20.00	0	114	70	130			
1,1-Dichloroethene	19	1.0	20.00	0	96.2	70	130			
Trichloroethene (TCE)	19	1.0	20.00	0	93.2	70	130			
Surr: 1,2-Dichloroethane-d4	9.2		10.00		91.7	70	130			
Surr: 4-Bromofluorobenzene	9.4		10.00		94.4	70	130			
Surr: Dibromofluoromethane	10		10.00		101	70	130			
Surr: Toluene-d8	11		10.00		108	70	130			

Sample ID: **2006097-004amsd** SampType: **MSD** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **Post Treatment** Batch ID: **R69410** RunNo: **69410**
Prep Date: Analysis Date: **6/5/2020** SeqNo: **2408566** Units: **µg/L**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Benzene	18	1.0	20.00	0	89.7	70	130	5.84	20	
Toluene	20	1.0	20.00	0	102	70	130	5.69	20	
Chlorobenzene	22	1.0	20.00	0	109	70	130	4.72	20	
1,1-Dichloroethene	18	1.0	20.00	0	90.0	70	130	6.62	20	
Trichloroethene (TCE)	17	1.0	20.00	0	86.1	70	130	7.93	20	
Surr: 1,2-Dichloroethane-d4	8.9		10.00		89.3	70	130	0	0	
Surr: 4-Bromofluorobenzene	9.5		10.00		95.4	70	130	0	0	
Surr: Dibromofluoromethane	9.9		10.00		99.3	70	130	0	0	
Surr: Toluene-d8	11		10.00		107	70	130	0	0	

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

QC SUMMARY REPORT
Hall Environmental Analysis Laboratory, Inc.

WO#: **2006097**
10-Jun-20

Client: Earth Con
Project: Earth Con Consultants Inc TWP Roswell Station

Sample ID: **100ng lcs** SampType: **LCS** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **LCSW** Batch ID: **R69443** RunNo: **69443**
Prep Date: Analysis Date: **6/6/2020** SeqNo: **2409131** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	9.7		10.00		96.8	70	130			
Surr: Dibromofluoromethane	11		10.00		107	70	130			
Surr: Toluene-d8	11		10.00		105	70	130			

Sample ID: **mb** SampType: **MBLK** TestCode: **EPA Method 8260B: VOLATILES**
Client ID: **PBW** Batch ID: **R69443** RunNo: **69443**
Prep Date: Analysis Date: **6/6/2020** SeqNo: **2409132** Units: **%Rec**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Surr: 1,2-Dichloroethane-d4	11		10.00		107	70	130			
Surr: 4-Bromofluorobenzene	9.8		10.00		97.9	70	130			
Surr: Dibromofluoromethane	11		10.00		109	70	130			
Surr: Toluene-d8	10		10.00		103	70	130			

Qualifiers:

*	Value exceeds Maximum Contaminant Level.	B	Analyte detected in the associated Method Blank
D	Sample Diluted Due to Matrix	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
ND	Not Detected at the Reporting Limit	P	Sample pH Not In Range
PQL	Practical Quanitative Limit	RL	Reporting Limit
S	% Recovery outside of range due to dilution or matrix		

HALL ENVIRONMENTAL ANALYSIS LABORATORY

Hall Environmental Analysis Laboratory
4901 Hawkins NE
Albuquerque, NM 87109
TEL: 505-345-3975 FAX: 505-345-4107
Website: www.hallenvironmental.com

Sample Log-In Check List

Client Name: EARTH CON Work Order Number: 2006097 RcptNo: 1

Received By: Emily Mocho 6/2/2020 9:15:00 AM

Completed By: Desiree Dominguez 6/2/2020 3:08:46 PM DD

Reviewed By: DAD 6/2/20

Chain of Custody

1. Is Chain of Custody complete? Yes ☑ No ☐ Not Present ☐
2. How was the sample delivered? UPS

Log In

3. Was an attempt made to cool the samples? Yes ☑ No ☐ NA ☐
4. Were all samples received at a temperature of >0° C to 6.0°C Yes ☐ No ☑ NA ☐
   Approved by client.
5. Sample(s) in proper container(s)? Yes ☑ No ☐
6. Sufficient sample volume for indicated test(s)? Yes ☑ No ☐
7. Are samples (except VOA and ONG) properly preserved? Yes ☑ No ☐
8. Was preservative added to bottles? Yes ☐ No ☑ NA ☐
9. Received at least 1 vial with headspace <1/4" for AQ VOA? Yes ☐ No ☐ NA ☑
10. Were any sample containers received broken? Yes ☐ No ☑
11. Does paperwork match bottle labels? Yes ☑ No ☐
    (Note discrepancies on chain of custody)
12. Are matrices correctly identified on Chain of Custody? Yes ☑ No ☐
13. Is it clear what analyses were requested? Yes ☑ No ☐
14. Were all holding times able to be met? Yes ☑ No ☐
    (If no, notify customer for authorization.)

# of preserved bottles checked for pH: 7 (<2 or >12 unless noted)
Adjusted? no
Checked by: EM 6/2/20

Special Handling (if applicable)

15. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☑

Person Notified: JD Hains Date: 6/2/20
By Whom: Leah Baca Via: ☐ eMail ☒ Phone ☐ Fax ☐ In Person
Regarding: High receiving temp. Will proceed with analysis unless hear differently
Client Instructions:

16. Additional remarks:

17. Cooler Information

Cooler No	Temp °C	Condition	Seal Intact	Seal No	Seal Date	Signed By
1	6.8	Good	Not Present			

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Chain-of-Custody Record

Client: EarthCon Consultants, Inc.
ATTN: James Mullooly
Mailing Address: 1880 West Oak Parkway Bldg 100
Suite 106, Marietta Ga 30062
Phone #: 770.973.2100 Ext. 2896
email or Fax#: Jmullooly@earthcon.com
QA/QC Package:
☐ Standard ☐ Level 4 (Full Validation)
Accreditation: ☐ Az Compliance
☐ NELAC ☐ Other
☐ EDD (Type)

Turn-Around Time:
☐ Standard ☐ Rush
Project Name: EarthCon Consultants Inc. TWP Roswell Station 9
Project #: 02.2012.003700 Montlly Discharge Water May 2020
Project Manager: JD Haines, PG
Sampler: CM Barnhill, PG
On Ice: ☑ Yes ☐ No
# of Coolers: 1
Cooler Temp (including CF): 6.9 - 0.1 = 6.8 (°C)

HALL ENVIRONMENTAL ANALYSIS LABORATORY
www.hallenvironmental.com
4901 Hawkins NE - Albuquerque, NM 87109
Tel. 505-345-3975 Fax 505-345-4107

Analysis Request

Date	Time	Matrix	Sample Name	Container Type and #	Preservative Type	HEAL No. 2006097	BTEX / MTBE / TMB's (8021)	TPH:8015D(GRO / DRO / MRO)	8081 Pesticides/8082 PCB's	EDB (Method 504.1)	PAHs by 8310 or 8270SIMS	RCRA 8 Metals	Cl, F, Br, NO_3, NO_2, PO_4, SO_4	8260 (VOA) Full List	8270 (Semi-VOA)	Total Coliform (Present/Absent)	Dissolved Metals:	Ca, Mg, K, Na	Field Filtered X	O-Phosphorus	Bromide
05/31/2020	0730	H_2O	Pre-Treatment	3x40mL VOA's	HCL	-001	X														
05/31/2020	0735	H_2O	Post Air Stripper	3x40mL VOA's	HCL	-002	X														
05/31/20	0745	H_2O	Between GAC's	3x40mL VOA's	HCL	-003	X														
05/31/20	0750	H_2O	Post-Treatment	3x40mL VOA's	HCL	-004							X	X			X	X	X	X	X
				2x500mL HDPE	H_2SO_4 None																
				1x125mL HDPE	HNO_3												~~X~~				
			Trip Blank	2x40mL VOA's	HCL	-005															

Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time
06/1/2020	1615	[signature]	EKM	UPS	6/2/20	9:15
Date:	Time:	Relinquished by:	Received by:	Via:	Date	Time

Remarks: Send Results ASAP To: Jmullooly@earthCon.com
Any Questions? Please Call CMB @ 575.626.1615

If necessary, samples submitted to Hall Environmental may be subcontracted to other accredited laboratories. This serves as notice of this possibility. Any sub-contracted data will be clearly notated on the analytical report.

07-Aug-2020

Steve Diamond
EarthCon
188 West Oak Parkway
Suite 106
Marietta, GA 30062

Re: **TWP Roswell Station #9** Work Order: **2007688**

Dear Steve,

ALS Environmental received 1 sample on 21-Jul-2020 01:50 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 13.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Shawn Smythe

Electronically approved by: Danielle Strasinger

Shawn Smythe
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 07-Aug-20

Client: EarthCon
Project: TWP Roswell Station #9
Work Order: **2007688**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
2007688-01	TWP East Baker Furnace	Air		7/16/2020	7/21/2020 13:50	☐

ALS Environmental

Date: 07 Aug 2022

Client: EarthCon
Project: TWP Roswell Station #9
Work Order: 2007688

Case Narrative

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Results relate only to the items tested and are not blank corrected unless indicated.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

Sample number TWP West Baker Furnace was not received.

ALS Environmental

Date: *07-Aug-20*

Client: EarthCon
Project: TWP Roswell Station #9
Sample ID: TWP East Baker Furnace
Collection Date: 7/16/2020

Work Order: 2007688
Lab ID: 2007688-01
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		250	ppbv	500	8/4/2020 01:54 AM
1,1,2,2-Tetrachloroethane	ND		250	ppbv	500	8/4/2020 01:54 AM
1,1,2-Trichloroethane	ND		250	ppbv	500	8/4/2020 01:54 AM
1,1-Dichloroethane	ND		250	ppbv	500	8/4/2020 01:54 AM
1,1-Dichloroethene	ND		250	ppbv	500	8/4/2020 01:54 AM
1,2,4-Trichlorobenzene	ND		250	ppbv	500	8/4/2020 01:54 AM
1,2,4-Trimethylbenzene	ND		250	ppbv	500	8/4/2020 01:54 AM
1,2-Dibromoethane	ND		100	ppbv	500	8/4/2020 01:54 AM
1,2-Dichlorobenzene	ND		250	ppbv	500	8/4/2020 01:54 AM
1,2-Dichloroethane	ND		250	ppbv	500	8/4/2020 01:54 AM
1,2-Dichloropropane	ND		250	ppbv	500	8/4/2020 01:54 AM
1,3,5-Trimethylbenzene	ND		250	ppbv	500	8/4/2020 01:54 AM
1,3-Butadiene	ND		250	ppbv	500	8/4/2020 01:54 AM
1,3-Dichlorobenzene	ND		500	ppbv	500	8/4/2020 01:54 AM
1,4-Dichlorobenzene	ND		500	ppbv	500	8/4/2020 01:54 AM
1,4-Dioxane	ND		500	ppbv	500	8/4/2020 01:54 AM
2-Butanone	ND		500	ppbv	500	8/4/2020 01:54 AM
2-Hexanone	ND		500	ppbv	500	8/4/2020 01:54 AM
2-Propanol	ND		500	ppbv	500	8/4/2020 01:54 AM
4-Ethyltoluene	ND		250	ppbv	500	8/4/2020 01:54 AM
4-Methyl-2-pentanone	ND		500	ppbv	500	8/4/2020 01:54 AM
Acetone	ND		500	ppbv	500	8/4/2020 01:54 AM
Benzene	**270**		**250**	**ppbv**	500	8/4/2020 01:54 AM
Benzyl chloride	ND		500	ppbv	500	8/4/2020 01:54 AM
Bromodichloromethane	ND		250	ppbv	500	8/4/2020 01:54 AM
Bromoform	ND		250	ppbv	500	8/4/2020 01:54 AM
Bromomethane	ND		250	ppbv	500	8/4/2020 01:54 AM
Carbon disulfide	ND		250	ppbv	500	8/4/2020 01:54 AM
Carbon tetrachloride	ND		250	ppbv	500	8/4/2020 01:54 AM
Chlorobenzene	ND		250	ppbv	500	8/4/2020 01:54 AM
Chloroethane	ND		250	ppbv	500	8/4/2020 01:54 AM
Chloroform	ND		100	ppbv	500	8/4/2020 01:54 AM
Chloromethane	ND		250	ppbv	500	8/4/2020 01:54 AM
cis-1,2-Dichloroethene	ND		250	ppbv	500	8/4/2020 01:54 AM
cis-1,3-Dichloropropene	ND		250	ppbv	500	8/4/2020 01:54 AM
Cumene	ND		250	ppbv	500	8/4/2020 01:54 AM
Cyclohexane	**8,100**		**250**	**ppbv**	500	8/4/2020 01:54 AM
Dibromochloromethane	ND		250	ppbv	500	8/4/2020 01:54 AM
Dichlorodifluoromethane	ND		250	ppbv	500	8/4/2020 01:54 AM

Note:

ALS Environmental

Date: *07-Aug-20*

Client: EarthCon
Project: TWP Roswell Station #9
Sample ID: TWP East Baker Furnace
Collection Date: 7/16/2020

Work Order: 2007688
Lab ID: 2007688-01
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Ethyl acetate	ND		250	ppbv	500	8/4/2020 01:54 AM
Ethylbenzene	ND		250	ppbv	500	8/4/2020 01:54 AM
Freon 113	ND		250	ppbv	500	8/4/2020 01:54 AM
Freon 114	ND		250	ppbv	500	8/4/2020 01:54 AM
Heptane	**6,500**		**250**	**ppbv**	500	8/4/2020 01:54 AM
Hexachlorobutadiene	ND		250	ppbv	500	8/4/2020 01:54 AM
Hexane	**14,000**		**5,000**	**ppbv**	10000	8/4/2020 01:10 AM
m,p-Xylene	ND		250	ppbv	500	8/4/2020 01:54 AM
Methylene chloride	ND		1,000	ppbv	500	8/4/2020 01:54 AM
MTBE	ND		250	ppbv	500	8/4/2020 01:54 AM
Naphthalene	ND		100	ppbv	500	8/4/2020 01:54 AM
o-Xylene	ND		250	ppbv	500	8/4/2020 01:54 AM
Propene	ND		250	ppbv	500	8/4/2020 01:54 AM
Styrene	ND		250	ppbv	500	8/4/2020 01:54 AM
Tetrachloroethene	ND		250	ppbv	500	8/4/2020 01:54 AM
Tetrahydrofuran	ND		250	ppbv	500	8/4/2020 01:54 AM
Toluene	**310**		**250**	**ppbv**	500	8/4/2020 01:54 AM
trans-1,2-Dichloroethene	ND		250	ppbv	500	8/4/2020 01:54 AM
trans-1,3-Dichloropropene	ND		250	ppbv	500	8/4/2020 01:54 AM
Trichloroethene	ND		100	ppbv	500	8/4/2020 01:54 AM
Trichlorofluoromethane	ND		250	ppbv	500	8/4/2020 01:54 AM
Vinyl acetate	ND		250	ppbv	500	8/4/2020 01:54 AM
Vinyl chloride	ND		250	ppbv	500	8/4/2020 01:54 AM
Surr: Bromofluorobenzene	*94.7*		*60-140*	*%REC*	500	8/4/2020 01:54 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		1,360	µg/m3	500	8/4/2020 01:54 AM
1,1,2,2-Tetrachloroethane	ND		1,720	µg/m3	500	8/4/2020 01:54 AM
1,1,2-Trichloroethane	ND		1,360	µg/m3	500	8/4/2020 01:54 AM
1,1-Dichloroethane	ND		1,010	µg/m3	500	8/4/2020 01:54 AM
1,1-Dichloroethene	ND		991	µg/m3	500	8/4/2020 01:54 AM
1,2,4-Trichlorobenzene	ND		1,860	µg/m3	500	8/4/2020 01:54 AM
1,2,4-Trimethylbenzene	ND		1,230	µg/m3	500	8/4/2020 01:54 AM
1,2-Dibromoethane	ND		768	µg/m3	500	8/4/2020 01:54 AM
1,2-Dichlorobenzene	ND		1,500	µg/m3	500	8/4/2020 01:54 AM
1,2-Dichloroethane	ND		1,010	µg/m3	500	8/4/2020 01:54 AM
1,2-Dichloropropane	ND		1,160	µg/m3	500	8/4/2020 01:54 AM
1,3,5-Trimethylbenzene	ND		1,230	µg/m3	500	8/4/2020 01:54 AM
1,3-Butadiene	ND		553	µg/m3	500	8/4/2020 01:54 AM
1,3-Dichlorobenzene	ND		3,010	µg/m3	500	8/4/2020 01:54 AM
1,4-Dichlorobenzene	ND		3,010	µg/m3	500	8/4/2020 01:54 AM

Note:

ALS Environmental

Date: *07-Aug-20*

Client: EarthCon
Project: TWP Roswell Station #9
Sample ID: TWP East Baker Furnace
Collection Date: 7/16/2020

Work Order: 2007688
Lab ID: 2007688-01
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dioxane	ND		1,800	µg/m3	500	8/4/2020 01:54 AM
2-Butanone	ND		1,470	µg/m3	500	8/4/2020 01:54 AM
2-Hexanone	ND		2,050	µg/m3	500	8/4/2020 01:54 AM
2-Propanol	ND		1,230	µg/m3	500	8/4/2020 01:54 AM
4-Ethyltoluene	ND		1,230	µg/m3	500	8/4/2020 01:54 AM
4-Methyl-2-pentanone	ND		2,050	µg/m3	500	8/4/2020 01:54 AM
Acetone	ND		1,190	µg/m3	500	8/4/2020 01:54 AM
Benzene	**863**		**799**	**µg/m3**	500	8/4/2020 01:54 AM
Benzyl chloride	ND		2,590	µg/m3	500	8/4/2020 01:54 AM
Bromodichloromethane	ND		1,680	µg/m3	500	8/4/2020 01:54 AM
Bromoform	ND		2,580	µg/m3	500	8/4/2020 01:54 AM
Bromomethane	ND		971	µg/m3	500	8/4/2020 01:54 AM
Carbon disulfide	ND		778	µg/m3	500	8/4/2020 01:54 AM
Carbon tetrachloride	ND		1,570	µg/m3	500	8/4/2020 01:54 AM
Chlorobenzene	ND		1,150	µg/m3	500	8/4/2020 01:54 AM
Chloroethane	ND		660	µg/m3	500	8/4/2020 01:54 AM
Chloroform	ND		488	µg/m3	500	8/4/2020 01:54 AM
Chloromethane	ND		516	µg/m3	500	8/4/2020 01:54 AM
cis-1,2-Dichloroethene	ND		991	µg/m3	500	8/4/2020 01:54 AM
cis-1,3-Dichloropropene	ND		1,130	µg/m3	500	8/4/2020 01:54 AM
Cumene	ND		1,230	µg/m3	500	8/4/2020 01:54 AM
Cyclohexane	**28,000**		**861**	**µg/m3**	500	8/4/2020 01:54 AM
Dibromochloromethane	ND		2,130	µg/m3	500	8/4/2020 01:54 AM
Dichlorodifluoromethane	ND		1,240	µg/m3	500	8/4/2020 01:54 AM
Ethyl acetate	ND		901	µg/m3	500	8/4/2020 01:54 AM
Ethylbenzene	ND		1,090	µg/m3	500	8/4/2020 01:54 AM
Freon 113	ND		1,920	µg/m3	500	8/4/2020 01:54 AM
Freon 114	ND		1,750	µg/m3	500	8/4/2020 01:54 AM
Heptane	**26,500**		**1,020**	**µg/m3**	500	8/4/2020 01:54 AM
Hexachlorobutadiene	ND		2,670	µg/m3	500	8/4/2020 01:54 AM
Hexane	**49,000**		**17,600**	**µg/m3**	10000	8/4/2020 01:10 AM
m,p-Xylene	ND		1,090	µg/m3	500	8/4/2020 01:54 AM
Methylene chloride	ND		3,500	µg/m3	500	8/4/2020 01:54 AM
MTBE	ND		901	µg/m3	500	8/4/2020 01:54 AM
Naphthalene	ND		524	µg/m3	500	8/4/2020 01:54 AM
o-Xylene	ND		1,090	µg/m3	500	8/4/2020 01:54 AM
Propene	ND		430	µg/m3	500	8/4/2020 01:54 AM
Styrene	ND		1,060	µg/m3	500	8/4/2020 01:54 AM
Tetrachloroethene	ND		1,700	µg/m3	500	8/4/2020 01:54 AM
Tetrahydrofuran	ND		737	µg/m3	500	8/4/2020 01:54 AM

Note:

ALS Environmental

Date: *07-Aug-20*

Client: EarthCon
Project: TWP Roswell Station #9
Work Order: 2007688
Sample ID: TWP East Baker Furnace
Lab ID: 2007688-01
Collection Date: 7/16/2020
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	**1,170**		**942**	**µg/m3**	500	8/4/2020 01:54 AM
trans-1,2-Dichloroethene	ND		991	µg/m3	500	8/4/2020 01:54 AM
trans-1,3-Dichloropropene	ND		1,130	µg/m3	500	8/4/2020 01:54 AM
Trichloroethene	ND		537	µg/m3	500	8/4/2020 01:54 AM
Trichlorofluoromethane	ND		1,400	µg/m3	500	8/4/2020 01:54 AM
Vinyl acetate	ND		880	µg/m3	500	8/4/2020 01:54 AM
Vinyl chloride	ND		639	µg/m3	500	8/4/2020 01:54 AM
Surr: Bromofluorobenzene	*94.7*		*60-140*	*%REC*	500	8/4/2020 01:54 AM

Note:

ALS Environmental

Date: 07-Aug-20

Client: EarthCon
Work Order: 2007688
Project: TWP Roswell Station #9

QC BATCH REPORT

Batch ID: **R179693** Instrument ID **VMS4** Method: **ETO-15**

mblk Sample ID: **MBLK-R179693** Units: **ppbv** Analysis Date: **8/3/2020 04:50 PM**

Client ID: Run ID: **VMS4_200803A** SeqNo: **2280847** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	0.50								
1,1,2,2-Tetrachloroethane	ND	0.50								
1,1,2-Trichloroethane	ND	0.50								
1,1-Dichloroethane	ND	0.50								
1,1-Dichloroethene	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.50								
1,2,4-Trimethylbenzene	ND	0.50								
1,2-Dibromoethane	ND	0.20								
1,2-Dichlorobenzene	ND	0.50								
1,2-Dichloroethane	ND	0.50								
1,2-Dichloropropane	ND	0.50								
1,3,5-Trimethylbenzene	ND	0.50								
1,3-Butadiene	ND	0.50								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
1,4-Dioxane	ND	1.0								
2-Butanone	ND	1.0								
2-Hexanone	ND	1.0								
2-Propanol	ND	1.0								
4-Ethyltoluene	ND	0.50								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	1.0								
Benzene	ND	0.50								
Benzyl chloride	ND	1.0								
Bromodichloromethane	ND	0.50								
Bromoform	ND	0.50								
Bromomethane	ND	0.50								
Carbon disulfide	0.06	0.50								J
Carbon tetrachloride	ND	0.50								
Chlorobenzene	ND	0.50								
Chloroethane	ND	0.50								
Chloroform	ND	0.20								
Chloromethane	ND	0.50								
cis-1,2-Dichloroethene	ND	0.50								
cis-1,3-Dichloropropene	ND	0.50								
Cumene	ND	0.50								
Cyclohexane	ND	0.50								
Dibromochloromethane	ND	0.50								
Dichlorodifluoromethane	ND	0.50								
Ethyl acetate	ND	0.50								
Ethylbenzene	ND	0.50								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 2007688
Project: TWP Roswell Station #9

QC BATCH REPORT

Batch ID: **R179693** Instrument ID **VMS4** Method: **ETO-15**

Freon 113	ND	0.50					
Freon 114	ND	0.50					
Heptane	ND	0.50					
Hexachlorobutadiene	ND	0.50					
Hexane	ND	0.50					
m,p-Xylene	ND	0.50					
Methylene chloride	ND	2.0					
MTBE	ND	0.50					
Naphthalene	ND	0.20					
o-Xylene	ND	0.50					
Propene	ND	0.50					
Styrene	ND	0.50					
Tetrachloroethene	ND	0.50					
Tetrahydrofuran	ND	0.50					
Toluene	ND	0.50					
trans-1,2-Dichloroethene	ND	0.50					
trans-1,3-Dichloropropene	ND	0.50					
Trichloroethene	ND	0.20					
Trichlorofluoromethane	ND	0.50					
Vinyl acetate	ND	0.50					
Vinyl chloride	ND	0.50					
Surr: Bromofluorobenzene	*9.09*	0	*10*	0	*90.9*	*60-140*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 2007688
Project: TWP Roswell Station #9

QC BATCH REPORT

Batch ID: **R179693** Instrument ID **VMS4** Method: **ETO-15**

lcs Sample ID: **LCS-R179693** Units: **ppbv** Analysis Date: **8/3/2020 01:07 PM**

Client ID: Run ID: **VMS4_200803A** SeqNo: **2280845** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	11.08	0.50	10	0	111	58.8-163	0			
1,1,2,2-Tetrachloroethane	11.25	0.50	10	0	112	60-140	0			
1,1,2-Trichloroethane	11.16	0.50	10	0	112	60-140	0			
1,1-Dichloroethane	11	0.50	10	0	110	60-140	0			
1,1-Dichloroethene	11.29	0.50	10	0	113	60-140	0			
1,2,4-Trichlorobenzene	10.08	0.50	10	0	101	49.3-150	0			
1,2,4-Trimethylbenzene	11.95	0.50	10	0	120	50.1-162	0			
1,2-Dibromoethane	11.05	0.20	10	0	110	60-140	0			
1,2-Dichlorobenzene	10.86	0.50	10	0	109	41.9-141	0			
1,2-Dichloroethane	11.08	0.50	10	0	111	60-140	0			
1,2-Dichloropropane	10.94	0.50	10	0	109	60-140	0			
1,3,5-Trimethylbenzene	11.91	0.50	10	0	119	60-140	0			
1,3-Butadiene	11.36	0.50	10	0	114	50.6-140	0			
1,3-Dichlorobenzene	10.84	1.0	10	0	108	60-140	0			
1,4-Dichlorobenzene	10.62	1.0	10	0	106	55.1-145	0			
1,4-Dioxane	11.33	1.0	10	0	113	60-140	0			
2-Butanone	10.83	1.0	10	0	108	60-140	0			
2-Hexanone	10.96	1.0	10	0	110	56.2-162	0			
2-Propanol	11.14	1.0	10	0	111	60-140	0			
4-Ethyltoluene	12.11	0.50	10	0	121	60-140	0			
4-Methyl-2-pentanone	11.6	1.0	10	0	116	60-140	0			
Acetone	9.61	1.0	10	0	96.1	60-140	0			
Benzene	10.93	0.50	10	0	109	60-140	0			
Benzyl chloride	11.46	1.0	10	0	115	31.9-174	0			
Bromodichloromethane	11.07	0.50	10	0	111	60-140	0			
Bromoform	11.07	0.50	10	0	111	60-140	0			
Bromomethane	11.21	0.50	10	0	112	60-140	0			
Carbon disulfide	10.9	0.50	10	0	109	60-140	0			
Carbon tetrachloride	11.27	0.50	10	0	113	60-140	0			
Chlorobenzene	10.43	0.50	10	0	104	60-140	0			
Chloroethane	10.73	0.50	10	0	107	60-140	0			
Chloroform	11.1	0.20	10	0	111	60-140	0			
Chloromethane	10.37	0.50	10	0	104	60-140	0			
cis-1,2-Dichloroethene	11.61	0.50	10	0	116	60-140	0			
cis-1,3-Dichloropropene	11.29	0.50	10	0	113	60-140	0			
Cumene	11.6	0.50	10	0	116	60-140	0			
Cyclohexane	11.08	0.50	10	0	111	60-140	0			
Dibromochloromethane	11.24	0.50	10	0	112	60-140	0			
Dichlorodifluoromethane	11.02	0.50	10	0	110	60-140	0			
Ethyl acetate	11.35	0.50	10	0	114	60-140	0			
Ethylbenzene	11.11	0.50	10	0	111	60-140	0			
Freon 113	11.05	0.50	10	0	110	60-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 2007688
Project: TWP Roswell Station #9

QC BATCH REPORT

Batch ID: **R179693** Instrument ID **VMS4** Method: **ETO-15**

Freon 114	11.16	0.50	10	0	112	60-140	0
Heptane	11.17	0.50	10	0	112	60-140	0
Hexachlorobutadiene	10.8	0.50	10	0	108	60-140	0
Hexane	10.82	0.50	10	0	108	60-140	0
m,p-Xylene	23.13	0.50	20	0	116	60-140	0
Methylene chloride	10.15	2.0	10	0	102	60-140	0
MTBE	11.28	0.50	10	0	113	60.8-151	0
Naphthalene	10.14	0.20	10	0	101	53.1-152	0
o-Xylene	11.54	0.50	10	0	115	60-140	0
Propene	10.11	0.50	10	0	101	34.4-139	0
Styrene	11.31	0.50	10	0	113	60-140	0
Tetrachloroethene	10.77	0.50	10	0	108	60-140	0
Tetrahydrofuran	10.93	0.50	10	0	109	60-140	0
Toluene	11.25	0.50	10	0	112	60-140	0
trans-1,2-Dichloroethene	10.69	0.50	10	0	107	60-140	0
trans-1,3-Dichloropropene	10.99	0.50	10	0	110	60-140	0
Trichloroethene	10.82	0.20	10	0	108	60-140	0
Trichlorofluoromethane	11.19	0.50	10	0	112	60-140	0
Vinyl acetate	11.11	0.50	10	0	111	48.4-145	0
Vinyl chloride	11.15	0.50	10	0	112	60-140	0
Surr: Bromofluorobenzene	*10.31*	0	*10*	0	*103*	*60-140*	0

The following samples were analyzed in this batch: 2007688-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Project: TWP Roswell Station #9
WorkOrder: **2007688**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/m3	
ppbv	

Sample Receipt Checklist

Client Name: **EARTHCON-MARIETTA**

Date/Time Received: **21-Jul-20 13:50**

Work Order: **2007688**

Received by: **JNW**

Checklist completed by Jan Wilcox (eSignature) 21-Jul-20 (Date)

Reviewed by: Shawn Smythe (eSignature) 21-Jul-20 (Date)

Matrices: air

Carrier name: FedEx

	Yes	No	Not Present
Shipping container/cooler in good condition?	☑	☐	☐
Custody seals intact on shipping container/cooler?	☐	☐	☑
Custody seals intact on sample bottles?	☐	☐	☑
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Samples in proper container/bottle?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	
All samples received within holding time?	☑	☐	
Container/Temp Blank temperature in compliance?	☑	☐	
Sample(s) received on ice?	☐	☑	

Temperature(s)/Thermometer(s):

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

	Yes	No		
Water - VOA vials have zero headspace?	☐	☐	No VOA vials submitted	☑
Water - pH acceptable upon receipt?	☐	☐	N/A	☑
pH adjusted?	☐	☐	N/A	☑

pH adjusted by:

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By:

Regarding:

Comments:

CorrectiveAction:

27-Aug-2020

Steve Diamond
EarthCon
188 West Oak Parkway
Suite 106
Marietta, GA 30062

Re: **Roswell Station 9** Work Order: **20080362**

Dear Steve,

ALS Environmental received 1 sample on 12-Aug-2020 02:57 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 14.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Shawn Smythe

Electronically approved by: Joe Ribar

Shawn Smythe
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 27-Aug-20

Client: EarthCon
Project: Roswell Station 9
Work Order: **20080362**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
20080362-01	West Baker Furnace	Air		8/6/2020 11:40	8/12/2020 14:57	☐

ALS Environmental *Date: 27-Aug-20*

Client: EarthCon
Project: Roswell Station 9
Work Order: 20080362

Case Narrative

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Results relate only to the items tested and are not blank corrected unless indicated.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

ALS Environmental

Date: *27-Aug-20*

Client: EarthCon
Project: Roswell Station 9
Sample ID: West Baker Furnace
Collection Date: 8/6/2020 11:40 AM

Work Order: 20080362
Lab ID: 20080362-01
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		250	ppbv	500	8/27/2020 01:38 PM
1,1,2,2-Tetrachloroethane	ND		250	ppbv	500	8/27/2020 01:38 PM
1,1,2-Trichloroethane	ND		250	ppbv	500	8/27/2020 01:38 PM
1,1-Dichloroethane	ND		250	ppbv	500	8/27/2020 01:38 PM
1,1-Dichloroethene	ND		250	ppbv	500	8/27/2020 01:38 PM
1,2,4-Trichlorobenzene	ND		250	ppbv	500	8/27/2020 01:38 PM
1,2,4-Trimethylbenzene	ND		250	ppbv	500	8/27/2020 01:38 PM
1,2-Dibromoethane	ND		100	ppbv	500	8/27/2020 01:38 PM
1,2-Dichlorobenzene	ND		250	ppbv	500	8/27/2020 01:38 PM
1,2-Dichloroethane	ND		250	ppbv	500	8/27/2020 01:38 PM
1,2-Dichloropropane	ND		250	ppbv	500	8/27/2020 01:38 PM
1,3,5-Trimethylbenzene	ND		250	ppbv	500	8/27/2020 01:38 PM
1,3-Butadiene	ND		250	ppbv	500	8/27/2020 01:38 PM
1,3-Dichlorobenzene	ND		500	ppbv	500	8/27/2020 01:38 PM
1,4-Dichlorobenzene	ND		500	ppbv	500	8/27/2020 01:38 PM
1,4-Dioxane	ND		500	ppbv	500	8/27/2020 01:38 PM
2-Butanone	ND		500	ppbv	500	8/27/2020 01:38 PM
2-Hexanone	ND		500	ppbv	500	8/27/2020 01:38 PM
2-Propanol	ND		500	ppbv	500	8/27/2020 01:38 PM
4-Ethyltoluene	ND		250	ppbv	500	8/27/2020 01:38 PM
4-Methyl-2-pentanone	ND		500	ppbv	500	8/27/2020 01:38 PM
Acetone	ND		500	ppbv	500	8/27/2020 01:38 PM
Benzene	**580**		**250**	**ppbv**	500	8/27/2020 01:38 PM
Benzyl chloride	ND		500	ppbv	500	8/27/2020 01:38 PM
Bromodichloromethane	ND		250	ppbv	500	8/27/2020 01:38 PM
Bromoform	ND		250	ppbv	500	8/27/2020 01:38 PM
Bromomethane	ND		250	ppbv	500	8/27/2020 01:38 PM
Carbon disulfide	ND		250	ppbv	500	8/27/2020 01:38 PM
Carbon tetrachloride	ND		250	ppbv	500	8/27/2020 01:38 PM
Chlorobenzene	ND		250	ppbv	500	8/27/2020 01:38 PM
Chloroethane	ND		250	ppbv	500	8/27/2020 01:38 PM
Chloroform	ND		100	ppbv	500	8/27/2020 01:38 PM
Chloromethane	ND		250	ppbv	500	8/27/2020 01:38 PM
cis-1,2-Dichloroethene	ND		250	ppbv	500	8/27/2020 01:38 PM
cis-1,3-Dichloropropene	ND		250	ppbv	500	8/27/2020 01:38 PM
Cumene	ND		250	ppbv	500	8/27/2020 01:38 PM
Cyclohexane	**20,000**		**5,000**	**ppbv**	10000	8/27/2020 12:49 PM
Dibromochloromethane	ND		250	ppbv	500	8/27/2020 01:38 PM
Dichlorodifluoromethane	ND		250	ppbv	500	8/27/2020 01:38 PM

Note:

ALS Environmental

Date: *27-Aug-20*

Client: EarthCon
Project: Roswell Station 9
Sample ID: West Baker Furnace
Collection Date: 8/6/2020 11:40 AM

Work Order: 20080362
Lab ID: 20080362-01
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Ethyl acetate	ND		250	ppbv	500	8/27/2020 01:38 PM
Ethylbenzene	ND		250	ppbv	500	8/27/2020 01:38 PM
Freon 113	ND		250	ppbv	500	8/27/2020 01:38 PM
Freon 114	ND		250	ppbv	500	8/27/2020 01:38 PM
Heptane	**15,000**		**5,000**	**ppbv**	10000	8/27/2020 12:49 PM
Hexachlorobutadiene	ND		250	ppbv	500	8/27/2020 01:38 PM
Hexane	**30,000**		**5,000**	**ppbv**	10000	8/27/2020 12:49 PM
m,p-Xylene	**360**		**250**	**ppbv**	500	8/27/2020 01:38 PM
Methylene chloride	ND		1,000	ppbv	500	8/27/2020 01:38 PM
MTBE	ND		250	ppbv	500	8/27/2020 01:38 PM
Naphthalene	ND		100	ppbv	500	8/27/2020 01:38 PM
o-Xylene	ND		250	ppbv	500	8/27/2020 01:38 PM
Propene	ND		250	ppbv	500	8/27/2020 01:38 PM
Styrene	ND		250	ppbv	500	8/27/2020 01:38 PM
Tetrachloroethene	ND		250	ppbv	500	8/27/2020 01:38 PM
Tetrahydrofuran	ND		250	ppbv	500	8/27/2020 01:38 PM
Toluene	**660**		**250**	**ppbv**	500	8/27/2020 01:38 PM
trans-1,2-Dichloroethene	ND		250	ppbv	500	8/27/2020 01:38 PM
trans-1,3-Dichloropropene	ND		250	ppbv	500	8/27/2020 01:38 PM
Trichloroethene	ND		100	ppbv	500	8/27/2020 01:38 PM
Trichlorofluoromethane	ND		250	ppbv	500	8/27/2020 01:38 PM
Vinyl acetate	ND		250	ppbv	500	8/27/2020 01:38 PM
Vinyl chloride	ND		250	ppbv	500	8/27/2020 01:38 PM
Surr: Bromofluorobenzene	*97.8*		*60-140*	*%REC*	500	8/27/2020 01:38 PM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		1,360	µg/m3	500	8/27/2020 01:38 PM
1,1,2,2-Tetrachloroethane	ND		1,720	µg/m3	500	8/27/2020 01:38 PM
1,1,2-Trichloroethane	ND		1,360	µg/m3	500	8/27/2020 01:38 PM
1,1-Dichloroethane	ND		1,010	µg/m3	500	8/27/2020 01:38 PM
1,1-Dichloroethene	ND		991	µg/m3	500	8/27/2020 01:38 PM
1,2,4-Trichlorobenzene	ND		1,860	µg/m3	500	8/27/2020 01:38 PM
1,2,4-Trimethylbenzene	ND		1,230	µg/m3	500	8/27/2020 01:38 PM
1,2-Dibromoethane	ND		768	µg/m3	500	8/27/2020 01:38 PM
1,2-Dichlorobenzene	ND		1,500	µg/m3	500	8/27/2020 01:38 PM
1,2-Dichloroethane	ND		1,010	µg/m3	500	8/27/2020 01:38 PM
1,2-Dichloropropane	ND		1,160	µg/m3	500	8/27/2020 01:38 PM
1,3,5-Trimethylbenzene	ND		1,230	µg/m3	500	8/27/2020 01:38 PM
1,3-Butadiene	ND		553	µg/m3	500	8/27/2020 01:38 PM
1,3-Dichlorobenzene	ND		3,010	µg/m3	500	8/27/2020 01:38 PM
1,4-Dichlorobenzene	ND		3,010	µg/m3	500	8/27/2020 01:38 PM

Note:

ALS Environmental

Date: *27-Aug-20*

Client: EarthCon
Project: Roswell Station 9
Sample ID: West Baker Furnace
Collection Date: 8/6/2020 11:40 AM

Work Order: 20080362
Lab ID: 20080362-01
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dioxane	ND		1,800	µg/m3	500	8/27/2020 01:38 PM
2-Butanone	ND		1,470	µg/m3	500	8/27/2020 01:38 PM
2-Hexanone	ND		2,050	µg/m3	500	8/27/2020 01:38 PM
2-Propanol	ND		1,230	µg/m3	500	8/27/2020 01:38 PM
4-Ethyltoluene	ND		1,230	µg/m3	500	8/27/2020 01:38 PM
4-Methyl-2-pentanone	ND		2,050	µg/m3	500	8/27/2020 01:38 PM
Acetone	ND		1,190	µg/m3	500	8/27/2020 01:38 PM
Benzene	**1,870**		**799**	**µg/m3**	500	8/27/2020 01:38 PM
Benzyl chloride	ND		2,590	µg/m3	500	8/27/2020 01:38 PM
Bromodichloromethane	ND		1,680	µg/m3	500	8/27/2020 01:38 PM
Bromoform	ND		2,580	µg/m3	500	8/27/2020 01:38 PM
Bromomethane	ND		971	µg/m3	500	8/27/2020 01:38 PM
Carbon disulfide	ND		778	µg/m3	500	8/27/2020 01:38 PM
Carbon tetrachloride	ND		1,570	µg/m3	500	8/27/2020 01:38 PM
Chlorobenzene	ND		1,150	µg/m3	500	8/27/2020 01:38 PM
Chloroethane	ND		660	µg/m3	500	8/27/2020 01:38 PM
Chloroform	ND		488	µg/m3	500	8/27/2020 01:38 PM
Chloromethane	ND		516	µg/m3	500	8/27/2020 01:38 PM
cis-1,2-Dichloroethene	ND		991	µg/m3	500	8/27/2020 01:38 PM
cis-1,3-Dichloropropene	ND		1,130	µg/m3	500	8/27/2020 01:38 PM
Cumene	ND		1,230	µg/m3	500	8/27/2020 01:38 PM
Cyclohexane	**70,200**		**17,200**	**µg/m3**	10000	8/27/2020 12:49 PM
Dibromochloromethane	ND		2,130	µg/m3	500	8/27/2020 01:38 PM
Dichlorodifluoromethane	ND		1,240	µg/m3	500	8/27/2020 01:38 PM
Ethyl acetate	ND		901	µg/m3	500	8/27/2020 01:38 PM
Ethylbenzene	ND		1,090	µg/m3	500	8/27/2020 01:38 PM
Freon 113	ND		1,920	µg/m3	500	8/27/2020 01:38 PM
Freon 114	ND		1,750	µg/m3	500	8/27/2020 01:38 PM
Heptane	**59,800**		**20,500**	**µg/m3**	10000	8/27/2020 12:49 PM
Hexachlorobutadiene	ND		2,670	µg/m3	500	8/27/2020 01:38 PM
Hexane	**107,000**		**17,600**	**µg/m3**	10000	8/27/2020 12:49 PM
m,p-Xylene	**1,580**		**1,090**	**µg/m3**	500	8/27/2020 01:38 PM
Methylene chloride	ND		3,500	µg/m3	500	8/27/2020 01:38 PM
MTBE	ND		901	µg/m3	500	8/27/2020 01:38 PM
Naphthalene	ND		524	µg/m3	500	8/27/2020 01:38 PM
o-Xylene	ND		1,090	µg/m3	500	8/27/2020 01:38 PM
Propene	ND		430	µg/m3	500	8/27/2020 01:38 PM
Styrene	ND		1,060	µg/m3	500	8/27/2020 01:38 PM
Tetrachloroethene	ND		1,700	µg/m3	500	8/27/2020 01:38 PM
Tetrahydrofuran	ND		737	µg/m3	500	8/27/2020 01:38 PM

Note:

ALS Environmental

Date: *27-Aug-20*

Client: EarthCon
Project: Roswell Station 9
Sample ID: West Baker Furnace
Collection Date: 8/6/2020 11:40 AM

Work Order: 20080362
Lab ID: 20080362-01
Matrix: AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	**2,510**		**942**	**µg/m3**	500	8/27/2020 01:38 PM
trans-1,2-Dichloroethene	ND		991	µg/m3	500	8/27/2020 01:38 PM
trans-1,3-Dichloropropene	ND		1,130	µg/m3	500	8/27/2020 01:38 PM
Trichloroethene	ND		537	µg/m3	500	8/27/2020 01:38 PM
Trichlorofluoromethane	ND		1,400	µg/m3	500	8/27/2020 01:38 PM
Vinyl acetate	ND		880	µg/m3	500	8/27/2020 01:38 PM
Vinyl chloride	ND		639	µg/m3	500	8/27/2020 01:38 PM
Surr: Bromofluorobenzene	*97.8*		*60-140*	*%REC*	500	8/27/2020 01:38 PM

Note:

ALS Environmental

Date: 27-Aug-20

Client: EarthCon
Project: Roswell Station 9
WorkOrder: **20080362**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/m3	
ppbv	

ALS Environmental

Date: 27-Aug-20

Client: EarthCon
Work Order: 20080362
Project: Roswell Station 9

QC BATCH REPORT

Batch ID: **R180503** Instrument ID **VMS4** Method: **ETO-15**

mblk Sample ID: **MBLK-R180503** Units: **ppbv** Analysis Date: **8/26/2020 06:20 PM**

Client ID: Run ID: **VMS4_200827A** SeqNo: **2297911** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	0.50								
1,1,2,2-Tetrachloroethane	ND	0.50								
1,1,2-Trichloroethane	ND	0.50								
1,1-Dichloroethane	ND	0.50								
1,1-Dichloroethene	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.50								
1,2,4-Trimethylbenzene	ND	0.50								
1,2-Dibromoethane	ND	0.20								
1,2-Dichlorobenzene	ND	0.50								
1,2-Dichloroethane	ND	0.50								
1,2-Dichloropropane	ND	0.50								
1,3,5-Trimethylbenzene	ND	0.50								
1,3-Butadiene	ND	0.50								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
1,4-Dioxane	ND	1.0								
2-Butanone	ND	1.0								
2-Hexanone	ND	1.0								
2-Propanol	ND	1.0								
4-Ethyltoluene	ND	0.50								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	1.0								
Benzene	ND	0.50								
Benzyl chloride	ND	1.0								
Bromodichloromethane	ND	0.50								
Bromoform	ND	0.50								
Bromomethane	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.50								
Chlorobenzene	ND	0.50								
Chloroethane	ND	0.50								
Chloroform	ND	0.20								
Chloromethane	ND	0.50								
cis-1,2-Dichloroethene	ND	0.50								
cis-1,3-Dichloropropene	ND	0.50								
Cumene	ND	0.50								
Cyclohexane	ND	0.50								
Dibromochloromethane	ND	0.50								
Dichlorodifluoromethane	ND	0.50								
Ethyl acetate	ND	0.50								
Ethylbenzene	ND	0.50								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20080362
Project: Roswell Station 9

QC BATCH REPORT

Batch ID: **R180503** Instrument ID **VMS4** Method: **ETO-15**

Freon 113	ND	0.50						
Freon 114	ND	0.50						
Heptane	ND	0.50						
Hexachlorobutadiene	0.08	0.50						J
Hexane	ND	0.50						
m,p-Xylene	ND	0.50						
Methylene chloride	ND	2.0						
MTBE	ND	0.50						
Naphthalene	ND	0.20						
o-Xylene	ND	0.50						
Propene	ND	0.50						
Styrene	ND	0.50						
Tetrachloroethene	ND	0.50						
Tetrahydrofuran	ND	0.50						
Toluene	ND	0.50						
trans-1,2-Dichloroethene	ND	0.50						
trans-1,3-Dichloropropene	ND	0.50						
Trichloroethene	ND	0.20						
Trichlorofluoromethane	ND	0.50						
Vinyl acetate	ND	0.50						
Vinyl chloride	ND	0.50						
Surr: Bromofluorobenzene	*9.58*	0	*10*	0	*95.8*	*60-140*	0	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20080362
Project: Roswell Station 9

QC BATCH REPORT

Batch ID: **R180503** Instrument ID **VMS4** Method: **ETO-15**

lcs Sample ID: **LCS-R180503** Units: **ppbv** Analysis Date: **8/26/2020 05:35 PM**

Client ID: Run ID: **VMS4_200827A** SeqNo: **2297910** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	9.93	0.50	10	0	99.3	58.8-163	0			
1,1,2,2-Tetrachloroethane	10.37	0.50	10	0	104	60-140	0			
1,1,2-Trichloroethane	9.91	0.50	10	0	99.1	60-140	0			
1,1-Dichloroethane	10.09	0.50	10	0	101	60-140	0			
1,1-Dichloroethene	10.31	0.50	10	0	103	60-140	0			
1,2,4-Trichlorobenzene	8.95	0.50	10	0	89.5	49.3-150	0			
1,2,4-Trimethylbenzene	10.85	0.50	10	0	108	50.1-162	0			
1,2-Dibromoethane	10.13	0.20	10	0	101	60-140	0			
1,2-Dichlorobenzene	10.72	0.50	10	0	107	41.9-141	0			
1,2-Dichloroethane	10.15	0.50	10	0	102	60-140	0			
1,2-Dichloropropane	10.14	0.50	10	0	101	60-140	0			
1,3,5-Trimethylbenzene	10.6	0.50	10	0	106	60-140	0			
1,3-Butadiene	11.27	0.50	10	0	113	50.6-140	0			
1,3-Dichlorobenzene	10.8	1.0	10	0	108	60-140	0			
1,4-Dichlorobenzene	11.04	1.0	10	0	110	55.1-145	0			
1,4-Dioxane	10.43	1.0	10	0	104	60-140	0			
2-Butanone	10.71	1.0	10	0	107	60-140	0			
2-Hexanone	10.93	1.0	10	0	109	56.2-162	0			
2-Propanol	10.42	1.0	10	0	104	60-140	0			
4-Ethyltoluene	11.17	0.50	10	0	112	60-140	0			
4-Methyl-2-pentanone	11.82	1.0	10	0	118	60-140	0			
Acetone	9.64	1.0	10	0	96.4	60-140	0			
Benzene	9.89	0.50	10	0	98.9	60-140	0			
Benzyl chloride	11.49	1.0	10	0	115	31.9-174	0			
Bromodichloromethane	10.2	0.50	10	0	102	60-140	0			
Bromoform	10.2	0.50	10	0	102	60-140	0			
Bromomethane	10.62	0.50	10	0	106	60-140	0			
Carbon disulfide	10.17	0.50	10	0	102	60-140	0			
Carbon tetrachloride	9.95	0.50	10	0	99.5	60-140	0			
Chlorobenzene	9.82	0.50	10	0	98.2	60-140	0			
Chloroethane	10.26	0.50	10	0	103	60-140	0			
Chloroform	9.99	0.20	10	0	99.9	60-140	0			
Chloromethane	9.59	0.50	10	0	95.9	60-140	0			
cis-1,2-Dichloroethene	10.62	0.50	10	0	106	60-140	0			
cis-1,3-Dichloropropene	10.42	0.50	10	0	104	60-140	0			
Cumene	10.41	0.50	10	0	104	60-140	0			
Cyclohexane	9.95	0.50	10	0	99.5	60-140	0			
Dibromochloromethane	10.12	0.50	10	0	101	60-140	0			
Dichlorodifluoromethane	10.28	0.50	10	0	103	60-140	0			
Ethyl acetate	9.9	0.50	10	0	99	60-140	0			
Ethylbenzene	10.11	0.50	10	0	101	60-140	0			
Freon 113	10.06	0.50	10	0	101	60-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20080362
Project: Roswell Station 9

QC BATCH REPORT

Batch ID: **R180503** Instrument ID **VMS4** Method: **ETO-15**

Freon 114	10.15	0.50	10	0	102	60-140	0
Heptane	10.06	0.50	10	0	101	60-140	0
Hexachlorobutadiene	9.87	0.50	10	0	98.7	60-140	0
Hexane	10.16	0.50	10	0	102	60-140	0
m,p-Xylene	20.82	0.50	20	0	104	60-140	0
Methylene chloride	9.37	2.0	10	0	93.7	60-140	0
MTBE	10.2	0.50	10	0	102	60.8-151	0
Naphthalene	10.25	0.20	10	0	102	53.1-152	0
o-Xylene	10.34	0.50	10	0	103	60-140	0
Propene	9.52	0.50	10	0	95.2	34.4-139	0
Styrene	10.71	0.50	10	0	107	60-140	0
Tetrachloroethene	9.87	0.50	10	0	98.7	60-140	0
Tetrahydrofuran	10.26	0.50	10	0	103	60-140	0
Toluene	10.23	0.50	10	0	102	60-140	0
trans-1,2-Dichloroethene	10.15	0.50	10	0	102	60-140	0
trans-1,3-Dichloropropene	10.5	0.50	10	0	105	60-140	0
Trichloroethene	9.96	0.20	10	0	99.6	60-140	0
Trichlorofluoromethane	10.29	0.50	10	0	103	60-140	0
Vinyl acetate	11.16	0.50	10	0	112	48.4-145	0
Vinyl chloride	11.79	0.50	10	0	118	60-140	0
Surr: Bromofluorobenzene	*10.29*	0	*10*	0	*103*	*60-140*	0

The following samples were analyzed in this batch: 20080362-01A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Sample Receipt Checklist

Client Name: EARTHCON-MARIETTA

Date/Time Received: 12-Aug-20 14:57

Work Order: 20080362

Received by: DNS

Checklist completed by Jan Wilcox (eSignature) 12-Aug-20 (Date)

Reviewed by: Shawn Smythe (eSignature) 13-Aug-20 (Date)

Matrices: air

Carrier name: FedEx

	Yes	No	Not Present
Shipping container/cooler in good condition?	☑	☐	☐
Custody seals intact on shipping container/cooler?	☐	☐	☑
Custody seals intact on sample bottles?	☐	☐	☑
Chain of custody present?	☑	☐	
Chain of custody signed when relinquished and received?	☑	☐	
Chain of custody agrees with sample labels?	☑	☐	
Samples in proper container/bottle?	☑	☐	
Sample containers intact?	☑	☐	
Sufficient sample volume for indicated test?	☑	☐	
All samples received within holding time?	☑	☐	
Container/Temp Blank temperature in compliance?	☑	☐	
Sample(s) received on ice?	☐	☑	

Temperature(s)/Thermometer(s):

Cooler(s)/Kit(s):

Date/Time sample(s) sent to storage:

	Yes	No	
Water - VOA vials have zero headspace?	☐	☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	☐	☐	N/A ☑
pH adjusted?	☐	☐	N/A ☑

pH adjusted by:

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Air Canister - Chain of Custody Record / Analytical Service Request

Page 1 of 1

20080362

02582

ALS

Ship To: ALS Environmental
4388 Glendale Milford Rd.
Cincinnati, Ohio 45242
Phone: (513) 733-5336
Fax: (513) 733-5347

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard

ALS Project No.

Company Name & Address (Reporting Information): EarthCon Consultants, Inc. ATTN: Sofie Weber-Snapp 1880 West Parkway, Suite 106 Marietta, GA 30062

Project Name: EarthCon Consultants, Inc TWP Rosell Station 9

Project Number: Thermal Oxidizer / SVE Air Sampling August 2020

Project Manager: Sofie Weber-Snapp

P.O. # / Billing Information

Phone: 770-973-2100

Fax: 770-973-7395

Email Address for Result Reporting: sweberspnapp@earthcon.com

Sampler (Print & Sign): Clayton M Barnhill, PE

OH VAP: ◯ Yes ◯ No
OH BUSTR: ◯ Yes ◯ No

Analysis Method

Type: SS = SubSlab; IA = Indoor Air; SG = Soil Gas; O = Other; AA = Ambient Air; SVE = Soil Vapor Extract

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID	Flow Controller ID	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	PID	TO15 VOCs	Type	Comments / Specific Instructions (ie: water or pressure issues)
West Baker Furnace		08/06/20	12:40			-25 Hg	0 Hg	127.4	✓ Total VOC Result	SVE	

There will be additional charges for damaged equipment

Report QC Levels _____
EDD required Yes / No
Type: _____ Units: _____

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Clayton M Barnhill PE	08/06/2020	16:00	[illegible]	8/12/20	14:57
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature ____°C

Received by OCD: 10/21/2022 8:09:38 AM

Released to Imaging: 11/22/2022 9:07:27 AM

15-Oct-2020

Sofie Weber-Snapp
EarthCon
188 West Oak Parkway
Suite 106
Marietta, GA 30062

Re: **Thermal Oxidizer/Sue Air Sampling/September 2020** Work Order: **20091002**

Dear Sofie,

ALS Environmental received 2 samples on 28-Sep-2020 05:46 PM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Laboratory Group. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 18.

If you have any questions regarding this report, please feel free to contact me.

Sincerely,

Shawn Smythe

Electronically approved by: Shawn Smythe

Shawn Smythe
Project Manager

Report of Laboratory Analysis

ALS Environmental

Date: 15-Oct-20

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020
Work Order: **20091002**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
20091002-01	West Baker Furnace	Air		9/23/2020 13:35	9/28/2020 17:46	☐
20091002-02	East Baker Furnace	Air		9/23/2020 13:40	9/28/2020 17:46	☐

ALS Environmental

Date: 15-Oct-20

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020
Work Order: 20091002

Case Narrative

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested.

Results relate only to the items tested and are not blank corrected unless indicated.

QC sample results for this data met laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

ALS is an EPA recognized NLLAP laboratory for lead paint, soil, and dust wipe analyses under its AIHA-LAP accreditation.

ALS Environmental

Date: *15-Oct-20*

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020 **Work Order:** 20091002
Sample ID: West Baker Furnace **Lab ID:** 20091002-01
Collection Date: 9/23/2020 01:35 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		250	ppbv	500	10/14/2020 03:29 AM
1,1,2,2-Tetrachloroethane	ND		250	ppbv	500	10/14/2020 03:29 AM
1,1,2-Trichloroethane	ND		250	ppbv	500	10/14/2020 03:29 AM
1,1-Dichloroethane	ND		250	ppbv	500	10/14/2020 03:29 AM
1,1-Dichloroethene	ND		250	ppbv	500	10/14/2020 03:29 AM
1,2,4-Trichlorobenzene	ND		250	ppbv	500	10/14/2020 03:29 AM
1,2,4-Trimethylbenzene	ND		250	ppbv	500	10/14/2020 03:29 AM
1,2-Dibromoethane	ND		100	ppbv	500	10/14/2020 03:29 AM
1,2-Dichlorobenzene	ND		250	ppbv	500	10/14/2020 03:29 AM
1,2-Dichloroethane	ND		250	ppbv	500	10/14/2020 03:29 AM
1,2-Dichloropropane	ND		250	ppbv	500	10/14/2020 03:29 AM
1,3,5-Trimethylbenzene	ND		250	ppbv	500	10/14/2020 03:29 AM
1,3-Butadiene	ND		250	ppbv	500	10/14/2020 03:29 AM
1,3-Dichlorobenzene	ND		500	ppbv	500	10/14/2020 03:29 AM
1,4-Dichlorobenzene	ND		500	ppbv	500	10/14/2020 03:29 AM
1,4-Dioxane	ND		500	ppbv	500	10/14/2020 03:29 AM
2-Butanone	ND		500	ppbv	500	10/14/2020 03:29 AM
2-Hexanone	ND		500	ppbv	500	10/14/2020 03:29 AM
2-Propanol	ND		500	ppbv	500	10/14/2020 03:29 AM
4-Ethyltoluene	ND		250	ppbv	500	10/14/2020 03:29 AM
4-Methyl-2-pentanone	ND		500	ppbv	500	10/14/2020 03:29 AM
Acetone	ND		500	ppbv	500	10/14/2020 03:29 AM
Benzene	ND		250	ppbv	500	10/14/2020 03:29 AM
Benzyl chloride	ND		500	ppbv	500	10/14/2020 03:29 AM
Bromodichloromethane	ND		250	ppbv	500	10/14/2020 03:29 AM
Bromoform	ND		250	ppbv	500	10/14/2020 03:29 AM
Bromomethane	ND		250	ppbv	500	10/14/2020 03:29 AM
Carbon disulfide	ND		250	ppbv	500	10/14/2020 03:29 AM
Carbon tetrachloride	ND		250	ppbv	500	10/14/2020 03:29 AM
Chlorobenzene	ND		250	ppbv	500	10/14/2020 03:29 AM
Chloroethane	ND		250	ppbv	500	10/14/2020 03:29 AM
Chloroform	ND		100	ppbv	500	10/14/2020 03:29 AM
Chloromethane	ND		250	ppbv	500	10/14/2020 03:29 AM
cis-1,2-Dichloroethene	ND		250	ppbv	500	10/14/2020 03:29 AM
cis-1,3-Dichloropropene	ND		250	ppbv	500	10/14/2020 03:29 AM
Cumene	ND		250	ppbv	500	10/14/2020 03:29 AM
Cyclohexane	**5,900**		**250**	**ppbv**	500	10/14/2020 03:29 AM
Dibromochloromethane	ND		250	ppbv	500	10/14/2020 03:29 AM
Dichlorodifluoromethane	ND		250	ppbv	500	10/14/2020 03:29 AM

Note:

ALS Environmental

Date: *15-Oct-20*

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020 **Work Order:** 20091002
Sample ID: West Baker Furnace **Lab ID:** 20091002-01
Collection Date: 9/23/2020 01:35 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Ethyl acetate	ND		250	ppbv	500	10/14/2020 03:29 AM
Ethylbenzene	ND		250	ppbv	500	10/14/2020 03:29 AM
Freon 113	ND		250	ppbv	500	10/14/2020 03:29 AM
Freon 114	ND		250	ppbv	500	10/14/2020 03:29 AM
Heptane	**5,700**		**250**	**ppbv**	500	10/14/2020 03:29 AM
Hexachlorobutadiene	ND		250	ppbv	500	10/14/2020 03:29 AM
Hexane	**11,000**		**250**	**ppbv**	500	10/14/2020 03:29 AM
m,p-Xylene	ND		250	ppbv	500	10/14/2020 03:29 AM
Methylene chloride	ND		1,000	ppbv	500	10/14/2020 03:29 AM
MTBE	ND		250	ppbv	500	10/14/2020 03:29 AM
Naphthalene	ND		100	ppbv	500	10/14/2020 03:29 AM
o-Xylene	ND		250	ppbv	500	10/14/2020 03:29 AM
Propene	ND		250	ppbv	500	10/14/2020 03:29 AM
Styrene	ND		250	ppbv	500	10/14/2020 03:29 AM
Tetrachloroethene	ND		250	ppbv	500	10/14/2020 03:29 AM
Tetrahydrofuran	ND		250	ppbv	500	10/14/2020 03:29 AM
Toluene	**800**		**250**	**ppbv**	500	10/14/2020 03:29 AM
trans-1,2-Dichloroethene	ND		250	ppbv	500	10/14/2020 03:29 AM
trans-1,3-Dichloropropene	ND		250	ppbv	500	10/14/2020 03:29 AM
Trichloroethene	ND		100	ppbv	500	10/14/2020 03:29 AM
Trichlorofluoromethane	ND		250	ppbv	500	10/14/2020 03:29 AM
Vinyl acetate	ND		250	ppbv	500	10/14/2020 03:29 AM
Vinyl chloride	ND		250	ppbv	500	10/14/2020 03:29 AM
Surr: Bromofluorobenzene	*101*		*60-140*	*%REC*	500	10/14/2020 03:29 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		1,360	µg/m3	500	10/14/2020 03:29 AM
1,1,2,2-Tetrachloroethane	ND		1,720	µg/m3	500	10/14/2020 03:29 AM
1,1,2-Trichloroethane	ND		1,360	µg/m3	500	10/14/2020 03:29 AM
1,1-Dichloroethane	ND		1,010	µg/m3	500	10/14/2020 03:29 AM
1,1-Dichloroethene	ND		991	µg/m3	500	10/14/2020 03:29 AM
1,2,4-Trichlorobenzene	ND		1,860	µg/m3	500	10/14/2020 03:29 AM
1,2,4-Trimethylbenzene	ND		1,230	µg/m3	500	10/14/2020 03:29 AM
1,2-Dibromoethane	ND		768	µg/m3	500	10/14/2020 03:29 AM
1,2-Dichlorobenzene	ND		1,500	µg/m3	500	10/14/2020 03:29 AM
1,2-Dichloroethane	ND		1,010	µg/m3	500	10/14/2020 03:29 AM
1,2-Dichloropropane	ND		1,160	µg/m3	500	10/14/2020 03:29 AM
1,3,5-Trimethylbenzene	ND		1,230	µg/m3	500	10/14/2020 03:29 AM
1,3-Butadiene	ND		553	µg/m3	500	10/14/2020 03:29 AM
1,3-Dichlorobenzene	ND		3,010	µg/m3	500	10/14/2020 03:29 AM
1,4-Dichlorobenzene	ND		3,010	µg/m3	500	10/14/2020 03:29 AM

Note:

ALS Environmental

Date: *15-Oct-20*

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020 **Work Order:** 20091002
Sample ID: West Baker Furnace **Lab ID:** 20091002-01
Collection Date: 9/23/2020 01:35 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dioxane	ND		1,800	µg/m3	500	10/14/2020 03:29 AM
2-Butanone	ND		1,470	µg/m3	500	10/14/2020 03:29 AM
2-Hexanone	ND		2,050	µg/m3	500	10/14/2020 03:29 AM
2-Propanol	ND		1,230	µg/m3	500	10/14/2020 03:29 AM
4-Ethyltoluene	ND		1,230	µg/m3	500	10/14/2020 03:29 AM
4-Methyl-2-pentanone	ND		2,050	µg/m3	500	10/14/2020 03:29 AM
Acetone	ND		1,190	µg/m3	500	10/14/2020 03:29 AM
Benzene	ND		799	µg/m3	500	10/14/2020 03:29 AM
Benzyl chloride	ND		2,590	µg/m3	500	10/14/2020 03:29 AM
Bromodichloromethane	ND		1,680	µg/m3	500	10/14/2020 03:29 AM
Bromoform	ND		2,580	µg/m3	500	10/14/2020 03:29 AM
Bromomethane	ND		971	µg/m3	500	10/14/2020 03:29 AM
Carbon disulfide	ND		778	µg/m3	500	10/14/2020 03:29 AM
Carbon tetrachloride	ND		1,570	µg/m3	500	10/14/2020 03:29 AM
Chlorobenzene	ND		1,150	µg/m3	500	10/14/2020 03:29 AM
Chloroethane	ND		660	µg/m3	500	10/14/2020 03:29 AM
Chloroform	ND		488	µg/m3	500	10/14/2020 03:29 AM
Chloromethane	ND		516	µg/m3	500	10/14/2020 03:29 AM
cis-1,2-Dichloroethene	ND		991	µg/m3	500	10/14/2020 03:29 AM
cis-1,3-Dichloropropene	ND		1,130	µg/m3	500	10/14/2020 03:29 AM
Cumene	ND		1,230	µg/m3	500	10/14/2020 03:29 AM
Cyclohexane	**20,300**		**861**	**µg/m3**	500	10/14/2020 03:29 AM
Dibromochloromethane	ND		2,130	µg/m3	500	10/14/2020 03:29 AM
Dichlorodifluoromethane	ND		1,240	µg/m3	500	10/14/2020 03:29 AM
Ethyl acetate	ND		901	µg/m3	500	10/14/2020 03:29 AM
Ethylbenzene	ND		1,090	µg/m3	500	10/14/2020 03:29 AM
Freon 113	ND		1,920	µg/m3	500	10/14/2020 03:29 AM
Freon 114	ND		1,750	µg/m3	500	10/14/2020 03:29 AM
Heptane	**23,500**		**1,020**	**µg/m3**	500	10/14/2020 03:29 AM
Hexachlorobutadiene	ND		2,670	µg/m3	500	10/14/2020 03:29 AM
Hexane	**38,200**		**881**	**µg/m3**	500	10/14/2020 03:29 AM
m,p-Xylene	ND		1,090	µg/m3	500	10/14/2020 03:29 AM
Methylene chloride	ND		3,500	µg/m3	500	10/14/2020 03:29 AM
MTBE	ND		901	µg/m3	500	10/14/2020 03:29 AM
Naphthalene	ND		524	µg/m3	500	10/14/2020 03:29 AM
o-Xylene	ND		1,090	µg/m3	500	10/14/2020 03:29 AM
Propene	ND		430	µg/m3	500	10/14/2020 03:29 AM
Styrene	ND		1,060	µg/m3	500	10/14/2020 03:29 AM
Tetrachloroethene	ND		1,700	µg/m3	500	10/14/2020 03:29 AM
Tetrahydrofuran	ND		737	µg/m3	500	10/14/2020 03:29 AM

Note:

ALS Environmental

Date: *15-Oct-20*

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020 **Work Order:** 20091002
Sample ID: West Baker Furnace **Lab ID:** 20091002-01
Collection Date: 9/23/2020 01:35 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	**3,000**		**942**	**µg/m3**	500	10/14/2020 03:29 AM
trans-1,2-Dichloroethene	ND		991	µg/m3	500	10/14/2020 03:29 AM
trans-1,3-Dichloropropene	ND		1,130	µg/m3	500	10/14/2020 03:29 AM
Trichloroethene	ND		537	µg/m3	500	10/14/2020 03:29 AM
Trichlorofluoromethane	ND		1,400	µg/m3	500	10/14/2020 03:29 AM
Vinyl acetate	ND		880	µg/m3	500	10/14/2020 03:29 AM
Vinyl chloride	ND		639	µg/m3	500	10/14/2020 03:29 AM
Surr: Bromofluorobenzene	*101*		*60-140*	*%REC*	500	10/14/2020 03:29 AM

Note:

ALS Environmental

Date: *15-Oct-20*

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020 **Work Order:** 20091002
Sample ID: East Baker Furnace **Lab ID:** 20091002-02
Collection Date: 9/23/2020 01:40 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		250	ppbv	500	10/14/2020 04:59 AM
1,1,2,2-Tetrachloroethane	ND		250	ppbv	500	10/14/2020 04:59 AM
1,1,2-Trichloroethane	ND		250	ppbv	500	10/14/2020 04:59 AM
1,1-Dichloroethane	ND		250	ppbv	500	10/14/2020 04:59 AM
1,1-Dichloroethene	ND		250	ppbv	500	10/14/2020 04:59 AM
1,2,4-Trichlorobenzene	ND		250	ppbv	500	10/14/2020 04:59 AM
1,2,4-Trimethylbenzene	ND		250	ppbv	500	10/14/2020 04:59 AM
1,2-Dibromoethane	ND		100	ppbv	500	10/14/2020 04:59 AM
1,2-Dichlorobenzene	ND		250	ppbv	500	10/14/2020 04:59 AM
1,2-Dichloroethane	ND		250	ppbv	500	10/14/2020 04:59 AM
1,2-Dichloropropane	ND		250	ppbv	500	10/14/2020 04:59 AM
1,3,5-Trimethylbenzene	ND		250	ppbv	500	10/14/2020 04:59 AM
1,3-Butadiene	ND		250	ppbv	500	10/14/2020 04:59 AM
1,3-Dichlorobenzene	ND		500	ppbv	500	10/14/2020 04:59 AM
1,4-Dichlorobenzene	ND		500	ppbv	500	10/14/2020 04:59 AM
1,4-Dioxane	ND		500	ppbv	500	10/14/2020 04:59 AM
2-Butanone	ND		500	ppbv	500	10/14/2020 04:59 AM
2-Hexanone	ND		500	ppbv	500	10/14/2020 04:59 AM
2-Propanol	ND		500	ppbv	500	10/14/2020 04:59 AM
4-Ethyltoluene	ND		250	ppbv	500	10/14/2020 04:59 AM
4-Methyl-2-pentanone	ND		500	ppbv	500	10/14/2020 04:59 AM
Acetone	ND		500	ppbv	500	10/14/2020 04:59 AM
Benzene	**270**		**250**	**ppbv**	500	10/14/2020 04:59 AM
Benzyl chloride	ND		500	ppbv	500	10/14/2020 04:59 AM
Bromodichloromethane	ND		250	ppbv	500	10/14/2020 04:59 AM
Bromoform	ND		250	ppbv	500	10/14/2020 04:59 AM
Bromomethane	ND		250	ppbv	500	10/14/2020 04:59 AM
Carbon disulfide	ND		250	ppbv	500	10/14/2020 04:59 AM
Carbon tetrachloride	ND		250	ppbv	500	10/14/2020 04:59 AM
Chlorobenzene	ND		250	ppbv	500	10/14/2020 04:59 AM
Chloroethane	ND		250	ppbv	500	10/14/2020 04:59 AM
Chloroform	ND		100	ppbv	500	10/14/2020 04:59 AM
Chloromethane	ND		250	ppbv	500	10/14/2020 04:59 AM
cis-1,2-Dichloroethene	ND		250	ppbv	500	10/14/2020 04:59 AM
cis-1,3-Dichloropropene	ND		250	ppbv	500	10/14/2020 04:59 AM
Cumene	ND		250	ppbv	500	10/14/2020 04:59 AM
Cyclohexane	**8,200**		**250**	**ppbv**	500	10/14/2020 04:59 AM
Dibromochloromethane	ND		250	ppbv	500	10/14/2020 04:59 AM
Dichlorodifluoromethane	ND		250	ppbv	500	10/14/2020 04:59 AM

Note:

ALS Environmental

Date: *15-Oct-20*

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020 **Work Order:** 20091002
Sample ID: East Baker Furnace **Lab ID:** 20091002-02
Collection Date: 9/23/2020 01:40 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Ethyl acetate	ND		250	ppbv	500	10/14/2020 04:59 AM
Ethylbenzene	ND		250	ppbv	500	10/14/2020 04:59 AM
Freon 113	ND		250	ppbv	500	10/14/2020 04:59 AM
Freon 114	ND		250	ppbv	500	10/14/2020 04:59 AM
Heptane	**8,400**		**250**	**ppbv**	500	10/14/2020 04:59 AM
Hexachlorobutadiene	ND		250	ppbv	500	10/14/2020 04:59 AM
Hexane	**16,000**		**2,500**	**ppbv**	5000	10/14/2020 04:14 AM
m,p-Xylene	ND		250	ppbv	500	10/14/2020 04:59 AM
Methylene chloride	ND		1,000	ppbv	500	10/14/2020 04:59 AM
MTBE	ND		250	ppbv	500	10/14/2020 04:59 AM
Naphthalene	ND		100	ppbv	500	10/14/2020 04:59 AM
o-Xylene	ND		250	ppbv	500	10/14/2020 04:59 AM
Propene	ND		250	ppbv	500	10/14/2020 04:59 AM
Styrene	ND		250	ppbv	500	10/14/2020 04:59 AM
Tetrachloroethene	ND		250	ppbv	500	10/14/2020 04:59 AM
Tetrahydrofuran	ND		250	ppbv	500	10/14/2020 04:59 AM
Toluene	**380**		**250**	**ppbv**	500	10/14/2020 04:59 AM
trans-1,2-Dichloroethene	ND		250	ppbv	500	10/14/2020 04:59 AM
trans-1,3-Dichloropropene	ND		250	ppbv	500	10/14/2020 04:59 AM
Trichloroethene	ND		100	ppbv	500	10/14/2020 04:59 AM
Trichlorofluoromethane	ND		250	ppbv	500	10/14/2020 04:59 AM
Vinyl acetate	ND		250	ppbv	500	10/14/2020 04:59 AM
Vinyl chloride	ND		250	ppbv	500	10/14/2020 04:59 AM
Surr: Bromofluorobenzene	*103*		*60-140*	*%REC*	500	10/14/2020 04:59 AM
TO-15 BY GC/MS			**ETO-15**			Analyst: **MRJ**
1,1,1-Trichloroethane	ND		1,360	µg/m3	500	10/14/2020 04:59 AM
1,1,2,2-Tetrachloroethane	ND		1,720	µg/m3	500	10/14/2020 04:59 AM
1,1,2-Trichloroethane	ND		1,360	µg/m3	500	10/14/2020 04:59 AM
1,1-Dichloroethane	ND		1,010	µg/m3	500	10/14/2020 04:59 AM
1,1-Dichloroethene	ND		991	µg/m3	500	10/14/2020 04:59 AM
1,2,4-Trichlorobenzene	ND		1,860	µg/m3	500	10/14/2020 04:59 AM
1,2,4-Trimethylbenzene	ND		1,230	µg/m3	500	10/14/2020 04:59 AM
1,2-Dibromoethane	ND		768	µg/m3	500	10/14/2020 04:59 AM
1,2-Dichlorobenzene	ND		1,500	µg/m3	500	10/14/2020 04:59 AM
1,2-Dichloroethane	ND		1,010	µg/m3	500	10/14/2020 04:59 AM
1,2-Dichloropropane	ND		1,160	µg/m3	500	10/14/2020 04:59 AM
1,3,5-Trimethylbenzene	ND		1,230	µg/m3	500	10/14/2020 04:59 AM
1,3-Butadiene	ND		553	µg/m3	500	10/14/2020 04:59 AM
1,3-Dichlorobenzene	ND		3,010	µg/m3	500	10/14/2020 04:59 AM
1,4-Dichlorobenzene	ND		3,010	µg/m3	500	10/14/2020 04:59 AM

Note:

ALS Environmental

Date: *15-Oct-20*

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020 **Work Order:** 20091002
Sample ID: East Baker Furnace **Lab ID:** 20091002-02
Collection Date: 9/23/2020 01:40 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
1,4-Dioxane	ND		1,800	µg/m3	500	10/14/2020 04:59 AM
2-Butanone	ND		1,470	µg/m3	500	10/14/2020 04:59 AM
2-Hexanone	ND		2,050	µg/m3	500	10/14/2020 04:59 AM
2-Propanol	ND		1,230	µg/m3	500	10/14/2020 04:59 AM
4-Ethyltoluene	ND		1,230	µg/m3	500	10/14/2020 04:59 AM
4-Methyl-2-pentanone	ND		2,050	µg/m3	500	10/14/2020 04:59 AM
Acetone	ND		1,190	µg/m3	500	10/14/2020 04:59 AM
Benzene	**863**		**799**	**µg/m3**	500	10/14/2020 04:59 AM
Benzyl chloride	ND		2,590	µg/m3	500	10/14/2020 04:59 AM
Bromodichloromethane	ND		1,680	µg/m3	500	10/14/2020 04:59 AM
Bromoform	ND		2,580	µg/m3	500	10/14/2020 04:59 AM
Bromomethane	ND		971	µg/m3	500	10/14/2020 04:59 AM
Carbon disulfide	ND		778	µg/m3	500	10/14/2020 04:59 AM
Carbon tetrachloride	ND		1,570	µg/m3	500	10/14/2020 04:59 AM
Chlorobenzene	ND		1,150	µg/m3	500	10/14/2020 04:59 AM
Chloroethane	ND		660	µg/m3	500	10/14/2020 04:59 AM
Chloroform	ND		488	µg/m3	500	10/14/2020 04:59 AM
Chloromethane	ND		516	µg/m3	500	10/14/2020 04:59 AM
cis-1,2-Dichloroethene	ND		991	µg/m3	500	10/14/2020 04:59 AM
cis-1,3-Dichloropropene	ND		1,130	µg/m3	500	10/14/2020 04:59 AM
Cumene	ND		1,230	µg/m3	500	10/14/2020 04:59 AM
Cyclohexane	**28,300**		**861**	**µg/m3**	500	10/14/2020 04:59 AM
Dibromochloromethane	ND		2,130	µg/m3	500	10/14/2020 04:59 AM
Dichlorodifluoromethane	ND		1,240	µg/m3	500	10/14/2020 04:59 AM
Ethyl acetate	ND		901	µg/m3	500	10/14/2020 04:59 AM
Ethylbenzene	ND		1,090	µg/m3	500	10/14/2020 04:59 AM
Freon 113	ND		1,920	µg/m3	500	10/14/2020 04:59 AM
Freon 114	ND		1,750	µg/m3	500	10/14/2020 04:59 AM
Heptane	**34,200**		**1,020**	**µg/m3**	500	10/14/2020 04:59 AM
Hexachlorobutadiene	ND		2,670	µg/m3	500	10/14/2020 04:59 AM
Hexane	**56,200**		**8,810**	**µg/m3**	5000	10/14/2020 04:14 AM
m,p-Xylene	ND		1,090	µg/m3	500	10/14/2020 04:59 AM
Methylene chloride	ND		3,500	µg/m3	500	10/14/2020 04:59 AM
MTBE	ND		901	µg/m3	500	10/14/2020 04:59 AM
Naphthalene	ND		524	µg/m3	500	10/14/2020 04:59 AM
o-Xylene	ND		1,090	µg/m3	500	10/14/2020 04:59 AM
Propene	ND		430	µg/m3	500	10/14/2020 04:59 AM
Styrene	ND		1,060	µg/m3	500	10/14/2020 04:59 AM
Tetrachloroethene	ND		1,700	µg/m3	500	10/14/2020 04:59 AM
Tetrahydrofuran	ND		737	µg/m3	500	10/14/2020 04:59 AM

Note:

ALS Environmental

Date: *15-Oct-20*

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020 **Work Order:** 20091002
Sample ID: East Baker Furnace **Lab ID:** 20091002-02
Collection Date: 9/23/2020 01:40 PM **Matrix:** AIR

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
Toluene	**1,430**		**942**	**µg/m3**	500	10/14/2020 04:59 AM
trans-1,2-Dichloroethene	ND		991	µg/m3	500	10/14/2020 04:59 AM
trans-1,3-Dichloropropene	ND		1,130	µg/m3	500	10/14/2020 04:59 AM
Trichloroethene	ND		537	µg/m3	500	10/14/2020 04:59 AM
Trichlorofluoromethane	ND		1,400	µg/m3	500	10/14/2020 04:59 AM
Vinyl acetate	ND		880	µg/m3	500	10/14/2020 04:59 AM
Vinyl chloride	ND		639	µg/m3	500	10/14/2020 04:59 AM
Surr: Bromofluorobenzene	*103*		*60-140*	*%REC*	500	10/14/2020 04:59 AM

Note:

ALS Laboratory Group
4388 Glendale-Milford Rd
Cincinnati, OH 45242
Ph: 513-733-5336
Fax: 513-733-5347
www.alsglobal.com

TVOC **

Client: Earthcon
Client Sample ID: TWP West Baker Furnace
ALS Sample # 20091002-01A
Method: EPA TO-15

		Estimated Concentration	Units
	TVOC**	68820	PPBV
	TVOC**	242545	ug/m3

Client Sample ID: TWP East Baker Furnace
ALS Sample # 20091002-02A
Method: EPA TO-15

		Estimated Concentration	Units
	TVOC**	86825	PPBV
	TVOC**	306002	ug/m3

**TVOC calculation based on response factor and molecular weight of hexane.
****Results should be considered estimated.

ALS Environmental

Date: 15-Oct-20

Client: EarthCon
Work Order: 20091002
Project: Thermal Oxidizer/Sue Air Sampling/September 202

QC BATCH REPORT

Batch ID: **R182060** Instrument ID **VMS4** Method: **ETO-15**

mblk Sample ID: **MBLK-R182060** Units: **ppbv** Analysis Date: **10/13/2020 04:14 PM**

Client ID: Run ID: **VMS4_201013A** SeqNo: **2328102** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	ND	0.50								
1,1,2,2-Tetrachloroethane	ND	0.50								
1,1,2-Trichloroethane	ND	0.50								
1,1-Dichloroethane	ND	0.50								
1,1-Dichloroethene	ND	0.50								
1,2,4-Trichlorobenzene	ND	0.50								
1,2,4-Trimethylbenzene	ND	0.50								
1,2-Dibromoethane	ND	0.20								
1,2-Dichlorobenzene	ND	0.50								
1,2-Dichloroethane	ND	0.50								
1,2-Dichloropropane	ND	0.50								
1,3,5-Trimethylbenzene	ND	0.50								
1,3-Butadiene	ND	0.50								
1,3-Dichlorobenzene	ND	1.0								
1,4-Dichlorobenzene	ND	1.0								
1,4-Dioxane	ND	1.0								
2-Butanone	ND	1.0								
2-Hexanone	ND	1.0								
2-Propanol	ND	1.0								
4-Ethyltoluene	ND	0.50								
4-Methyl-2-pentanone	ND	1.0								
Acetone	ND	1.0								
Benzene	ND	0.50								
Benzyl chloride	ND	1.0								
Bromodichloromethane	ND	0.50								
Bromoform	ND	0.50								
Bromomethane	ND	0.50								
Carbon disulfide	ND	0.50								
Carbon tetrachloride	ND	0.50								
Chlorobenzene	ND	0.50								
Chloroethane	ND	0.50								
Chloroform	ND	0.20								
Chloromethane	ND	0.50								
cis-1,2-Dichloroethene	ND	0.50								
cis-1,3-Dichloropropene	ND	0.50								
Cumene	ND	0.50								
Cyclohexane	ND	0.50								
Dibromochloromethane	ND	0.50								
Dichlorodifluoromethane	ND	0.50								
Ethyl acetate	ND	0.50								
Ethylbenzene	ND	0.50								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20091002
Project: Thermal Oxidizer/Sue Air Sampling/September 202

QC BATCH REPORT

Batch ID: **R182060** Instrument ID **VMS4** Method: **ETO-15**

Freon 113	ND	0.50					
Freon 114	ND	0.50					
Heptane	ND	0.50					
Hexachlorobutadiene	ND	0.50					
Hexane	ND	0.50					
m,p-Xylene	ND	0.50					
Methylene chloride	ND	2.0					
MTBE	ND	0.50					
Naphthalene	ND	0.20					
o-Xylene	ND	0.50					
Propene	ND	0.50					
Styrene	ND	0.50					
Tetrachloroethene	ND	0.50					
Tetrahydrofuran	ND	0.50					
Toluene	ND	0.50					
trans-1,2-Dichloroethene	ND	0.50					
trans-1,3-Dichloropropene	ND	0.50					
Trichloroethene	ND	0.20					
Trichlorofluoromethane	ND	0.50					
Vinyl acetate	ND	0.50					
Vinyl chloride	ND	0.50					
Surr: Bromofluorobenzene	*9.5*	0	*10*	0	*95*	*60-140*	0

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20091002
Project: Thermal Oxidizer/Sue Air Sampling/September 202

QC BATCH REPORT

Batch ID: **R182060** Instrument ID **VMS4** Method: **ETO-15**

lcs Sample ID: **LCS-R182060** Units: **ppbv** Analysis Date: **10/13/2020 02:57 PM**

Client ID: Run ID: **VMS4_201013A** SeqNo: **2328101** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	9.97	0.50	10	0	99.7	58.8-163	0			
1,1,2,2-Tetrachloroethane	10.47	0.50	10	0	105	60-140	0			
1,1,2-Trichloroethane	9.64	0.50	10	0	96.4	60-140	0			
1,1-Dichloroethane	10.59	0.50	10	0	106	60-140	0			
1,1-Dichloroethene	10.66	0.50	10	0	107	60-140	0			
1,2,4-Trichlorobenzene	8.5	0.50	10	0	85	49.3-150	0			
1,2,4-Trimethylbenzene	10.94	0.50	10	0	109	50.1-162	0			
1,2-Dibromoethane	9.48	0.20	10	0	94.8	60-140	0			
1,2-Dichlorobenzene	9.73	0.50	10	0	97.3	41.9-141	0			
1,2-Dichloroethane	10.75	0.50	10	0	108	60-140	0			
1,2-Dichloropropane	10.53	0.50	10	0	105	60-140	0			
1,3,5-Trimethylbenzene	10.17	0.50	10	0	102	60-140	0			
1,3-Butadiene	9.45	0.50	10	0	94.5	50.6-140	0			
1,3-Dichlorobenzene	9.93	1.0	10	0	99.3	60-140	0			
1,4-Dichlorobenzene	10.12	1.0	10	0	101	55.1-145	0			
1,4-Dioxane	9.09	1.0	10	0	90.9	60-140	0			
2-Butanone	10.88	1.0	10	0	109	60-140	0			
2-Hexanone	11.77	1.0	10	0	118	56.2-162	0			
2-Propanol	11.26	1.0	10	0	113	60-140	0			
4-Ethyltoluene	10.97	0.50	10	0	110	60-140	0			
4-Methyl-2-pentanone	11.79	1.0	10	0	118	60-140	0			
Acetone	10.1	1.0	10	0	101	60-140	0			
Benzene	10.18	0.50	10	0	102	60-140	0			
Benzyl chloride	10.64	1.0	10	0	106	31.9-174	0			
Bromodichloromethane	10.08	0.50	10	0	101	60-140	0			
Bromoform	9.6	0.50	10	0	96	60-140	0			
Bromomethane	8.79	0.50	10	0	87.9	60-140	0			
Carbon disulfide	10.13	0.50	10	0	101	60-140	0			
Carbon tetrachloride	9.73	0.50	10	0	97.3	60-140	0			
Chlorobenzene	9.45	0.50	10	0	94.5	60-140	0			
Chloroethane	11.46	0.50	10	0	115	60-140	0			
Chloroform	10.09	0.20	10	0	101	60-140	0			
Chloromethane	10.48	0.50	10	0	105	60-140	0			
cis-1,2-Dichloroethene	11.49	0.50	10	0	115	60-140	0			
cis-1,3-Dichloropropene	10.79	0.50	10	0	108	60-140	0			
Cumene	10.24	0.50	10	0	102	60-140	0			
Cyclohexane	10.25	0.50	10	0	102	60-140	0			
Dibromochloromethane	9.51	0.50	10	0	95.1	60-140	0			
Dichlorodifluoromethane	9.24	0.50	10	0	92.4	60-140	0			
Ethyl acetate	11.02	0.50	10	0	110	60-140	0			
Ethylbenzene	10.21	0.50	10	0	102	60-140	0			
Freon 113	9.57	0.50	10	0	95.7	60-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: EarthCon
Work Order: 20091002
Project: Thermal Oxidizer/Sue Air Sampling/September 202

QC BATCH REPORT

Batch ID: **R182060** Instrument ID **VMS4** Method: **ETO-15**

Freon 114	9.21	0.50	10	0	92.1	60-140	0
Heptane	12.19	0.50	10	0	122	60-140	0
Hexachlorobutadiene	8.55	0.50	10	0	85.5	60-140	0
Hexane	11.02	0.50	10	0	110	60-140	0
m,p-Xylene	21.14	0.50	20	0	106	60-140	0
Methylene chloride	9.94	2.0	10	0	99.4	60-140	0
MTBE	10.73	0.50	10	0	107	60.8-151	0
Naphthalene	8.96	0.20	10	0	89.6	53.1-152	0
o-Xylene	10.48	0.50	10	0	105	60-140	0
Propene	10.87	0.50	10	0	109	34.4-139	0
Styrene	10.46	0.50	10	0	105	60-140	0
Tetrachloroethene	8.86	0.50	10	0	88.6	60-140	0
Tetrahydrofuran	12.28	0.50	10	0	123	60-140	0
Toluene	9.6	0.50	10	0	96	60-140	0
trans-1,2-Dichloroethene	9.78	0.50	10	0	97.8	60-140	0
trans-1,3-Dichloropropene	10.82	0.50	10	0	108	60-140	0
Trichloroethene	9.75	0.20	10	0	97.5	60-140	0
Trichlorofluoromethane	9.53	0.50	10	0	95.3	60-140	0
Vinyl acetate	12.69	0.50	10	0	127	48.4-145	0
Vinyl chloride	9.52	0.50	10	0	95.2	60-140	0
Surr: Bromofluorobenzene	*10.66*	0	*10*	0	*107*	*60-140*	0

The following samples were analyzed in this batch: 20091002-01A 20091002-02A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 15-Oct-20

Client: EarthCon
Project: Thermal Oxidizer/Sue Air Sampling/September 2020
WorkOrder: **20091002**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DUP	Method Duplicate
E	EPA Method
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SDL	Sample Detection Limit
SW	SW-846 Method

Units Reported	Description
µg/m3	
ppbv	

ALS Environmental

Sample Receipt Checklist

Client Name: **EARTHCON-MARIETTA** Date/Time Received: **28-Sep-20 17:46**

Work Order: **20091002** Received by: **SNH**

Checklist completed by Stephanie Harrington (eSignature) 29-Sep-20 (Date) Reviewed by: Shawn Smythe (eSignature) 30-Sep-20 (Date)

Matrices:

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☐	No ☐	Not Present ☑
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Sample(s) received on ice?	Yes ☐	No ☑	
Temperature(s)/Thermometer(s):			
Cooler(s)/Kit(s):			
Date/Time sample(s) sent to storage:			
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

Appendix D

Historical SVE System Table for Gasoline Range Organics

APPENDIX D: Historical Summary of Vapor Sample Analyses for the SVE System (Gasoline Range VOCs) Transwestern Compressor Station No. 9 - Roswell, NM

Sample ID	Date	Gasoline Range VOCs		Estimated Process Flow	Potential Emissions	< C5	C5-C6	C6-C7	C7-C8	C8-C9	C9-C10	C10-C11	C11-C12	C12-C14	C14+
		(ug/L)	(ppbv) [(a)]	(scfm)	(lb/hr)	(%)									
West Baker Furnace	10/06/09	1,770	539	142	0.9	--	10.5	46.2	38.1	4.0	1.2	0.0	0.0	0.0	0.0
West Baker Furnace	08/10/11	3,200	974	147	1.8	--	--	--	--	--	--	--	--	--	--
West Baker Furnace	07/03/12	3,700	1,126	162	2.2	--	--	--	--	--	--	--	--	--	--
West Baker Furnace	10/05/12	1,400	426	162	0.8	--	--	--	--	--	--	--	--	--	--
West Baker Furnace	10/22/12	1,670	508	162	1.0	--	17.1	44.2	28.6	4.2	5.0	0.5	0.2	0.1	0.1
West Baker Furnace	01/29/13	1,130	344	160	0.7	--	20.3	44.9	25.9	3.9	4.6	0.3	0.0	0.1	0.0
West Baker Furnace	02/27/13	1,120	341	160	0.7	--	14.2	40.2	30.2	6.1	8.3	0.6	0.4	0.0	0.0
West Baker Furnace	03/29/13	694	211	160	0.4	--	14.8	42.0	29.5	8.1	5.1	0.2	0.1	0.2	0.0
West Baker Furnace	04/30/13	850	259	160	0.5	--	31.1	32.1	23.6	8.0	4.3	0.7	0.1	0.1	0.0
West Baker Furnace	05/16/13	5,610	1,707	160	3.4	--	33.5	31.4	26.8	5.8	2.0	0.4	0.1	0.0	0.0
West Baker Furnace	06/17/13	4,600	1,400	160	2.8	--	--	--	--	--	--	--	--	--	--
West Baker Furnace	07/17/13	4,680	1,424	160	2.8	--	28.6	30.3	30.3	6.9	3.5	0.3	0.1	0.0	0.0
West Baker Furnace	08/27/13	3,040	925	160	1.8	--	25.7	28.7	31.0	8.3	5.0	0.9	0.3	0.1	0.0
West Baker Furnace	09/25/13	2,280	694	160	1.4	--	25.4	29.5	24.8	10.0	7.5	1.9	0.8	0.1	0.0
West Baker Furnace	10/17/13	1,900	578	160	1.1	--	28.0	38.7	21.3	7.4	3.6	0.5	0.4	0.1	0.0
West Baker Furnace	11/22/13	2,100	639	160	1.3	--	31.9	35.5	23.4	5.9	3.0	0.1	0.1	0.1	0.0
West Baker Furnace	12/17/13	1,980	603	160	1.2	--	28.6	37.8	21.0	7.3	4.1	0.7	0.3	0.2	0.0
East Baker Furnace	10/06/09	2,010	612	216	1.6	--	15.4	49.3	31.4	2.9	1.0	0.0	0.0	0.0	0.0
East Baker Furnace	08/10/11	2,200	669	147	1.2	--	--	--	--	--	--	--	--	--	--
East Baker Furnace	07/03/12	2,100	639	159	1.3	--	--	--	--	--	--	--	--	--	--
East Baker Furnace	10/05/12	1,200	365	159	0.7	--	--	--	--	--	--	--	--	--	--
East Baker Furnace	10/22/12	1,780	542	160	1.1	--	15.3	41.0	29.6	5.8	7.1	0.9	0.1	0.1	0.1
East Baker Furnace	01/29/13	928	282	160	0.6	--	16.4	46.9	24.9	6.2	5.4	0.2	0.0	0.0	0.0
East Baker Furnace	02/27/13	860	262	160	0.5	--	15.2	43.2	30.0	6.2	5.2	0.2	0.0	0.0	0.0
East Baker Furnace	03/29/13	555	169	160	0.3	--	16.6	47.6	24.4	6.1	4.5	0.5	0.2	0.1	0.0
East Baker Furnace	04/30/13	772	235	160	0.5	--	27.7	28.9	29.6	8.0	4.6	0.9	0.2	0.1	0.0
East Baker Furnace	05/16/13	5,350	1,628	160	3.2	--	31.4	30.2	27.7	6.9	2.7	0.8	0.2	0.1	0.0
East Baker Furnace	06/17/13	4,700	1,430	160	2.8	--	--	--	--	--	--	--	--	--	--
East Baker Furnace	07/17/13	5,780	1,759	160	3.5	--	29.5	29.8	29.1	7.0	3.6	0.8	0.2	0.0	0.0
East Baker Furnace	08/27/13	3,040	925	160	1.8	--	25.6	28.7	31.0	8.5	5.1	0.9	0.2	0.0	0.0
East Baker Furnace	09/25/13	2,040	621	160	1.2	--	25.9	30.1	25.4	9.5	7.4	1.2	0.4	0.1	0.0
East Baker Furnace	10/17/13	1,650	502	160	1.0	--	30.5	32.8	22.8	7.9	4.6	0.6	0.4	0.2	0.2
East Baker Furnace	11/22/13	1,960	596	160	1.2	--	29.6	32.5	24.2	7.9	4.4	0.7	0.4	0.3	0.0
East Baker Furnace	12/17/13	1,770	539	160	1.1	--	31.4	33.2	22.8	7.2	4.2	0.6	0.3	0.3	0.0

(a) Conversion Factor:

P = 1.00 atm, MW = 79 g/mole, R = 0.08205 L*atm/(K*mole), T = 293°K

C ppbv = C ug/L * ((R * T)/(MW*P))

C ppbv = C ug/L * 0.3043

APPENDIX D: Historical SVE System Potential Emissions Estimate for Gasoline Range Organics
Transwestern Compressor Station No. 9 - Roswell, NM

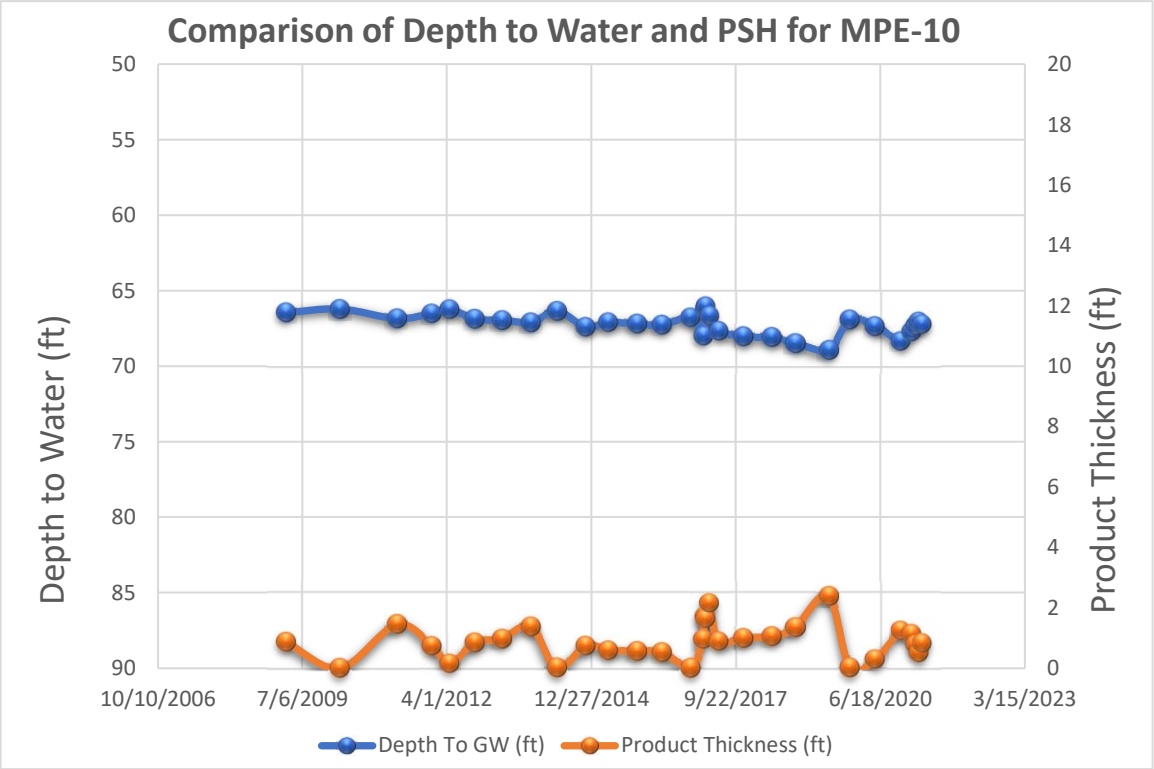
	West Unit				East Unit				Total				
Date	Total GRO C(ug/L)	Flow Rate Q(scfm)	Potential Emissions M(lb/hr)	Projected TPY M(tons/yr)	Total GRO C(ug/L)	Flow Rate Q(scfm)	Potential Emissions M(lb/hr)	Projected TPY M(tons/yr)	Flow Rate Q(scfm)	Potential Emissions M(lb/hr)	Projected TPY M(tons/yr)	Projected GPY M(gal/yr)	Projected PPY M(lbs/yr)
05/21/03	3,220	128	1.5	6.8	1,850	175	1.2	5.3	303	2.8	12.1	3,810	24,147
06/04/03	3,660	127	1.7	7.6	3,450	142	1.8	8.0	269	3.6	15.7	4,942	31,326
12/15/04	979	157	0.6	2.5	2,800	215	2.3	9.9	372	2.8	12.4	3,912	24,796
07/15/05	2,120	153	1.2	5.3	4,140	184	2.9	12.5	337	4.1	17.8	5,622	35,638
05/01/06	2,200	160	1.3	5.8	4,470	198	3.3	14.5	358	4.6	20.3	6,404	40,590
09/13/06	990	165	0.6	2.7	3,140	210	2.5	10.8	375	3.1	13.5	4,259	26,996
06/22/07	826	161	0.5	2.2	1,300	206	1.0	4.4	367	1.5	6.6	2,075	13,150
07/02/08	728	150	0.4	1.8	1,420	193	1.0	4.5	343	1.4	6.3	1,984	12,575
11/05/08	5,840	140	3.1	13.4	4,580	177	3.0	13.3	317	6.1	26.7	8,429	53,426
10/06/09	1,770	142	0.9	4.1	2,010	216	1.6	7.1	358	2.6	11.2	3,549	22,492
08/10/11	3,200	147	1.8	7.7	2,200	147	1.2	5.3	294	3.0	13.0	4,109	26,046
07/03/12	3,700	162	2.2	9.8	2,100	159	1.3	5.5	321	3.5	15.3	4,831	30,623
10/05/12	1,400	162	0.8	3.7	1,200	159	0.7	3.1	321	1.6	6.9	2,162	13,702
10/22/12	1,670	162	1.0	4.4	1,780	160	1.1	4.7	322	2.1	9.1	2,875	18,222
01/29/13	1,130	160	0.7	3.0	928	160	0.6	2.4	320	1.2	5.4	1,705	10,804
02/27/13	1,120	160	0.7	2.9	860	160	0.5	2.3	320	1.2	5.2	1,640	10,395
03/29/13	694	160	0.4	1.8	555	160	0.3	1.5	320	0.7	3.3	1,035	6,557
04/30/13	850	160	0.5	2.2	772	160	0.5	2.0	320	1.0	4.3	1,343	8,515
05/16/13	5,610	160	3.4	14.7	5,350	160	3.2	14.0	320	6.6	28.8	9,078	57,539
06/17/13	4,600	160	2.8	12.1	4,700	160	2.8	12.3	320	5.6	24.4	7,703	48,824
07/17/13	4,680	160	2.8	12.3	5,780	160	3.5	15.2	320	6.3	27.5	8,664	54,914
08/27/13	3,040	160	1.8	8.0	3,040	160	1.8	8.0	320	3.6	16.0	5,036	31,919
09/25/13	2,280	160	1.4	6.0	2,040	160	1.2	5.4	320	2.6	11.3	3,578	22,679
10/17/13	1,900	160	1.1	5.0	1,650	160	1.0	4.3	320	2.1	9.3	2,940	18,637
11/22/13	2,100	160	1.3	5.5	1,960	160	1.2	5.1	320	2.4	10.7	3,363	21,315
12/17/13	1,980	160	1.2	5.2	1,770	160	1.1	4.6	320	2.2	9.8	3,106	19,687

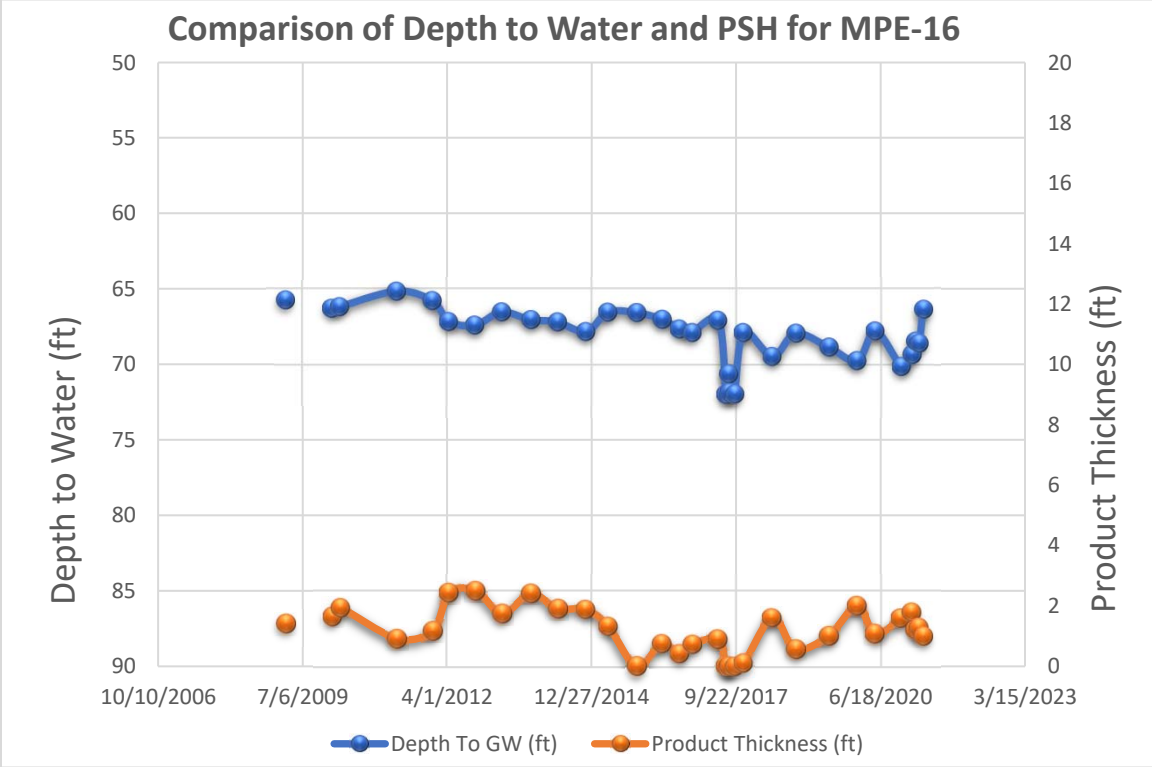
Notes:
1) Concentrations based on Hall Lab analysis of SVE system samples

Appendix E

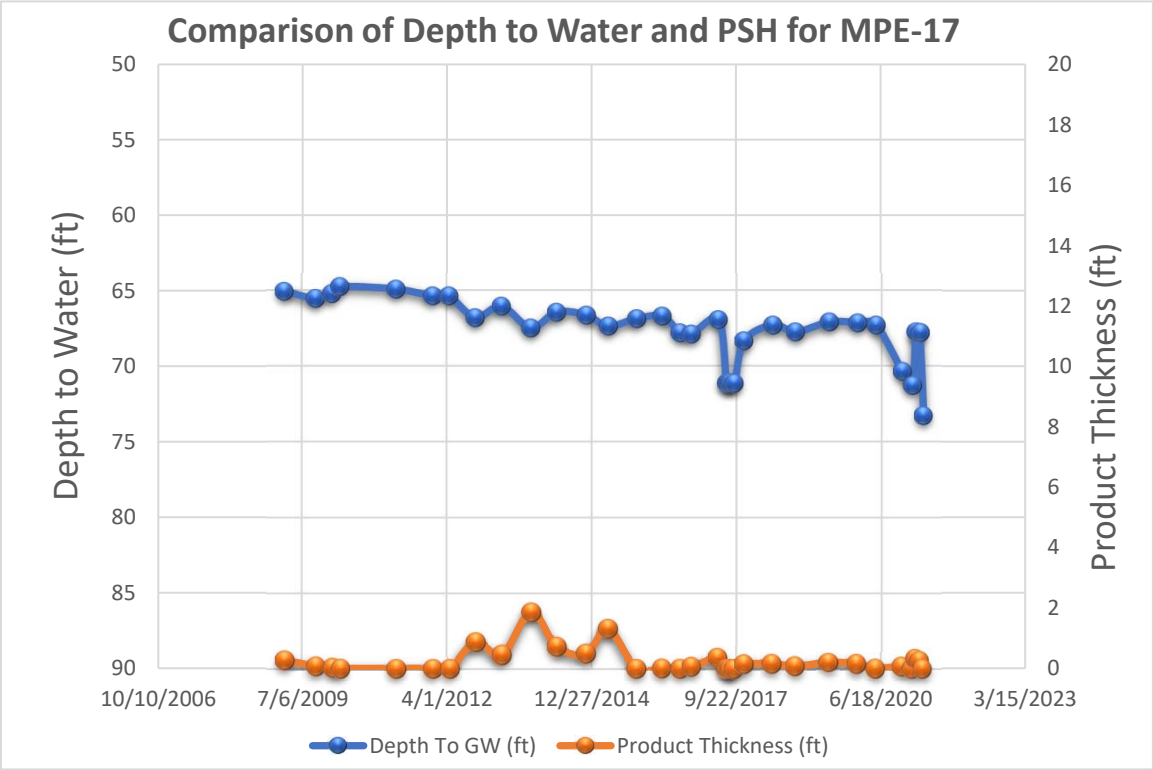
Depth to Water and Product Thickness Graphs

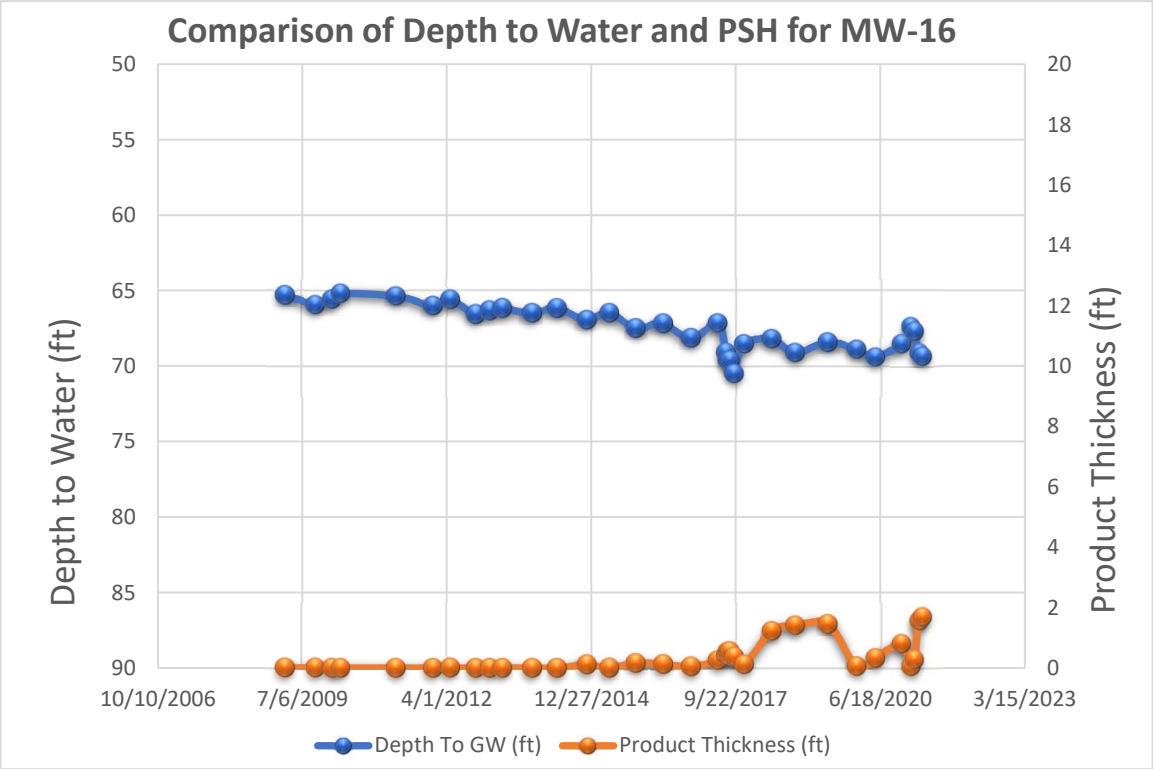
APPENDIX E - Depth to Water and Product Thickness Graphs
Transwestern Compressor Station No. 9 - Roswell, NM



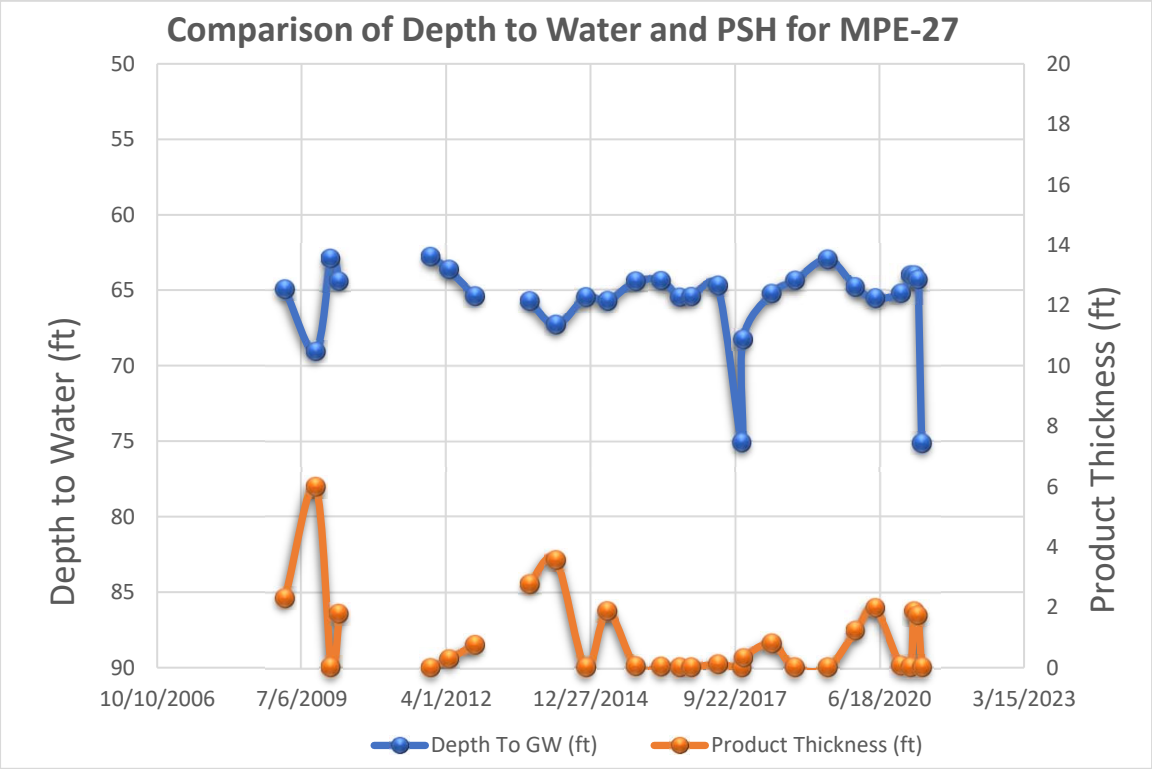


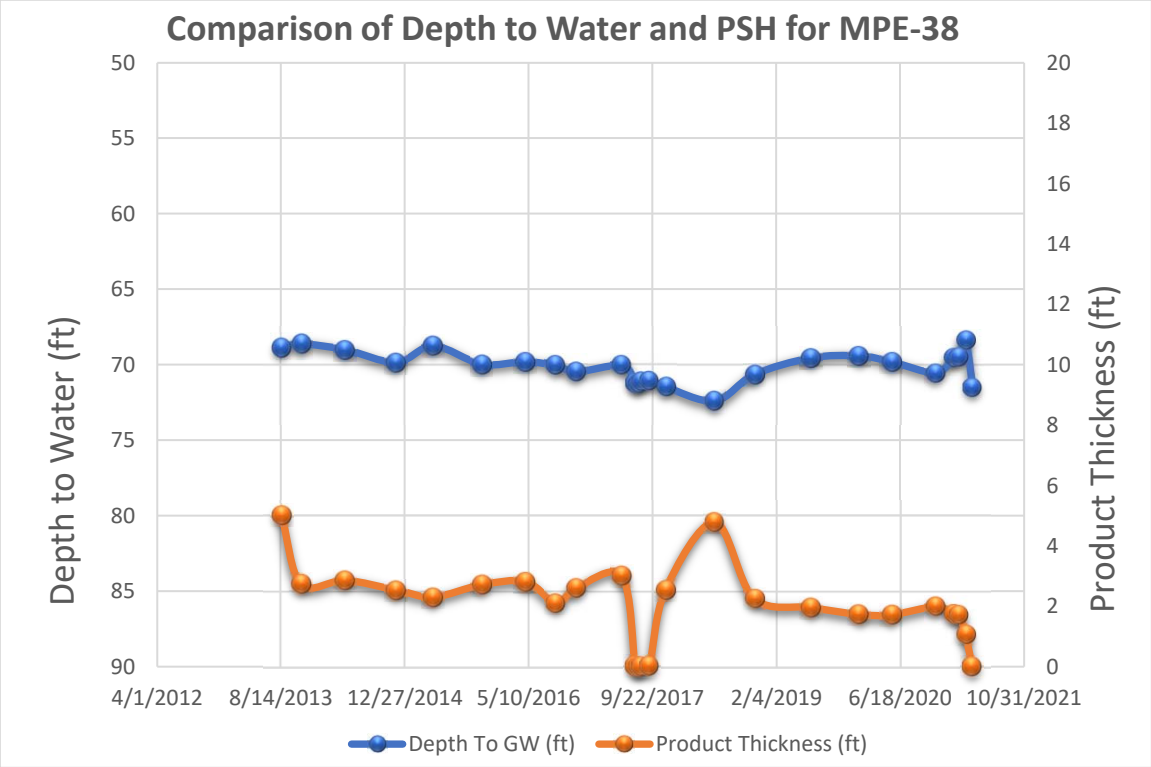
APPENDIX E - Depth to Water and Product Thickness Graphs
Transwestern Compressor Station No. 9 - Roswell, NM



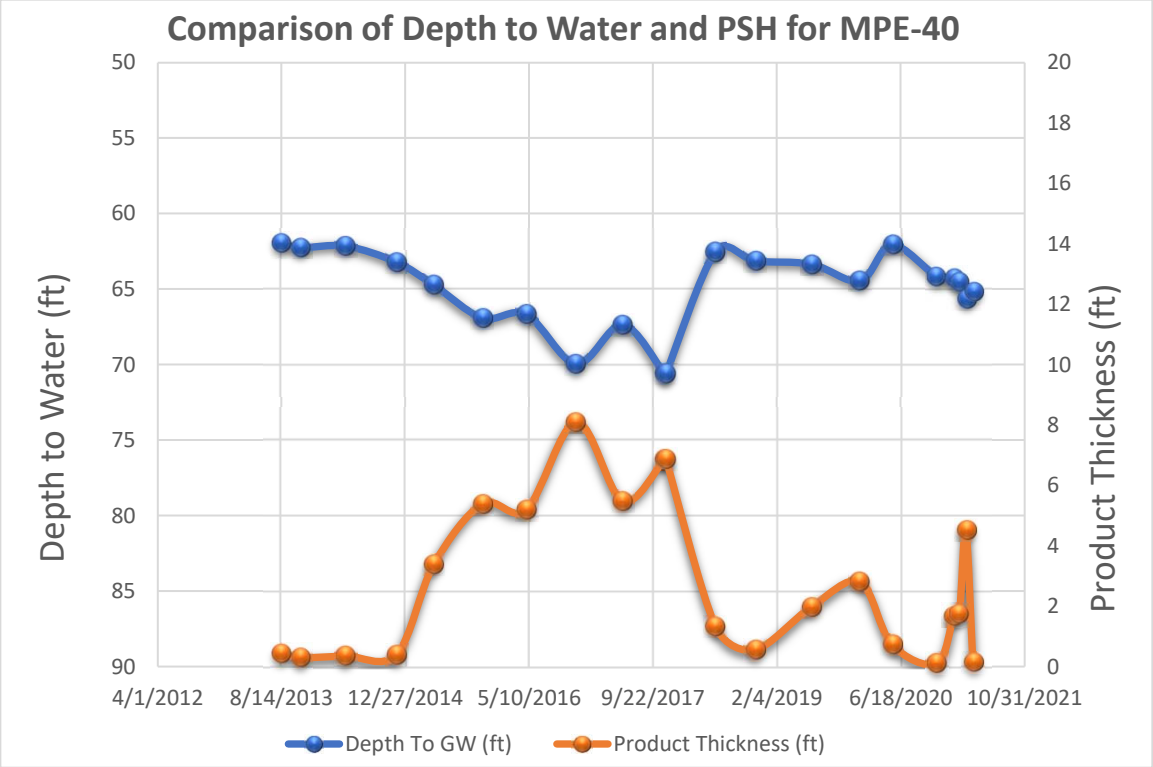


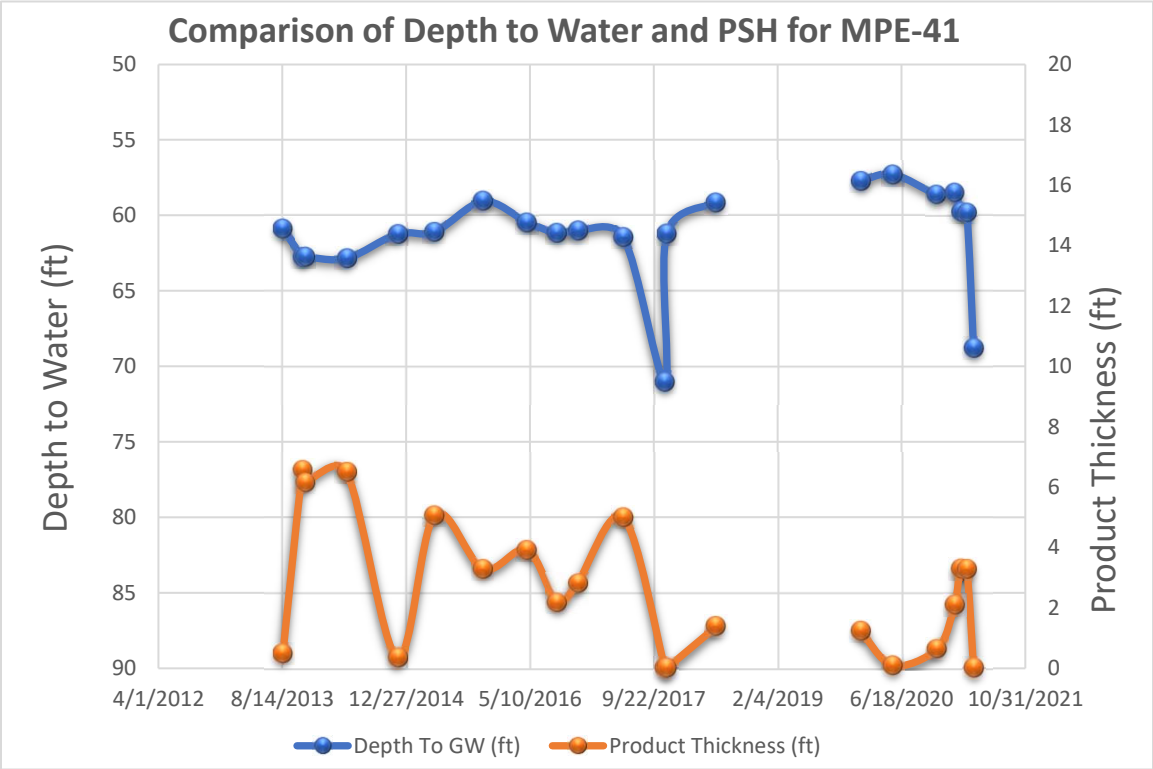
APPENDIX E - Depth to Water and Product Thickness Graphs
Transwestern Compressor Station No. 9 - Roswell, NM



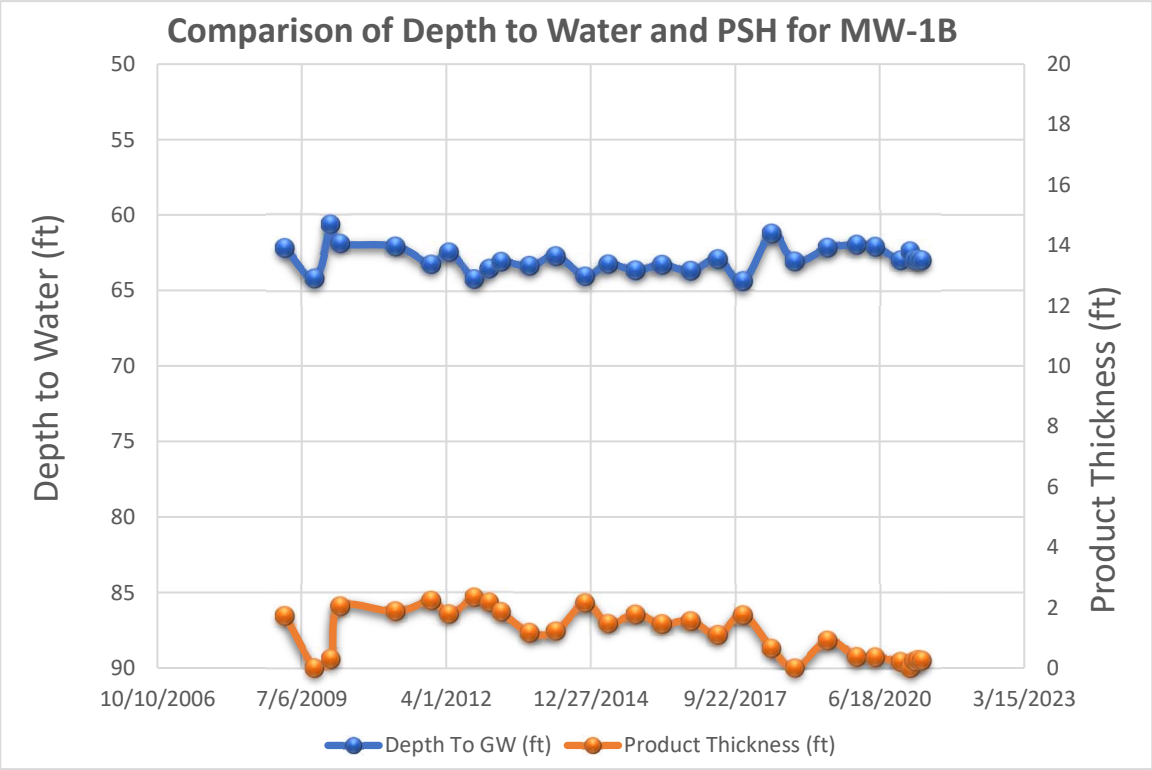


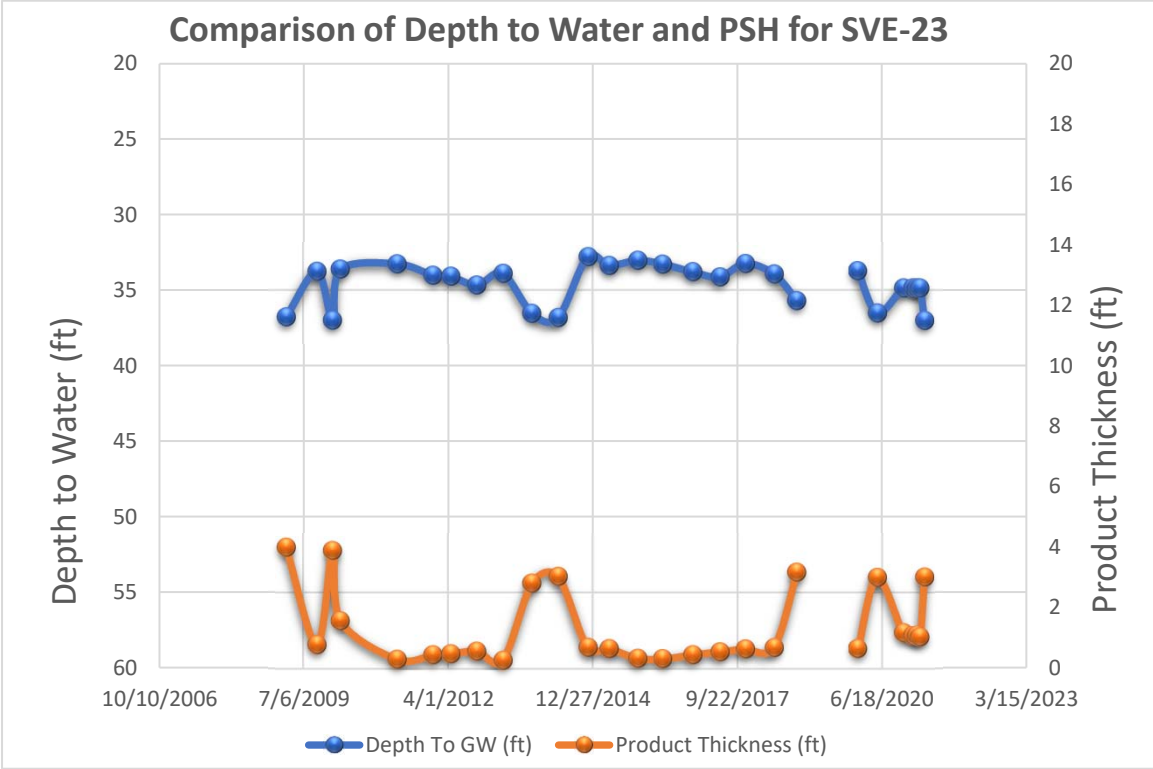
APPENDIX E - Depth to Water and Product Thickness Graphs
Transwestern Compressor Station No. 9 - Roswell, NM



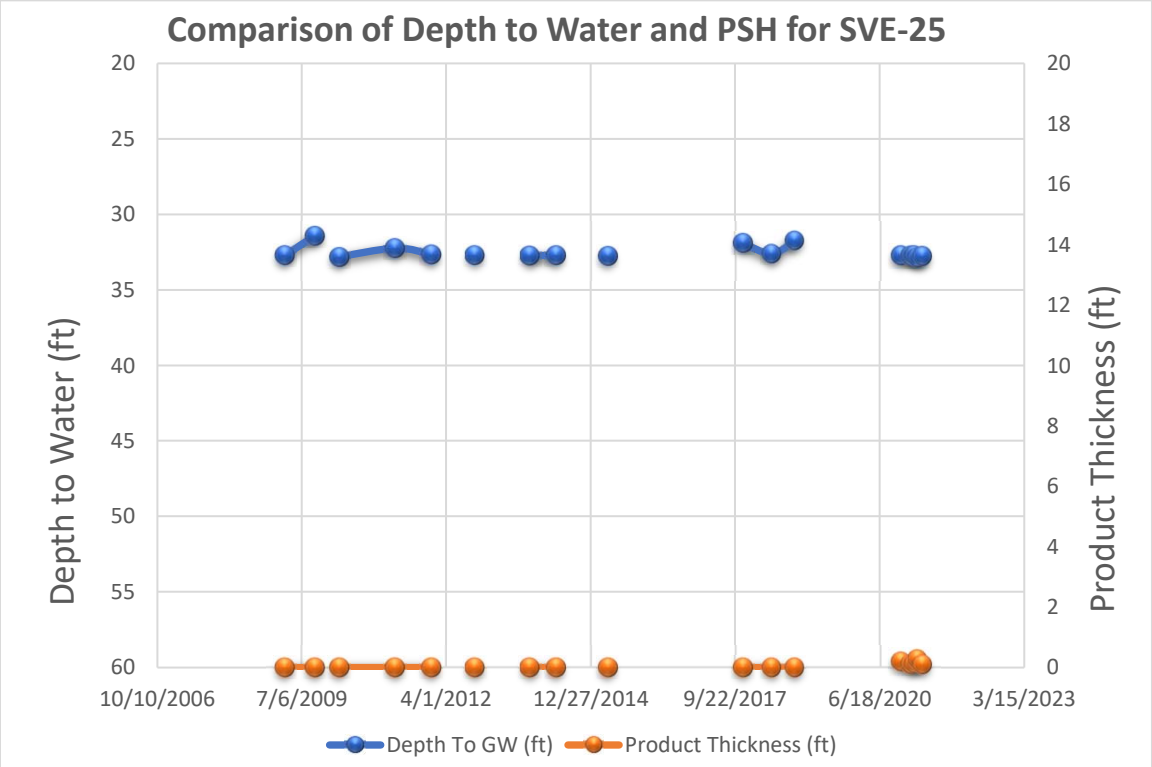


APPENDIX E - Depth to Water and Product Thickness Graphs
Transwestern Compressor Station No. 9 - Roswell, NM





APPENDIX E - Depth to Water and Product Thickness Graphs
Transwestern Compressor Station No. 9 - Roswell, NM



Received by OCD: 10/21/2022 8:09:38 AM

Accepted for the record
11/22/2022

NV

TRANSWESTERN PIPELINE COMPANY
An ENERGY TRANSFER Company

October 14, 2021

Mr. Ricardo Maestas
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

RE: Approval with Modifications
Report of 2020 Groundwater Remediation Activities
Roswell Compressor Station No. 9
Transwestern Pipeline Company
Roswell, Chaves County, New Mexico
NMOCD Abatement Plan #AP-125 (formerly #GW-052)
EPA ID No. NMD986676955
HWB-TWP-21-001

Dear Mr. Maestas;

Transwestern Pipeline, LLC (Transwestern) submits this *Approval with Modifications Response to Comments* (RTC) regarding the comments received from the New Mexico Environment Department (NMED) in response to the *Approval with Modifications Report of 2020 Groundwater Remediation Activities* for the above referenced Site. To respond specifically to each of the Agency's comments, dated July 15, 2021, the original comment included within the NMED letter is in **bold**, with the Transwestern response included in plain text immediately following the item requiring a response.

Comment 1

The Executive Summary, page vi, states, "[a]s during prior years of operation, the groundwater portion of the system was manually deactivated in January, February, March, November, and December of 2020 due to freezing temperatures. To protect the groundwater treatment system and minimize deactivation periods during future operations, heat tape and pipe insulation have since been installed throughout the process. Additional weather protection will be added as needed to minimize downtime during winter months." Comment 2 of the NMED's *Additional Response to Comments 10/14/2020 Approval with Modification 2019 Groundwater Remediation Activities Former Surface Impoundments,* dated April 9, 2021, states, "[t]he deactivation period is approximately six months and unusually long for southern New Mexico. The Respondent must resolve the issue to minimize the deactivation period before the coldest winter months in late 2021." The mean temperatures during the

Released to Imaging: 11/22/2022 9:07:27 AM

months of January, February, March, November, and December in Roswell, New Mexico are reportedly above freezing, and the weather is relatively mild. Therefore, it may not be necessary to deactivate the system for the winter months even without additional weather protection. Evaluate whether the system can be deactivated for shorter periods in response to weather conditions, in order to minimize deactivation periods. Provide a discussion in a response letter.

Comment noted. Furthermore, according to U.S. Climate Data[1] for New Mexico, freezing temperatures appear to occur starting in November thru February. Due to variable weather temperatures, the risk of damage to process equipment (pumps, valves, level sensors, fitting connections, spray field nozzles, etc.) and underground piping (from recovery wells to holding tanks to treatment equipment) increases while operating the system intermittently during the winter months. Also, operating the system while freezing temperature fluctuate will require additional field time for winterizing and de-winterizing the system to protect components from damage. Transwestern will monitor the cold weather periods of daily consistent freezing temperatures and will deactivate the system appropriately to protect system components while minimizing downtime. In addition, Transwestern will install additional cold weather protection as needed to minimize downtime.

Comment 2

In Section 3.3.1, *Perched Aquifer,* pages 7 and 8, the Respondent states, "[s]ince SVE-23 is the only well to contain PSH [in the wells screened across the perched aquifer], it is believed the PSH in SVE-23 may be residual product that may have accumulated in that well. Historical PSH measurements in wells located in the perched aquifer and upper aquifer indicate that the PSH footprint has stabilized or decreased." According to Table 3-2, *Summary of Groundwater Surface Elevations,* page 35 of 70, the PSH column thicknesses in well SVE-23 in the January 2020, January 2021, and April 2021 measurements are recorded as 0.65, 1.08, and 3.00 feet, respectively, and PSH has been detected in well SVE-23 since 2009. The PSH column thickness does not exhibit either decreasing or stabilizing trends; rather it is fluctuating and persistent. The PSH plume is likely present on the perched aquifer. Re-evaluate the conditions regarding the PSH in well SVE-23 and correct the statement, as appropriate, and provide replacement pages.

Based on historical PSH measurements, the PSH trends in SVE-23 appear to fluctuate and persistent since 2009. There was a period between November 2014 through January 2020 (six years) where the PSH thickness (average 0.55 foot) appears to be stable except for one gauging event (November 2018). For the next two gauging events (May 2020 and November 2020), the PSH thickness increased. Since January 2021

[1] https://www.usclimatedata.com/climate/roswell/new-mexico/united-states/usnm0267

through September 2021, PSH thickness has been monitored monthly in SVE-23. The average PSH thickness is 1.58 feet and the minimum and maximum thickness recorded during this 9-monthperiod ranged between 0.65 foot and 3.00 feet, respectively. The paragraph was revised to include this aforementioned information. Replacement pages are attached.

Comment 3

In Section 3.3.1, *Perched Aquifer,* page 8, the Respondent states, "Transwestern recommends that PSH recovery via manual bailing be initiated immediately in SVE-23 considering the overall corrective action objective for the site. Liquid levels and recovery data collected from SVE-23 during bailing activities will be evaluated to determine if a more aggressive recovery method is warranted." The Respondent submitted the *Extension Request regarding the Report of Perched Aquifer Evaluation and Future Corrective Action Recommendations* (Request), dated May 26, 2021and the Request was approved on June 8, 2021. The Request states that the document will be submitted no later than July 1, 2021. Unless the document *(Report of Perched Aquifer Evaluation and Future Corrective Action Recommendations)* is submitted, reviewed and evaluated, NMED will not be able to determine whether the recommendation to stop the PSH measurements and initiate PSH recovery via manual balling is appropriate. Therefore, the recommendation cannot be approved at this time and Comment 4 of the NMED's *Approval with Modifications Report of 2019 Groundwater Remediation Activities,* dated July 2, 2020, still remains valid. Remove the recommendation from the revised Report and provide replacement pages.

Comment noted, the recommendation has been removed per NMED request.

Comment 4

In Section 3.3.2, *Upper Aquifer,* page 8, the Respondent states, "PSH trends decrease since 2018." According to Table 3-2, *Summary of Groundwater Surface Elevations,* page 7 of 70, the measured PSH thicknesses in well MW-16 in the May 2018, May 2020, and April 2021 measurements are recorded as 1.22, 0.31, and 1.66 feet, respectively. PSH appears to be fluctuating or increasing in well MW-16 since 2018. The statement may or may not be accurate for some wells screened in the upper aquifer. Provide more detail to support the assertion and provide replacement pages.

The PSH trend refers to the pattern of decreasing PSH observed throughout the overall plume over several years. Since 2018, trends show a decrease in both the average PSH thickness and the areal extent of the plume. Note that if MW-16 PSH thickness fluctuates,

this does not negate the overall observed trend. Furthermore, the number of wells with measurable PSH has decreased. Replacement pages are attached.

Comment 5

In Section 3.4.1, *Perched Aquifer,* page 8, the Respondent states, "[a]nalytical data also indicates that 1,4-dioxane was not detected in SVE-28 or RW-1; although 1,4-dioxane was detected in SVE-30, it was not above the GCL." According to Table 3-5a, *Summary of Groundwater Analytical Results,* the 1,4-dioxane concentration in the groundwater sample collected from well RW-1 in November 23, 2020 is recorded as <25 µg/L, exceeding the groundwater cleanup level (GCL) of 6.72 µg/L. It is impossible to demonstrate whether 1,4- dioxane is present at concentrations above or below the applicable GCL. All analytes whose limit of quantitation (LOQ) values are higher than the applicable GCLs are considered data quality exceptions and must be identified as such. Revise the Report accordingly and provide replacement pages.

A footnote on Table 3.5a was added to indicate that RW-1 had a recorded limit of quantitation that exceeds the applicable GCL. Section 3.4.1 in the text was updated to indicate that RW-1 had a higher limit of quantitation than the applicable GCL. Replacement pages are attached.

Comment 6

In Section 3.4.2, *Upper Aquifer,* page 9, the Respondent states, "[a]nalytical data indicates that other VOCs were detected in MW-20, MW-22, MW-26, MW-39, MW-41, and MW-42, but only 1,1-DCE was detected at concentrations exceeding GCLs in wells MW-26 and MW-39." According to Table 3-5a, *Summary of Groundwater Analytical Results,* the naphthalene concentrations in the groundwater samples collected from wells MW-20, MW-22, MW-26, MW-39; MW-41, and MW-42 in 2020 are recorded as <2 µg/L, exceeding the groundwater cleanup level (GCL) of 1.43 µg/L. Therefore, it is unknown whether naphthalene is present at concentrations above or below the GCL. All analytes whose LOQ values are higher than the applicable GCLs are considered data quality exceptions and must be identified as such. Revise the Report accordingly and provide replacement pages (see Comment 5 above).

A footnote on Table 3.5a was added to indicate that naphthalene had recorded limit of quantitation that exceeds the applicable GCL. Section 3.4.2 in the text was updated to indicate that naphthalene had a higher limit of quantitation than the applicable GCL. Replacement pages are attached.

Comment 7

In Section 4.1, *Soil Vapor Extraction System Monitoring Results,* page 12, the Respondent states, "[l]aboratory data packages are included in Appendix C." A hard copy of the laboratory analytical reports is not required in the future reports. Provide an electronic copy on CD/DVD only in future reports.

Comment noted.

Comment 8

In Section 4.2, Groundwater Treatment System Monitoring Results, page 12, the Respondent states, "[o]peration records for the irrigation system presented in Table 4-2 indicate that the volume of groundwater recovered, treated, and discharged in 2020 was approximately 97,400 gallons." According to Table 4-2, Summary of Treated Water Irrigation Rates, page 4 of 4, the volume of water treated in 2020 is recorded as 94,800 gallons. Resolve the discrepancy and provide replacement pages.

Section 4.2 has been updated. Replacement pages are attached.

Comment 9

In Section 4.2, *Groundwater Treatment System Monitoring Results,* page 12, the Respondent states, "[a]ccording to Table 4-3, approximately 8.07 pounds (1.27 equivalent gallons) of dissolved-phase hydrocarbons were removed by the groundwater/PSH recovery system in 2020." Table 4-3, *Groundwater Treatment System Mass Removal Calculations for Total BTEX,* does not include the estimated mass of dissolved-phase hydrocarbons removed each year. Include the estimated mass of dissolved-phase hydrocarbons removed each year. In addition, Table 4-6, *Historical Hydrocarbon Removal Summary,* indicates that the mass of dissolved-phase hydrocarbons removed in 2020 is 6.22 pounds rather than 8.07 pounds. Resolve the discrepancy and provide replacement pages.

Table 4-3 has been updates to include the estimated mass of dissolved-phase hydrocarbons removed each year, replacement pages are attached.

Table 4-6 indicates that 8.07 pounds was removed 2020, and so does the text in Section 4.2, it is unclear to Transwestern were the 6.22 pounds come from.

Comment 10

In Section 4.2, *Groundwater Treatment System Monitoring Results,* page 12, the Respondent states, "approximately 940 gallons of PSH accumulated in the surge tank in 2020. PSH separated in the surge tank is removed by a vacuum truck and sent to a permitted off-site disposal facility periodically. Historical PSH recovery volumes are provided in Table 4-6." Table 4-6, *Historical Hydrocarbon Removal Summary,* indicates that the mass of PSH recovered in 2020 is 5,950 pounds; however, the table does not present the PSH recovery volume. Present the PSH recovery volume in the table and provide replacement pages.

Table 4-6 has been updated to include PSH recovery volume. Replacement page is attached.

Comment 11

In Section 4.2, *Groundwater Treatment System Monitoring Results,* page 12, the Respondent states, "[t]he MPE wells are installed on top of the clay layer, and the pumps are currently installed 6 inches from the bottom of the wells. Lowering the pumps in the wells is not possible as the clay layer might be penetrated." It is not clear how lowering the pump would penetrate the clay layer because well end cap would prevent the pump from reaching below the clay layer. Provide a clarification in the response letter.

Section 4.2 was updated to: Lowering the pumps in the wells is not possible as the depth of the wells are terminated at the top of the clay layer. Replacement page is attached.

An illustration of MPE 20 is included for reference detailing the location of the top of the clay layer in relation to the well construction to help visually show how lowering the pump would penetrate the clay layer.

Comment 12

In Section 4.2, *Groundwater Treatment System Monitoring Results,* page 13, the Respondent states, "analytical data for the Post-Treatment sample indicate that BTEX was not detected above laboratory reporting limits." According to Table 4-4, *Summary of Water Treatment System Analyses,* page 65 of 69, the chloride and sulfate concentrations in the Post-Treatment samples consistently exceed the New Mexico Water Quality Control Commission (NMWQCC) standards of 250 and 600 mg/L, respectively. The Respondent must discuss the issue of the chloride and sulfate exceedances with the New Mexico Oil Conservation Division (OCD). Carbon copy (CC) NMED on the OCD notification regarding the issue.

According to historical documents and correspondence between Transwestern and OCD, it has been documented that background concentrations of chloride and sulfate are above the NMWQCC standards (Amended Remediation Workplan, May 2013). According to "Phase III Soil and Groundwater Assessment for Roswell Compressor Station No. 9 Surface Impoundments" (ENRON, October 15, 1997): "Inorganic analyses for major ions indicate that groundwater samples from each well, including upgradient monitor wells MW-6 and MW-10, exceed the NMWQCC groundwater standards for TDS, chloride, and sulfate. Inorganic water quality measurements show similar chemical composition for samples from the uppermost aquifer and water within the Artesia Group. The generally poor inorganic water quality in the vicinity of the site is natural and likely results from gypsum beds within the alluvium and underlying Artesia Group."

The remediation system is operating in accordance with *Stage II Abatement Plan* (AP#125) approved by OCD in email correspondence date March 14, 2016. As requested by NMED, OCD will be contacted to discuss the chloride and sulfate exceedances that appear to be present since 2009.

Comment 13

In Section 4.2, *Groundwater Treatment System Monitoring Results,* page 13, the Respondent states, "[b]etween April and September 2020, the air stripper was monitored at multiple points to detect potential breakthrough of VOCs through the carbon treatment system." According to Table 4-5, *Summary of Air Stripper Vapor Monitoring,* the carbon treatment system has been effectively removing VOCs removed by the air stripper. However, the Report does not provide any discussion regarding the findings (e.g., potential breakthrough of VOCs through the carbon treatment system). Provide a discussion for the findings and provide replacement pages.

Based on field monitoring activities, the carbon treatment system for removing vapor VOCS by the air stripper achieved a 95 percent or greater efficiency for the year. In June 2020, vapor-phase carbon treatment efficiency of zero percentage was observed after the first carbon vessel ("midpoint") location; however, the carbon treatment efficiency was 69 percent after second carbon vessel. Further monitoring was planned to verify treatment efficiencies in August; however, the air stripper was deactivated due to an inoperable float switch. Once repairs were completed, the vapor-phase carbon vessels were monitored in September 2020. Based on field measurements, the carbon treatment efficiency was calculated to be approximately 97 percent in September 2020. Future monitoring will continue to measure breakthrough of the carbon vessels. Replacement pages are attached.

Received by OCD: 10/21/2022 8:09:38 AM

Transwestern appreciates the opportunity to continue to work with NMED and NMOCD to continue to bring this site to closure. If you have any further questions or comments regarding these responses, please do not hesitate to contact me at (210) 870-2725 or JD Haines of EarthCon Consultants, Inc. at (317) 450-6126.

Sincerely,

Ms. Stacy Boultinghouse, PG
Environmental Manager
Transwestern Pipeline Company, LLC
Stacy.Boultinghouse@energytransfer.com

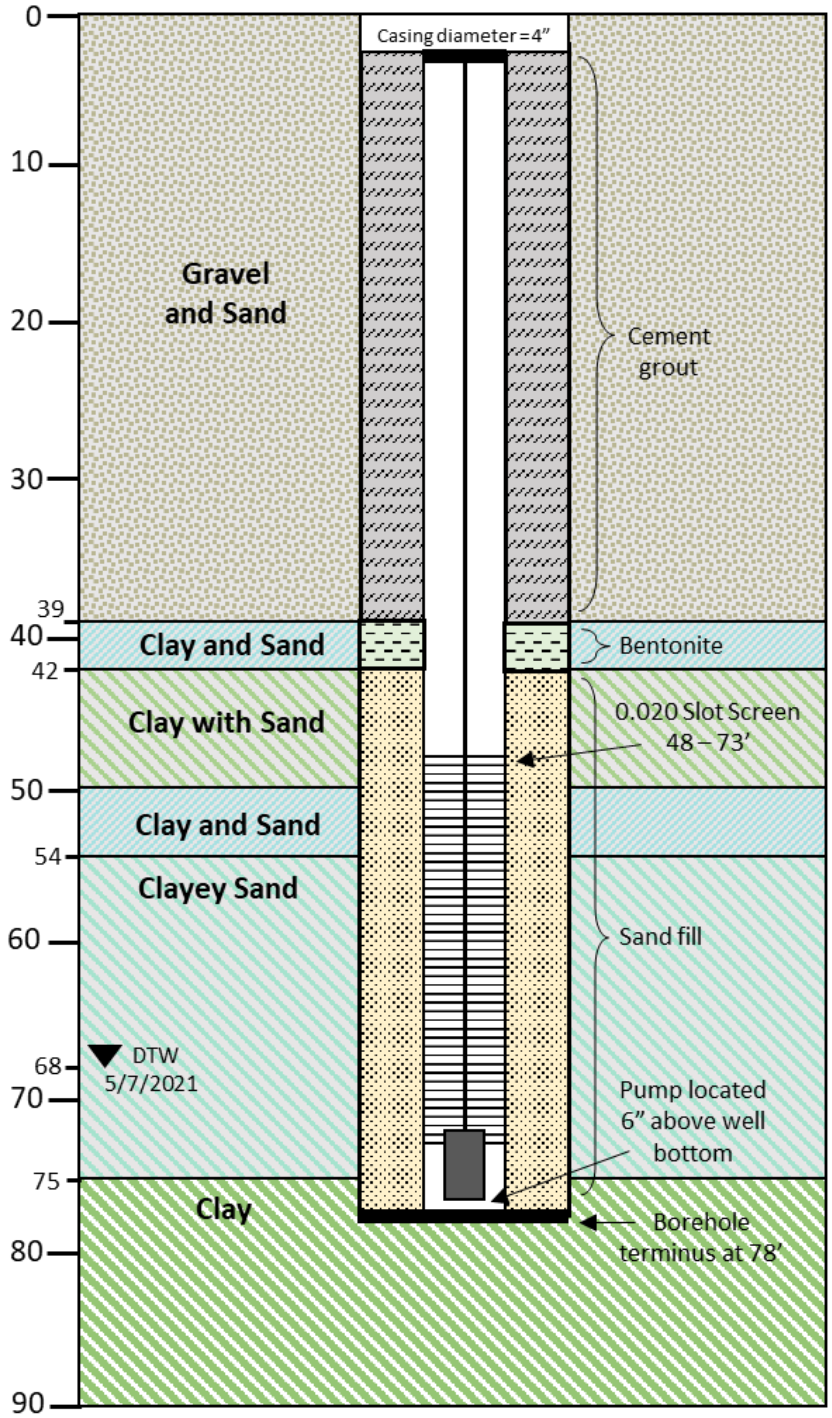
Cc: D. Cobrain, NMED HWB
M. Suzuki, NMED HWB
M. Bratcher, NMOCD
B. Billings, NMOCD
L. King, USEPA Region 6
JD Haines, EarthCon
S. Diamond, EarthCon

Released to Imaging: 11/22/2022 9:07:27 AM

EarthCon Consultants, Inc.
1880 West Oak
Parkway Building 100,
Suite 106
Marietta, Georgia 30062

P: 770-973-2100
F: 770-973-7395
www.earthcon.com

MPE-20 Borehole Illustration



NOT TO SCALE

EARTHCON®

REPORT OF 2020 GROUNDWATER REMEDIATION ACTIVITIES
FORMER SURFACE IMPOUNDMENTS
TRANSWESTERN COMPRESSOR STATION NO. 9
(ROSWELL COMPRESSOR STATION)
6381 NORTH MAIN STREET
ROSWELL, CHAVES COUNTY, NEW MEXICO
NMOCD GW-052
NMED 1656; EPA ID NMD986676955

PREPARED FOR:

TRANSWESTERN PIPELINE COMPANY, LLC
1300 MAIN
HOUSTON, TEXAS 77002

PREPARED BY:

EARTHCON CONSULTANTS, INC.
14405 WALTERS ROAD, SUITE 700
HOUSTON, TEXAS 77014
281.240.5200

EarthCon Project No. 02.20180005.00

April 2021

Report of 2020 Groundwater Remediation Activities
Former Surface Impoundments
Transwestern Compressor Station No. 9
(Roswell Compressor Station)
6381 North Main Street
Roswell, Chaves County, New Mexico
NMOCD GW-052
NMED 1656; EPA ID NMD986676955

Prepared For:

Transwestern Pipeline Company, LLC
1300 Main
Houston, TX 77002

April 2021

EarthCon Project No. 02.20180005.00

EarthCon Consultants, Inc. (EarthCon) is submitting to Transwestern Pipeline Company, LLC (Transwestern) this *Report of 2020 Groundwater Remediation Activities* for the Roswell Compressor Station in Roswell, Chaves County, New Mexico. This report has been prepared for the exclusive use of and reliance by Transwestern and may not be relied upon by any other person or entity without the express written authorization of EarthCon.

Any reliance, use, or re-use of this document (or the opinions, findings, conclusions, or recommendations if any represented herein), by parties other than those expressly authorized by EarthCon is at the sole risk of those parties. This report was prepared by or performed under the direction of the EarthCon Professionals listed below and approved by Transwestern.

Signed:

_____
Hannah Behar
Staff Scientist
EarthCon Consultants, Inc.

_____
Steve Diamond, PE (AL, GA, LA, MO, SC, MI)
Senior Engineer
EarthCon Consultants, Inc.

_____
J.D. Haines, LPG (IN)
Principal Geologist
EarthCon Consultants, Inc.

Date:_____

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Report of 2020 Groundwater Remediation Activities
Former Surface Impoundments
Transwestern Compressor Station No. 9
(Roswell Compressor Station)
6381 North Main Street
Roswell, Chaves County, New Mexico
NMOCD GW-052
NMED 1656; EPA ID NMD986676955

Prepared For:

Transwestern Pipeline Company, LLC
1300 Main
Houston, TX 77002

April 2021

Certification Statement
40 CFR 270.11(d)(1)

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision according to a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted, is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ _____

Stacy Boultinghouse, PG (TX, LA) Date
Environmental Manager
Transwestern Pipeline Company, LLC

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

EXECUTIVE SUMMARY

This *Report of 2020 Groundwater Remediation Activities* was prepared by EarthCon Consultants, Inc. (EarthCon) on behalf of Transwestern Pipeline Company, LLC (Transwestern) for the Former Surface Impoundments at the Transwestern Compressor Station No. 9 (also known as the Roswell Compressor Station) property located at 6381 North Main Street in Roswell, New Mexico. On March 13, 2013, the New Mexico Environment Department (NMED) issued a Stipulated Final Order (SFO) that governs activities associated with the Former Surface Impoundments. The purpose of the SFO, as stated in *Section III.A*, are 1) to ensure the continuance of ongoing remediation of contaminated soils and groundwater in the vicinity of the former surface impoundments to levels protective of human health or the environment in order to complete clean closure of the interim status units; and 2) to prevent or mitigate the migration of hazardous constituents at or from the Facility. As per *Section III.O* of the SFO, investigations, remediation, and other work that has been satisfactorily completed prior to the effective date of this Order, and that fulfills the substantive requirements of this Order, may be used to comply with this Order. Based on past investigations and the implementation of the corrective action plan, the groundwater treatment system continues to effectively control the migration of the PSH plume and continues to recover PSH and dissolved-phase hydrocarbons. Transwestern has fully complied with SFO objectives and has taken numerous actions to ensure that soils and groundwater at the Former Surface Impoundments will not adversely impact human health or the environment. This annual groundwater report was developed in general accordance with *Section IX.D – Reporting Requirements* of the SFO.

The former surface impoundments were historically used to store waste hydrocarbons, including pipeline condensate, pigging wastes, spent solvents, and other wastes and debris from pipeline maintenance activities conducted at the Roswell Compressor Station. The wastes were removed from the former surface impoundments and the area was backfilled with clean soil in 2001. A soil and groundwater remediation system was subsequently designed and installed to address dissolved-phase and phase separated hydrocarbons (PSH) detected in groundwater.

The remediation system in operation at the Roswell Compressor Station uses multiphase extraction (MPE) technology consisting of a soil vapor extraction (SVE) and treatment unit and a groundwater/PSH recovery and treatment unit. The recovery well network currently consists of 9 SVE-only wells and 35 MPE wells. A network of 30 monitoring wells (29 wells installed in

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

the Upper Aquifer and one well installed in the deeper regional San Andres Formation Aquifer) is used to assess groundwater conditions within the Project Area.

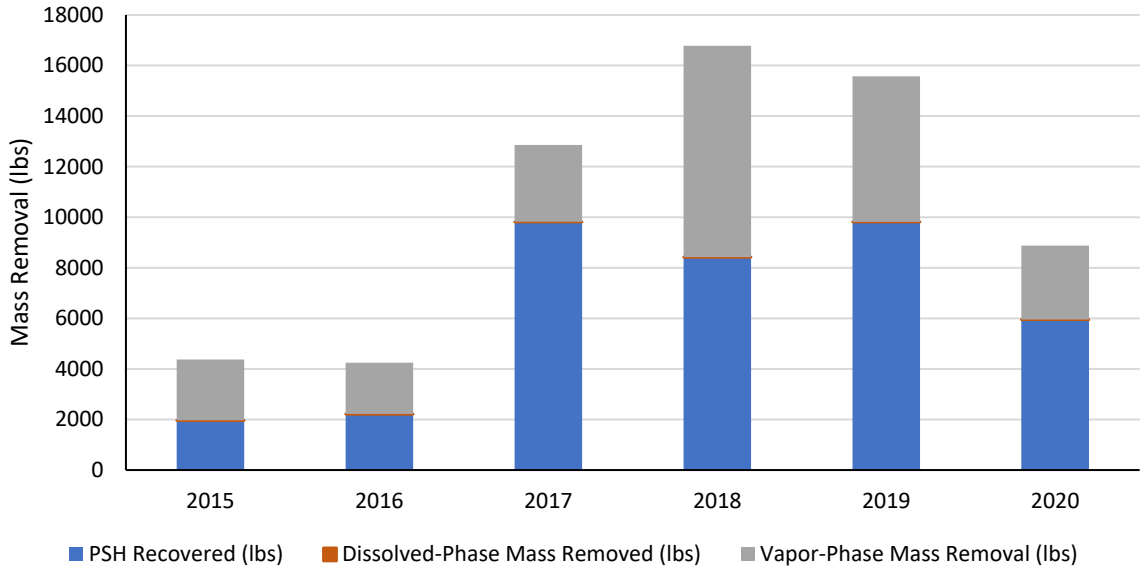
During 2020, the SVE portion of the recovery system operated from January through December. During this time, the system operated full-time except for periods of maintenance and during the semi-annual sampling events. The groundwater portion of the system operated from April through October in 2020. As during prior years of operation, the groundwater portion of the system was manually deactivated in January, February, March, November, and December of 2020 due to freezing temperatures. To protect the groundwater treatment system and minimize deactivation periods during future operations, heat tape and pipe insulation have since been installed throughout the process. Additional weather protection will be added as needed to minimize downtime during winter months.

The remediation system recovered approximately 2,918 pounds of vapor-phase hydrocarbons (or approximately 461 equivalent gallons) in 2020 during SVE system operation. The groundwater/PSH recovery system treated and discharged approximately 97,400 gallons of groundwater, removed approximately 8.07 pounds (approximately 1.27 equivalent gallons) of dissolved-phase hydrocarbons and recovered approximately 940 gallons (5,950 pounds) of PSH. A total of approximately 8,882 pounds of hydrocarbons were removed by the system in 2020. This compares to a total of approximately 15,600 pounds of hydrocarbon removed in 2019 (5,786 pounds of vapor-phase hydrocarbons, 1,550 gallons (9,811 pounds) of PSH, and 2.58 pounds of dissolved phase hydrocarbons). Removal rates for the last six years of operation are included below in **ES.1**. and **ES.2** as a comparison.

ES.1 - Historical Hydrocarbon Removal Summary

Year	Extracted Groundwater (gals)	PSH Recovered (lbs)	Dissolved-Phase Mass Removal (lbs)	Vapor-Phase Mass Removal (lbs)
2015	64,140	1,962	2.94	2,405
2016	137,650	2,216	5.35	2,026
2017	90,550	9,812	8.60	3,038
2018	41,120	8,419	3.12	8,356
2019	23,620	9,812	2.58	5,760
2020	97,400	5,950	8.07	2,918

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®



ES.2 - Historical Hydrocarbon Removal Summary

While the groundwater/PSH recovery portion of the remediation system was operational, water samples were collected from four locations in the treatment process to assess treatment efficiency and compliance with discharge requirements. Additionally, semi-annual groundwater sampling was conducted in May 2020 and November 2020 to assess groundwater conditions.

Consistent with historical data, the May and November 2020 groundwater elevation data indicated groundwater flow in the Upper Aquifer was to the north/northeast on the northern portion of the Project Area and to the southeast on the southern portion of the Project Area. The divide in the hydraulic gradient is located near the northeast corner of the Facility, indicating the presence of a complex water-bearing unit with areas of preferential flow.

During the 2020 semi-annual groundwater sampling events, PSH was present in groundwater monitoring wells, SVE wells, and MPE wells located in the vicinity of the Former Surface Impoundments. Dissolved benzene, toluene, ethylbenzene, and xylenes (BTEX), 1,1-DCE and Naphthalene were detected in groundwater at concentrations exceeding the applicable cleanup levels during the sampling events. It appears the benzene exceeding the GCLs is closely associated with observable PSH. Samples from MW-20, MW-22, MW-26, MW-39, MW-40, MW-41, MW-42, SVE-28, SVE-30, and RW-1 were also analyzed for 1,4-dioxane, but this constituent was only detected at SVE-30, at concentrations below the applicable cleanup levels. The data indicates delineation of PSH and dissolved constituents of concern

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges BUSINESS SOLUTIONS ®

Received by OCD: 10/21/2022 8:09:38 AM

to applicable New Mexico Water Quality Control Commission's (NMWQCC) standards and the EPA Maximum Contaminant Levels (MCLs) was maintained within the existing monitoring network.

Based on the groundwater remediation activities completed in 2020, Transwestern recommends continued operation of the remediation system in 2021 to recover PSH and reduce dissolved-phase hydrocarbons, continued semi-annual groundwater monitoring, and continued monitoring of the effluent from the SVE system and discharge from the groundwater treatment system.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014

P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®
Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

TABLE OF CONTENTS

EXECUTIVE SUMMARY iv
1.0 INTRODUCTION 1
2.0 SCOPE OF ACTIVITIES 3
3.0 SEMI-ANNUAL GROUNDWATER MONITORING 3
3.1 Groundwater Monitoring Regulatory Criteria 5
3.2 Groundwater Monitoring & Chemical Analytical Data Results 5
3.2.1 Perched Aquifer 6
3.2.2 Upper Aquifer 6
3.3 PSH Thickness 7
3.3.1 Perched Aquifer 7
3.3.2 Upper Aquifer 8
3.4 Groundwater Analytical Results ..... 9~~8~~
3.4.1 Perched Aquifer ..... 9~~8~~
3.4.2 Upper Aquifer 9
4.0 REMEDIATION SYSTEM OPERATION, MAINTENANCE, AND MONITORING ..... 10~~9~~
4.1 Soil Vapor Extraction System Monitoring Results ..... 12~~11~~
4.2 Groundwater Treatment System Monitoring Results 12
5.0 SUMMARY OF FINDINGS AND CONCLUSIONS ..... 14~~13~~

TABLES

Table 3-1 Sampling and Analysis Plan
Table 3-2 Summary of Groundwater Surface Elevations
Table 3-3 Summary of Field Parameters
Table 3-4 Summary of Historical Field Parameters
Table 3-5 Summary of Groundwater Analytical Results
Table 3-5a Summary of Groundwater Analytical Results – Other Detected Constituents.
Table 3-6 Summary of Well Completion Details
Table 4-1 SVE System Mass Removal Calculations for Total Volatile Organic Compounds
Table 4-2 Summary of Treated Water Irrigation Rates
Table 4-3 Groundwater Treatment System Mass Removal Calculations for Total BTEX
Table 4-4 Summary of Water Treatment System Analyses
Table 4-5 Summary of Air Stripper Vapor Discharge Monitoring
Table 4-6 Historical Hydrocarbon Removal Summary

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®
Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

FIGURES

Figure 1-1 Site Location Map
Figure 1-2 Site Features
Figure 1-3 Remediation System Layout
Figure 1-4 Equipment Compound Detail
Figure 3-1 Well Locations
Figure 3-2a Groundwater Surface Elevations in the Perched Aquifer, May 2020
Figure 3-2b Groundwater Surface Elevations in the Perched Aquifer, November 2020
Figure 3-3a Groundwater Surface Elevations in the Upper Aquifer, May 2020
Figure 3-3b Groundwater Surface Elevations in the Upper Aquifer, November 2020
Figure 3-4a Distribution of PSH in the Perched Aquifer, May 2020
Figure 3-4b Distribution of PSH in the Perched Aquifer, November 2020
Figure 3-5a Distribution of PSH in the Upper Aquifer, May 2020
Figure 3-5b Distribution of PSH in the Upper Aquifer, November 2020
Figure 3-6 Distribution of Dissolved Benzene in the Perched Aquifer, November 2020
Figure 3-7a Distribution of Dissolved Benzene in the Upper Aquifer, May 2020
Figure 3-7b Distribution of Dissolved Benzene in the Upper Aquifer, November 2020
Figure 3-8 Distribution of Dissolved BTEX in the Perched Aquifer, November 2020
Figure 3-9a Distribution of Dissolved BTEX in the Upper Aquifer, May 2020
Figure 3-9b Distribution of Dissolved BTEX in the Upper Aquifer, November 2020
Figure 3-10 Distribution of Dissolved 1,1-DCE in the Perched Aquifer, November 2020
Figure 3-11a Distribution of Dissolved 1,1-DCE in the Upper Aquifer, May 2020
Figure 3-11b Distribution of Dissolved 1,1-DCE in the Upper Aquifer, November 2020

APPENDICES

Appendix A Copies of the May, September, and November 2020 PSH Evaluation Field Notes
Appendix B Analytical Data Packages – Semi-annual Groundwater Sampling
Appendix C Analytical Data Packages – SVE and Groundwater Treatment System Sampling
Appendix D Historical SVE System Tables for Gasoline Range Organics
Appendix E Depth to Water and Product Thickness Graphs

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®
Released to Imaging: 11/22/2022 9:07:27 AM

1.0 INTRODUCTION

This *Report of 2020 Groundwater Remediation Activities* was prepared by EarthCon Consultants, Inc. (EarthCon) on behalf of Transwestern Pipeline Company, LLC (Transwestern) to document on-going corrective actions associated with the Former Surface Impoundments at the Transwestern Compressor Station No. 9 (also known as the Roswell Compressor Station) property, located at 6381 North Main Street in Roswell, New Mexico (the "Site").

The Site consists of the Roswell Compressor Station and the area undergoing corrective action (the "Project Area") (**Figure 1-1** and **Figure 1-2**). On March 13, 2013, the New Mexico Environment Department (NMED) issued a Stipulated Final Order (SFO) that governs environmental activities conducted within the Project Area. This report was developed in general accordance with *Section IX.D – Reporting Requirements* of the SFO.

The Facility is an active natural gas compressor station, owned and operated by Transwestern, located approximately 8 miles north of the city center of Roswell, New Mexico along the eastern side of U.S. Highway 285. The Facility occupies approximately 77 acres of land in Section 21 (SW¼ of the SW¼) and Section 28 (NW¼ of the NW¼) of Township 9S and Range 24E, Chaves County, New Mexico (**Figure 1-1**). Access is via U.S. Highway 285, and the entire Facility is secured by a chain-link fence with locked gates.

The Project Area encompasses a portion of the northeast corner of the Facility and a portion of a 40-acre easement of land to the northeast, leased from the New Mexico State Land Office (SLO) State Trust Land for remediation and monitoring purposes (**Figure 1-2**). There are no adjacent structures on either the Facility or the State Land other than those associated with the remediation system. Most of the off-site extraction and monitoring wells are located within a fenced perimeter.

The Facility is located along the Transwestern natural gas pipeline that extends from Texas to the Arizona/California border, and serves as the district office for Transwestern's New Mexico operations. The compressor station services two 30-inch main lines and two 24-inch lateral pipelines. The primary function of the compressor station is to boost the pressure of the natural gas stream by means of compressors powered by natural gas-fueled internal combustion engines. Additionally, the Facility conducts gas transmission pipeline maintenance operations that generate waste hydrocarbons, including pipeline condensate, pigging wastes, spent solvents, and other wastes and debris, which were historically discharged to the former surface impoundments (also

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

referred to as Pits 1 and 2). Currently, wastes generated as a result of operations are transported offsite for disposal in accordance with all local, state and federal requirements.

The historic wastes were removed from the former surface impoundments and the excavations were lined with a polyethylene liner and backfilled with clean soil in 2001. A soil and groundwater remediation system was subsequently designed and installed to address dissolved and phase separated hydrocarbons (PSH) detected in groundwater in 2002/2003. The soil vapor extraction (SVE) portion of the system began operation in March 2003, and the groundwater/PSH recovery portion of the system began operation April 2004.

The remediation system consists of SVE blowers with a treatment unit, a groundwater/PSH recovery and treatment unit, and a network of 9 active SVE-only wells and 35 multi-phase extraction (MPE) wells (**Figures 1-3** and **1-4**). Three additional SVE wells (SVE-1A, 2A, and 3) are inactive at the Site. Vapor-phase hydrocarbons are extracted via SVE-only wells and MPE wells and routed to two Baker Furnace thermal oxidizer units for treatment. Groundwater and PSH are recovered by pneumatic pumps installed in the MPE recovery wells. The recovered fluids are conveyed to a 210-barrel aboveground storage tank that serves as a surge tank and separation unit for PSH and groundwater. Separated groundwater is conveyed to a treatment train consisting of an air stripper followed by a particulate filter vessel and two additional liquid-phase granulated activated carbon (GAC) units in series. The treated water is then conveyed to an irrigation water tank for dispersal via an irrigation system. PSH separated in the surge tank is removed by a vacuum truck and sent to a permitted off-site disposal facility periodically. The vapor stream from the air strippers is treated via two vapor-phase GAC units followed by discharge to the atmosphere.

Typically, the SVE portion of the system operates year-round, and groundwater/PSH recovery occurs from spring to fall, with brief shutdowns for repair and maintenance. For the 2020 reporting year, the SVE system operated year-round and the groundwater/PSH recovery occurred from April to October. In addition, the system is deactivated for 48 to 72 hours in preparation for semi-annual monitoring.

Currently, a network of 30 monitoring wells (29 installed in the Upper Aquifer and one installed in the deeper regional San Andres Formation Aquifer) is used to assess groundwater conditions within the Project Area.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Received by OCD: 10/21/2022 8:09:38 AM

This report documents groundwater remediation and monitoring activities conducted at the Project Area during year 2020. Field activities were conducted by CMB Environmental & Geologic Services, Inc. (CMB) of Roswell, New Mexico.

2.0 SCOPE OF ACTIVITIES

The activities performed at the Site during 2020 include the following and are summarized below:

- Semi-annual groundwater monitoring;
- Remediation system operation, maintenance, and monitoring;
- Investigation of a suspected perched aquifer.

3.0 SEMI-ANNUAL GROUNDWATER MONITORING

Semi-annual groundwater sampling to assess groundwater conditions was conducted in May 2020 and November 2020 by CMB in general accordance with the SFO. Six groundwater samples were collected from MW-10, MW-11, MW-17, SVE-28, SVE-30, and RW-1 in September 2020 as a response to the HWB-TWP-20-001 Comments from the State received on July 2, 2020. The groundwater monitoring network at the Site consists of 30 monitoring wells, of which 25 are included within the monitoring plan and the remaining wells are used for gauging. Groundwater samples were collected from 11 of these monitoring wells during the May 2020 sampling event and from 22 of these monitoring wells during the November 2020 sampling event, in general accordance with the approved *Sampling and Analysis Plan* (SAP) presented in **Table 3-1**.

In correspondence dated July 2, 2020, NMED requested that groundwater samples be collected for wells RW-1, MW-10, MW-11, MW-17, SVE-28 and SVE-30 during the 2020 semi-annual sampling events. These wells were sampled in September 2020, and again in November 2020 (Response to HWB-TWP-20-002 Comment 2).

Prior to commencing semi-annual groundwater gauging and sampling, the remediation system (groundwater extraction and soil vapor extraction) was manually deactivated for a period of 48 to 72 hours. Depth to PSH, if present, and depth to groundwater was measured in each monitoring well and MPE well using an interface probe, which consists of an optical sensor probe capable of distinguishing between PSH and groundwater. Apparent PSH thickness and water levels were recorded to the nearest 0.01-foot and the data is presented in **Table 3-2**.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Released to Imaging: 11/22/2022 9:07:27 AM

Prior to sampling, the selected monitoring wells were purged and monitored for stabilization of water quality parameters, including pH, specific conductance, dissolved oxygen (DO), oxidation-reduction potential (ORP), and temperature using a calibrated YSI Meter, in accordance with US EPA Sampling and Analysis Plan Guidance and Template Version 4, dated May 2014. Stable water quality parameter (temperature, pH and specific conductance) measurements indicate representative sampling is obtainable. Water quality is considered stable if for three consecutive readings:

- temperature range is no more than +1C;
- pH varies by no more than 0.2 pH units;
- specific conductance readings are within 10% of the average.

Field parameters recorded from the May 2020, September 2020, and November 2020 sampling events are presented in **Table 3-3**. Historical field parameters prior to the 2020 sampling events are included in **Table 3-4**. During the September 2020 event, MW-11 did not meet stabilization criteria for temperature after three well volumes had been purged. However, the other water quality parameters were stable for MW-11, so the sample was considered acceptable. During the November 2020 sampling event, pH stabilization criteria was not met for MW-13, MW-14, MW-17, MW-22, MW-24D, MW-35, or SVE-28. Of these wells, MW-13, MW-14, MW-17, MW-22, MW-35, and SVE-28 were purged for at least three well volumes. Well MW-24D was purged for less than three well volumes but used low flow purging. All other water quality parameters besides pH stabilized, so the samples were considered acceptable. As per EPA Region 4 SESD Operating Procedure, an adequate purge is normally achieved when three to five well volumes have been purged. In future sampling events, at least three purge volumes (and up to a total of five well volumes) will be used if necessary, to achieve parameter stability (Response to HWB-TWP-20-001 Comment 7).

A combination of disposable bailers and bladder pumps with dedicated tubing was used to purge and collect groundwater samples from selected monitoring wells. The groundwater samples collected during the semi-annual sampling event were analyzed for benzene, toluene, ethylbenzene and xylenes (BTEX) via EPA Method 8260, for Volatile Organic Compounds (VOCs) via EPA Method 8260B, and for 1,4-Dioxane via EPA Method 8270C SIM in accordance with the SAP (Response to HWB-TWP-20-002 Comment 2). Quality control samples including

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

groundwater sample duplicates, field blanks, equipment blanks, and trip blanks were collected during the semi-annual sampling events. Purged groundwater and equipment decontamination water were collected in a dedicated 55-gallon drum during sampling and then transferred to the surge tank for on-site treatment and disposal as described in Section 1.0. Copies of the field documentation are included in **Appendix A**.

3.1 Groundwater Monitoring Regulatory Criteria

Groundwater cleanup levels (GCLs) were identified for evaluating analytical data for groundwater samples collected during the semi-annual sampling events, in accordance with Section VI.A. of the March 2013 SFO for the Site. The GCLs shown in **Table 3-5** were identified as described in the following paragraphs.

The target constituents-of-concern (COCs) required to be sampled per the approved 2020 Sampling Plan for the Project Area include BTEX, 1,1-dichloroethane (1,1-DCA), and 1,1-dichloroethene (1,1-DCE). The GCLs for the target COCs were identified using the NMWQCC standards Human Health Standard (HHS) described in NMAC 20.6.2, as well as the EPA MCLs for drinking water contaminants. If both a NMWQCC standard and a MCL have been established for an individual substance, then the lower of the two levels is used as the GCL for that COC. If neither a NMWQCC standard nor a MCL has been established for a COC, then the cleanup level is identified as the screening level for tap water in Table A-1 of the 2012 NMED Risk Assessment Guidance for Site Investigation and Remediation, or the EPA Region 6 Screening Levels for tap water.

The Project Area has been in active remediation since 2001 and the remediation system formerly operated under NMOCD's formal Discharge Permit GW-052. The NMOCD determined that the Discharge Permit is not necessary for the Site, and it is more practical to regulate the Site under a *Stage 2 Abatement Plan* (AP). In December 2015, the Discharge Permit for the Site was allowed to expire. A Stage 2 AP for the Site was submitted to the NMOCD and was approved on March 14, 2016.

3.2 Groundwater Monitoring & Chemical Analytical Data Results

The water bearing unit at the Site has been reported as a perched aquifer within the area of the former surface impoundments, an upper aquifer within which most of the monitoring and remedial activities take place, and the deeper San Andres Formation Aquifer. To date, the deeper San Andres Formation

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Aquifer has not been impacted by the release associated with the Former Surface Impoundments. Well locations are illustrated in **Figure 3-1** and a summary of well construction information is provided in **Table 3-6**.

Groundwater elevations shown in **Table 3-2** were calculated using the May and November 2020 groundwater elevation data collected from the Site groundwater monitoring wells and top-of-casing data from a survey conducted by PR Patton & Associates in October 2013.

3.2.1 Perched Aquifer

Based on current data and historical information dating back to 1991, a perched aquifer appears to intersect wells SVE-23, SVE-25, SVE-27, SVE-28, SVE-31, and RW-1. In addition to the information presented in this report, an evaluation of the perched aquifer and corrective action recommendations will be submitted separately as per April 9, 2021 NMED correspondence. The potentiometric surface maps for the Perched Aquifer are presented in **Figures 3-2a** and **3-2b.**

3.2.2 Upper Aquifer

The potentiometric surface maps for the Upper Aquifer, presented in **Figures 3-3a** and **3-3b,** indicate that groundwater flows generally to the north on the northern portion of the Project Area and to the southeast on the southern portion of the Project Area. The divide in the hydraulic gradient is located near the northeast corner of the Facility, indicating the presence of a complex water-bearing unit with areas of preferential flow.

Based on the groundwater elevation data, the hydraulic gradient for the northern component of groundwater flow, between monitoring wells MW-12 and MW-40, was 0.019 ft/ft during the May 2020 sampling event and 0.018 ft/ft during the November 2020 sampling event, which appears to be consistent with historical data. The hydraulic gradient for the southeastern component of groundwater flow, between monitoring wells MW-16 and MW-35, was 0.005 ft/ft during the May 2020 sampling event and 0.004 ft/ft during the November 2020 sampling event, which appears to be consistent with historical data.

A review of historical groundwater elevation data for the Site monitoring wells (**Table 3-2**) indicates the Upper Aquifer within the Project Area has experienced an average decrease in groundwater level elevation of 1.54 feet between October 2009 and November 2020. The groundwater elevation in MW-24D, installed in the deeper regional San Andres Formation Aquifer, decreased by 4.22 feet between 2009 and 2020.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

3.3 PSH Thickness

Groundwater gauging data collected from Site monitoring and recovery wells during the May 2020 sampling event indicates that the average apparent PSH thickness was 0.94 feet, with a maximum of 2.98 feet measured in SVE-23. Groundwater gauging data collected from Site monitoring and recovery wells during the November 2020 sampling event indicates that the average apparent PSH thickness was 0.73 feet, with the maximum thickness of 1.99 feet measured in MPE-38. As of 2021, eleven wells (MPE-10, MPE-16, MPE-17, MPE-27, MPE-38, MW-16, MPE-40, MPE-41, MW-1B, SVE-23, and SVE-25) contain PSH. Correlation graphs have been developed between depth to water and PSH (Response to HWB-TWP-20-002 Comment 3) and are presented in **Appendix E**. Due to recovery efforts, PSH thickness has decreased in certain wells despite fluctuations in the water table. PSH thickness has decreased or has not been measurable for multiple consecutive years in MW-2, MW-12, MPE-20, MPE-21, MPE-23, MPE-24, MPE-28, and MPE-31.

3.3.1 Perched Aquifer

On May 13, 2020 and November 10, 2020, liquid levels were measured in SVE-23 using an optical interface probe to determine the presence and apparent thickness of PSH. According to liquid levels, the apparent thickness of 2.98 feet and 1.17 feet was measured in SVE-23 in May and November 2020, respectively. During 2020, PSH thickness at SVE-23 appeared to be positively correlated with depth to water, but more data is needed for evaluation (Response to HWB-TWP-20-002 Comment 3). Gauging will be conducted every month in 2021, the first four months of which are presented in **Table 3-2**, and an evaluation will be presented in a separate report, as per NMED correspondence dated April 9, 2021. Distribution of PSH apparent thickness is presented in **Figures 3-2a** and **3-2b**. Further PSH monitoring will continue for SVE-23 in 2021. In addition, the SVE-23 will be re-developed using clean water and bailing techniques to remove PSH that may trapped in the well sand pack.

In correspondence dated July 2, 2020 and November 25, 2020, NMED requested Transwestern to provide a work plan to delineate the PSH in SVE-23 which is in the perched aquifer. Based on further review of historical records, Transwestern notes that certain work related to the perched aquifer was first delineated during the 1991 Shallow Subsurface Investigation and in multiple reports prior to the 2013 SFO. ~~Since SVE-23 is the only well to contain PSH, it is believed the~~

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

~~PSH in SVE-23 may be residual product that may have accumulated in that well. Historical PSH measurements in wells located in the perched aquifer and upper aquifer indicate that the PSH footprint has stabilized or decreased. Therefore, incurring additional cost to further delineate the PSH in the perched aquifer would not be beneficial to the overall objective of recovering PSH at this time.~~

Based on historical PSH measurements, the PSH trends in SVE-23 appear to fluctuate and persistent since 2009. There was a period between November 2014 through January 2020 (six years) where the PSH thickness (average 0.55 foot) appears to be stable except for one gauging event (November 2018). For the next two gauging events (May 2020 and November 2020), the PSH thickness increased. Since January 2021 through September 2021, PSH thickness has been monitored monthly in SVE-23. The average PSH thickness is 1.58 feet and the minimum and maximum thickness recorded during this 9-monthperiod ranged between 0.65 foot and 3.00 feet, respectively.

~~In correspondence dated July 2, 2020 and November 25, 2020, NMED requested Transwestern to suspend PSH recovery activities in SVE-23 and monitor PSH thickness over time; however, Transwestern recommends that PSH recovery via manual bailing be initiated immediately in SVE-23 considering the overall corrective action objective for the site. Liquid levels and recovery data collected from SVE-23 during bailing activities will be evaluated to determine if a more aggressive recovery method is warranted. Although, it~~ It should be noted that the current recovery well network for the groundwater extraction and soil vapor extraction is within the footprint of the perched aquifer, specifically in SVE-23.

3.3.2 Upper Aquifer

The areal extent of PSH in the Upper Aquifer, as measured during the May and November 2020 semi-annual sampling events, remains delineated within the Project Area and appears consistent with 2019 data. (**Figures 3-5a** and **3-5b**). Although PSH thickness continues to fluctuate in certain wells, there has been an overall decreasing trend in PSH thickness in the Upper Aquifer since 2018. Furthermore, the number of wells with measurable PSH in the Upper Aquifer has decreased. ~~PSH trends decrease since 2018~~. Current and historical groundwater gauging data is presented in **Table 3-2**.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

3.4 Groundwater Analytical Results

Groundwater samples were collected and analyzed for BTEX by EPA method 8260 or for VOCs via EPA Method 8260B, and 1,4-dioxane was analyzed by EPA method 8270SIM in accordance with the SAP. The analytical results for groundwater samples collected during the May, September, and November 2020 sampling events are summarized in **Table 3-5** and the laboratory analytical reports are included in **Appendix B**. Due to PSH detections, a groundwater sample was not collected from MW-16 in May or November 2020.

3.4.1 Perched Aquifer

In the Perched Aquifer, BTEX was detected above reporting limits in wells SVE-28, SVE-30, and RW-1. However, benzene was the only BTEX constituent in these wells that exceeded GCLs (Response to HWB-TWP-19-001 Comment 2). Analytical data also indicates that 1,4-dioxane was not detected in SVE-28 or RW-1 (however, the limit of quantitation was higher than the applicable GCL for RW-1); although 1-4-dioxane was detected in SVE-30, it was not above the GCL.

Analytical data indicates that 1,1-DCA was detected in concentrations exceeding the GCLs in well SVE-30 during the September and November 2020 sampling events (Response to HWB-TWP-20-001 Comment 15). Based on the 2020 analytical data, the areal distribution of BTEX, 1,1-DCA, and 1,1-DCE in the Perched Aquifer remains delineated within the Project Area and is consistent with the 2019 data (**Figures 3-6** through **3-11**).

3.4.2 Upper Aquifer

In the Upper Aquifer, BTEX were not detected above reporting limits in MW-10, MW-11, MW-13, MW-14, MW-17, MW-20, MW-21, MW-22, MW-24D, MW-26, MW-27, MW-29, MW-32, MW-34, MW-35, MW-37, MW-39, MW-40, MW-41, MW-42, and SVE-31. None of the BTEX detects exceeded GCL in the Upper Aquifer. The results also indicate that 1,4-dioxane was not detected in MW-20, MW-22, MW-26, MW-39, MW-41, or MW-42.

Analytical data indicates that other VOCs were detected in MW-20, MW-22, MW-26, MW-39, MW-41, and MW-42, but only 1,1-DCE was detected at concentrations exceeding GCLs in wells MW-26 and MW-39. The limit of quantitation was higher than the applicable GCL for naphthalene, and therefor this data is seen as data quality exceptions. Based on the 2020 analytical data, the areal distribution of BTEX, 1,1-DCA, and 1,1-DCE in the Upper Aquifer remains delineated within the

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Project Area and is consistent with the 2019 data. Furthermore, it appears that benzene and PSH concentration are closely related (**Figures 3-6** through **3-11**).

Analytical results for the duplicates are included in the laboratory data packages in **Appendix B** and indicate that the only target analyte detections were for MW-39, MW-22, and MW-26. For quality assurance purposes, the relative percent difference (RPD) of the reported concentrations between the original samples and their duplicates was calculated for each semi-annual sampling event. The RPDs were at or below 7% for each sampling event, with the calculations included in **Appendix B**.

4.0 REMEDIATION SYSTEM OPERATION, MAINTENANCE, AND MONITORING

During 2020, the SVE portion of the recovery system was operational year-round and included all circuits except for when the SVE system was deactivated for equipment repairs and semi-annual sampling events.

The groundwater/PSH recovery portion of the remediation system operated from April 9, 2020 to October 31, 2020, except for periods of maintenance and during the semi-annual sampling events. Specifically, the groundwater/PSH recovery portion of the remediation system was deactivated in January, February, March, November, and December 2020 due to freezing temperatures. Transwestern reviewed potential cost to winterize the groundwater extraction and treatment equipment components by installing a new heated building, replace the existing outdoor surge tank with an oil/water separator, and replace the spray field with an infiltration gallery (Response to HWB-TWP-20-001 Comment 13). Considering the tasks needed for this upgrade (design, geotechnical study, procurement, installation and permitting), the probable cost for the upgrade could range between $200,000 to $300,000. The benefit for incurring the additional cost to upgrade the system for operating over the extreme winter months would not be considerable since the remaining LNAPL in the subsurface appears to be at residual saturation levels. Furthermore, since the LNAPL and dissolved-phase plume is controlled, it is recommended that the groundwater extraction system operate in a pulsing manner by alternating the operation of select extraction wells over a certain period time. This will allow sufficient time for residual LNAPL to rebound and be recovered more efficiently. If groundwater data suggest that the plume is migrating, the pulsing program would be suspended. The details of the proposed pulsing enhancement will be described in the annual update to the Operation, Maintenance and Monitoring Plan (O&MM Plan), as per March 16, 2021 correspondence with NMED.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

To protect the groundwater treatment system and minimize deactivation periods during future operations, heat tape and pipe insulation have since been installed throughout the process. Additional weather protection will be added as needed to minimize downtime during winter months. However, during extreme freezing temperatures that exist over consecutive days in the winter months, the system will be deactivated. Constant days of severe freezing would increase the risk of failures and major damage to equipment components, piping system, and spray field and possibly lead to uncontrolled discharges or safety hazards. Therefore, deactivation of the system during these occurrences is recommend.

The groundwater/PSH recovery portion of the remediation system was deactivated 48 to 72 hours prior to the 2020 semi-annual sampling events (May 2020 and November 2020).

The remediation system was monitored on a weekly basis to assess for continuous operation of components, maintenance needs, and early detection of potential leaks. System readings, such as flow rates, pressure, and temperature, were collected by the operator on a routine basis to monitor system performance and treatment efficiencies. During this reporting period, maintenance activities of the groundwater recovery system consisted of installing a new meter on the surge tank, replacing filters and rubber washers, decalcifying the air stripper, replacing irrigation sprinkler heads, repairing discharge lines, changing filter bags, cleaning the float switch, installing new sumps, installing new o-rings, fixing hose leaks, changing sock filters, maintenance on the compressor, replacing V-belts on the compressor, repairing the GAC water hose, and repairing the compressor switch. Maintenance activities on the SVE portion of the treatment system during this reporting period included installing new 55-gallon GAC drums on the air stripper, repaired flex hose on the west baker unit, repairing a 4” line, repairing the outlet on the surge tank, repairing an airline on MPE-27, replacing the chart recorder paper periodically, minor maintenance on the compressor, installing a new thermocouple, decalcifying the air stripper, fixing electrical issues, greasing bakers, and repairing a linkage bolt.

Monthly samples were collected from April through October 2020 from the groundwater treatment system at four locations in the treatment process: at the inlet of the air-stripper (Pre-Treatment); at the outlet of the air stripper (Post Air Stripper); at the outlet of the first GAC unit (Between GACs); and at the outlet of the irrigation water holding tank (Post-Treatment). The samples collected from the Pre-Treatment, Post Air Stripper, and Between GACs locations were analyzed for BTEX via method 8021B, and the Post-Treatment sample was analyzed for anions via EPA

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

method 300.0, dissolved metals via EPA method 200.7, and VOCs via EPA method 8260B. In addition, vapor readings are collected bimonthly along the process line of the vapor-phase granular carbon connected to the air stripper air exhaust port. Monitoring data is summarized in **Table 4-5** (Response to HWB-TWP-19-002 Comment 3).

Influent air samples from the process pipes prior to entering the east and west Baker Furnaces were collected and analyzed for total VOCs (TVOCs) by EPA Method TO-15 in March 2020, September 2020, and January 2021. In July 2020 only east Baker Furnace samples were collected and analyzed, and in August 2020 only west Baker Furnace samples were collected and analyzed. Total VOCs concentrations are presented in **Table 4-1**.

4.1 Soil Vapor Extraction System Monitoring Results

The average combined air flowrate of the SVE system was approximately 320 cubic feet per minute (cfm) with an applied vacuum between 14 and 82 inches of water. The two thermal oxidizers maintained an average chamber treatment temperature of 1,500^{o}F, which is above the required thermal destruction temperature of 1,400^{o}F.

In 2020, air samples of influent vapor were collected from the Baker Furnaces and were analyzed for TVOCs using EPA method TO-15. Analytical data results summarized in **Table 4-1** indicate that the SVE system recovered approximately 2,918 pounds (or about 461 equivalent gallons) of vapor-phase TVOCs in 2020, compared to the approximately 5,767 pounds (or about 910 gallons) removed in 2019. Historical recovery amounts are provided in **Table 4-6.**

Laboratory data packages are included in **Appendix C**. Historical SVE data was analyzed for TPH in the gasoline range organics (GRO) via EPA method 8015D. These historical tables have been included in **Appendix D**.

4.2 Groundwater Treatment System Monitoring Results

The groundwater extraction flowrate averaged 0.37 gallons per minute (gpm) in 2020. Operation records for the irrigation system presented in **Table 4-2** indicate that the volume of groundwater recovered, treated, and discharged in 2020 was approximately ~~97,400~~94,800 gallons.

According to **Table 4-3**, approximately 8.07 pounds (1.27 equivalent gallons) of dissolved-phase hydrocarbons were removed by the groundwater/PSH recovery system in 2020. The amount of dissolved phase hydrocarbons removed in 2020 appears to have increased compared to 2019,

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

during which 2.58 pounds (0.41 equivalent gallons) of dissolved phase hydrocarbons were removed from approximately 24,080 gallons of treated groundwater. A total of approximately 79 pounds of dissolved TVOCs has been removed by the groundwater remediation system since 2009. In addition, approximately 940 gallons of PSH accumulated in the surge tank in 2020. PSH separated in the surge tank is removed by a vacuum truck and sent to a permitted off-site disposal facility periodically. Historical PSH recovery volumes are provided in **Table 4-6.**

Based on NMED Comment 14 (7/2/2020) an evaluation of the MPE wells were conducted in 2020. The MPE wells are installed on top of the clay layer, and the pumps are currently installed 6 inches from the bottom of the wells. Lowering the pumps in the wells is not possible ~~as the clay layer might be penetrated~~as the depth of the well is located at the top of the clay layer**.** The water level in the Upper Aquifer is near the confining clay layer and fluctuates with the season. Recharge rates decline during the summer months (droughts) as water levels decrease. The groundwater level, clay layer, and the down-well pneumatic pump design limits the water recovery rate in the Upper Aquifer. Therefore, increasing the flowrate in the MPE wells with the current remedial design is not feasible (Response to HWB-TWP-20-001 Comment 14).

To address residual soil contamination within the source area, SVE wells were co-located with the MPE wells. The SVE wells (apart from SVE-3, SVE-23, and SVE-30) were advanced approximately 30-35 ft below ground surface (bgs) within the shallow soil zone consisting of primarily sands and gravels. Due to their shallow depth, the SVE wells are frequently above the water table elevation and may not have detectable water. During 2020, SVE-1A, SVE-2A, SVE-3, SVE-22, SVE-24, SVE-25, SVE-26, SVE-27, and SVE-31, were dry during at least one sampling event.

Monthly water treatment samples were collected between April and October 2020. Samples from the locations identified as Pre-Treatment, Between GACs, and Post Air Stripper were analyzed for BTEX via EPA Method 8021B, and the Post Treatment sample was analyzed for anions via EPA method 300.0, dissolved metals via EPA method 200.7, and VOCs via EPA method 8260B. The analytical data for these samples demonstrates that the treatment system is effectively removing the hydrocarbon constituents present in the recovered groundwater. Furthermore, analytical data for the Post-Treatment sample indicate that BTEX was not detected above laboratory reporting limits. Analytical data for the monthly samples is summarized in **Table 4-4** and laboratory data packages are included in **Appendix C**.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Between April and September 2020, the air stripper was monitored at multiple points to detect potential breakthrough of VOCs through the carbon treatment system. The PID readings from locations identified as Prior to Carbon, Between Carbon Vessels, and After Carbon Vessels are provided in **Table 4-5 (**Response HWB-TWP-19-002 Comment 3**)**. Based on field monitoring activities, the carbon treatment system for removing vapor VOCS by the air stripper achieved a 95 percent or greater efficiency. In June 2020, vapor-phase carbon treatment efficiency of zero percentage was observed after the first carbon vessel ("midpoint") location; however, the carbon treatment efficiency was 69 percent after second carbon vessel. Further monitoring was planned to verify treatment efficiencies in August; however, the air stripper was deactivated due to an inoperable float switch. Once repairs were completed, the vapor-phase carbon vessels were monitored in September 2020. Based on field measurements, the carbon treatment efficiency was calculated to be 97.1 percent in September 2020. Future monitoring will continue to measure breakthrough of the carbon vessels.

5.0 SUMMARY OF FINDINGS AND CONCLUSIONS

Based on the information presented in the previous sections regarding the operation of the remediation system installed at the Project Area, the following findings and conclusions are offered:

- The 2020 Upper Aquifer groundwater gauging data identified a northern component of groundwater flow with a gradient of 0.019 ft/ft and 0.018 ft/ft during the May 2020 and November 2020 sampling events respectively, and a southeastern component of groundwater flow with a gradient of 0.005 ft/ft during the May 2020 sampling event and 0.004 ft/ft during the November 2020 sampling event. These gradients are generally consistent with previous years' observations.

- Historical gauging data for the Site monitoring wells indicates that between 2009 and 2020 groundwater elevation in the Upper Aquifer of the Project Area has decreased by an average of 1.54 feet and groundwater elevation in the deeper San Andres Formation Aquifer has decreased by 4.22 feet.

- Groundwater gauging data collected from the Site monitoring and recovery wells during the May and November 2020 semi-annual groundwater monitoring events indicates that PSH remains delineated within the Project Area. The average side-wide apparent

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

thicknesses of PSH measured in 2020 was 0.94 feet during the May 2020 sampling event and 0.73 feet during the November 2020 sampling event. The maximum site-wide apparent thicknesses of PSH measured in 2020 was 2.98 feet in SVE-23 during the May 2020 sampling event and 1.99 feet in MPE-38 during the November 2020 sampling event.

- Analytical data from the 2020 semi-annual groundwater monitoring events indicates that BTEX, 1,1-DCE, and 1,1-DCA were detected at dissolved concentrations exceeding the GCLs in four monitoring wells. These exceedances are within the existing monitoring network. Benzene exceeding the GCLs is closely associated with observable PSH. 1,1-DCE concentrations are generally consistent with previous results. 1,1-DCA is above GCL in SVE-30, which is located in the monitoring network.

- During 2020, the SVE portion of the recovery system operated year-round except for periods of maintenance and prior to sampling events. The groundwater/PSH recovery portion of the system operated full-time from April to October except for periods of system maintenance, and the semi-annual sampling events. Approximately 2,918 pounds of vapor-phase TVOCs (approximately 461 equivalent gallons) were recovered by the SVE technology.

- The groundwater/PSH recovery system recovered, treated, and discharged 97,400 gallons of groundwater in 2020. Approximately 8.07 pounds of dissolved-phase BTEX hydrocarbons were removed by the groundwater/PSH recovery system in 2020. A total of approximately 79 pounds of dissolved-phase hydrocarbons have been removed by the system since May 2009. The groundwater/PSH recovery system recovered approximately 940 gallons (approximately 5,950 pounds) of PSH in 2020. In total, approximately 8,882 pounds of hydrocarbons were removed by the system in 2020.

- Based on the evaluation and historical information, a perched aquifer appears to exist and intersect wells SVE-23, SVE-25, SVE-27, SVE-28, SVE-31, and RW-1. Recommendations and an evaluation of the perched aquifer will be given in a separate report, as per NMED correspondence dated April 9, 2021.

- Two semiannual sampling events were completed for the recovery well RW-1, several SVE wells, and monitoring wells MW-10, MW-11, and MW-17 as requested by NMED.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Received by OCD: 10/21/2022 8:09:38 AM

- Samples collected on a monthly basis between April and October 2020 from the groundwater treatment system demonstrate that the treatment system is effectively removing the hydrocarbon constituents present in the recovered groundwater.

Based on the 2020 groundwater data, the groundwater treatment system continues to control the migration of the PSH plume and continues to recover PSH and dissolved-phase hydrocarbons.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Released to Imaging: 11/22/2022 9:07:27 AM

TABLES

FIGURES

APPENDICES

Appendix A

Copies of May 2020, September 2020, and November 2020 Field Notes

Appendix B

Data Validation Report – RPDs and

Analytical Data Packages – Semi-annual Groundwater Sampling

Appendix C

Analytical Data Packages – SVE and Groundwater Treatment System Sampling

Appendix D

Historical SVE System Table for Gasoline Range Organics

3.3 PSH Thickness

Groundwater gauging data collected from Site monitoring and recovery wells during the May 2020 sampling event indicates that the average apparent PSH thickness was 0.94 feet, with a maximum of 2.98 feet measured in SVE-23. Groundwater gauging data collected from Site monitoring and recovery wells during the November 2020 sampling event indicates that the average apparent PSH thickness was 0.73 feet, with the maximum thickness of 1.99 feet measured in MPE-38. As of 2021, eleven wells (MPE-10, MPE-16, MPE-17, MPE-27, MPE-38, MW-16, MPE-40, MPE-41, MW-1B, SVE-23, and SVE-25) contain PSH. Correlation graphs have been developed between depth to water and PSH (Response to HWB-TWP-20-002 Comment 3) and are presented in **Appendix E**. Due to recovery efforts, PSH thickness has decreased in certain wells despite fluctuations in the water table. PSH thickness has decreased or has not been measurable for multiple consecutive years in MW-2, MW-12, MPE-20, MPE-21, MPE-23, MPE-24, MPE-28, and MPE-31.

3.3.1 Perched Aquifer

On May 13, 2020 and November 10, 2020, liquid levels were measured in SVE-23 using an optical interface probe to determine the presence and apparent thickness of PSH. According to liquid levels, the apparent thickness of 2.98 feet and 1.17 feet was measured in SVE-23 in May and November 2020, respectively. During 2020, PSH thickness at SVE-23 appeared to be positively correlated with depth to water, but more data is needed for evaluation (Response to HWB-TWP-20-002 Comment 3). Gauging will be conducted every month in 2021, the first four months of which are presented in **Table 3-2**, and an evaluation will be presented in a separate report, as per NMED correspondence dated April 9, 2021. Distribution of PSH apparent thickness is presented in **Figures 3-2a** and **3-2b**. Further PSH monitoring will continue for SVE-23 in 2021. In addition, the SVE-23 will be re-developed using clean water and bailing techniques to remove PSH that may trapped in the well sand pack.

In correspondence dated July 2, 2020 and November 25, 2020, NMED requested Transwestern to provide a work plan to delineate the PSH in SVE-23 which is in the perched aquifer. Based on further review of historical records, Transwestern notes that certain work related to the perched aquifer was first delineated during the 1991 Shallow Subsurface Investigation and in multiple reports prior to the 2013 SFO.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Based on historical PSH measurements, the PSH trends in SVE-23 appear to fluctuate and persistent since 2009. There was a period between November 2014 through January 2020 (six years) where the PSH thickness (average 0.55 foot) appears to be stable except for one gauging event (November 2018). For the next two gauging events (May 2020 and November 2020), the PSH thickness increased. Since January 2021 through September 2021, PSH thickness has been monitored monthly in SVE-23. The average PSH thickness is 1.58 feet and the minimum and maximum thickness recorded during this 9-monthperiod ranged between 0.65 foot and 3.00 feet, respectively.

It should be noted that the current recovery well network for the groundwater extraction and soil vapor extraction is within the footprint of the perched aquifer, specifically in SVE-23.

3.3.2 Upper Aquifer

The areal extent of PSH in the Upper Aquifer, as measured during the May and November 2020 semi-annual sampling events, remains delineated within the Project Area and appears consistent with 2019 data. (**Figures 3-5a** and **3-5b**). Although PSH thickness continues to fluctuate in certain wells, there has been an overall decreasing trend in PSH thickness in the Upper Aquifer since 2018. Furthermore, the number of wells with measurable PSH in the Upper Aquifer has decreased. . Current and historical groundwater gauging data is presented in **Table 3-2**.

3.4 Groundwater Analytical Results

Groundwater samples were collected and analyzed for BTEX by EPA method 8260 or for VOCs via EPA Method 8260B, and 1,4-dioxane was analyzed by EPA method 8270SIM in accordance with the SAP. The analytical results for groundwater samples collected during the May, September, and November 2020 sampling events are summarized in **Table 3-5** and the laboratory analytical reports are included in **Appendix B**. Due to PSH detections, a groundwater sample was not collected from MW-16 in May or November 2020.

3.4.1 Perched Aquifer

In the Perched Aquifer, BTEX was detected above reporting limits in wells SVE-28, SVE-30, and RW-1. However, benzene was the only BTEX constituent in these wells that exceeded GCLs (Response to HWB-TWP-19-001 Comment 2). Analytical data also indicates that 1,4-dioxane was not detected in SVE-28 or RW-1 (however, the limit of quantitation was higher than the applicable GCL for RW-1); although 1-4-dioxane was detected in SVE-30, it was not above the GCL.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Analytical data indicates that 1,1-DCA was detected in concentrations exceeding the GCLs in well SVE-30 during the September and November 2020 sampling events (Response to HWB-TWP-20-001 Comment 15). Based on the 2020 analytical data, the areal distribution of BTEX, 1,1-DCA, and 1,1-DCE in the Perched Aquifer remains delineated within the Project Area and is consistent with the 2019 data (**Figures 3-6** through **3-11**).

3.4.2 Upper Aquifer

In the Upper Aquifer, BTEX were not detected above reporting limits in MW-10, MW-11, MW-13, MW-14, MW-17, MW-20, MW-21, MW-22, MW-24D, MW-26, MW-27, MW-29, MW-32, MW-34, MW-35, MW-37, MW-39, MW-40, MW-41, MW-42, and SVE-31. None of the BTEX detects exceeded GCL in the Upper Aquifer. The results also indicate that 1,4-dioxane was not detected in MW-20, MW-22, MW-26, MW-39, MW-41, or MW-42.

Analytical data indicates that other VOCs were detected in MW-20, MW-22, MW-26, MW-39, MW-41, and MW-42, but only 1,1-DCE was detected at concentrations exceeding GCLs in wells MW-26 and MW-39. The limit of quantitation was higher than the applicable GCL for naphthalene, and therefor this data is seen as data quality exceptions. Based on the 2020 analytical data, the areal distribution of BTEX, 1,1-DCA, and 1,1-DCE in the Upper Aquifer remains delineated within the Project Area and is consistent with the 2019 data. Furthermore, it appears that benzene and PSH concentration are closely related (**Figures 3-6** through **3-11**).

Analytical results for the duplicates are included in the laboratory data packages in **Appendix B** and indicate that the only target analyte detections were for MW-39, MW-22, and MW-26. For quality assurance purposes, the relative percent difference (RPD) of the reported concentrations between the original samples and their duplicates was calculated for each semi-annual sampling event. The RPDs were at or below 7% for each sampling event, with the calculations included in **Appendix B**.

4.0 REMEDIATION SYSTEM OPERATION, MAINTENANCE, AND MONITORING

During 2020, the SVE portion of the recovery system was operational year-round and included all circuits except for when the SVE system was deactivated for equipment repairs and semi-annual sampling events.

The groundwater/PSH recovery portion of the remediation system operated from April 9, 2020 to October 31, 2020, except for periods of maintenance and during the semi-annual sampling

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

In 2020, air samples of influent vapor were collected from the Baker Furnaces and were analyzed for TVOCs using EPA method TO-15. Analytical data results summarized in **Table 4-1** indicate that the SVE system recovered approximately 2,918 pounds (or about 461 equivalent gallons) of vapor-phase TVOCs in 2020, compared to the approximately 5,767 pounds (or about 910 gallons) removed in 2019. Historical recovery amounts are provided in **Table 4-6.**

Laboratory data packages are included in **Appendix C**. Historical SVE data was analyzed for TPH in the gasoline range organics (GRO) via EPA method 8015D. These historical tables have been included in **Appendix D**.

4.2 Groundwater Treatment System Monitoring Results

The groundwater extraction flowrate averaged 0.37 gallons per minute (gpm) in 2020. Operation records for the irrigation system presented in **Table 4-2** indicate that the volume of groundwater recovered, treated, and discharged in 2020 was approximately 94,800 gallons.

According to **Table 4-3**, approximately 8.07 pounds (1.27 equivalent gallons) of dissolved-phase hydrocarbons were removed by the groundwater/PSH recovery system in 2020. The amount of dissolved phase hydrocarbons removed in 2020 appears to have increased compared to 2019, during which 2.58 pounds (0.41 equivalent gallons) of dissolved phase hydrocarbons were removed from approximately 24,080 gallons of treated groundwater. A total of approximately 79 pounds of dissolved TVOCs has been removed by the groundwater remediation system since 2009. In addition, approximately 940 gallons of PSH accumulated in the surge tank in 2020. PSH separated in the surge tank is removed by a vacuum truck and sent to a permitted off-site disposal facility periodically. Historical PSH recovery volumes are provided in **Table 4-6.**

Based on NMED Comment 14 (7/2/2020) an evaluation of the MPE wells were conducted in 2020. The MPE wells are installed on top of the clay layer, and the pumps are currently installed 6 inches from the bottom of the wells. Lowering the pumps in the wells is not possible as the depth of the well is located at the top of the clay layer. The water level in the Upper Aquifer is near the confining clay layer and fluctuates with the season. Recharge rates decline during the summer months (droughts) as water levels decrease. The groundwater level, clay layer, and the down-well pneumatic pump design limits the water recovery rate in the Upper Aquifer. Therefore, increasing the flowrate in the MPE wells with the current remedial design is not feasible (Response to HWB-TWP-20-001 Comment 14).

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

To address residual soil contamination within the source area, SVE wells were co-located with the MPE wells. The SVE wells (apart from SVE-3, SVE-23, and SVE-30) were advanced approximately 30-35 ft below ground surface (bgs) within the shallow soil zone consisting of primarily sands and gravels. Due to their shallow depth, the SVE wells are frequently above the water table elevation and may not have detectable water. During 2020, SVE-1A, SVE-2A, SVE-3, SVE-22, SVE-24, SVE-25, SVE-26, SVE-27, and SVE-31, were dry during at least one sampling event.

Monthly water treatment samples were collected between April and October 2020. Samples from the locations identified as Pre-Treatment, Between GACs, and Post Air Stripper were analyzed for BTEX via EPA Method 8021B, and the Post Treatment sample was analyzed for anions via EPA method 300.0, dissolved metals via EPA method 200.7, and VOCs via EPA method 8260B. The analytical data for these samples demonstrates that the treatment system is effectively removing the hydrocarbon constituents present in the recovered groundwater. Furthermore, analytical data for the Post-Treatment sample indicate that BTEX was not detected above laboratory reporting limits. Analytical data for the monthly samples is summarized in **Table 4-4** and laboratory data packages are included in **Appendix C**.

Between April and September 2020, the air stripper was monitored at multiple points to detect potential breakthrough of VOCs through the carbon treatment system. The PID readings from locations identified as Prior to Carbon, Between Carbon Vessels, and After Carbon Vessels are provided in **Table 4-5 (**Response HWB-TWP-19-002 Comment 3**)**. Based on field monitoring activities, the carbon treatment system for removing vapor VOCS by the air stripper achieved a 95 percent or greater efficiency. In June 2020, vapor-phase carbon treatment efficiency of zero percentage was observed after the first carbon vessel ("midpoint") location; however, the carbon treatment efficiency was 69 percent after second carbon vessel. Further monitoring was planned to verify treatment efficiencies in August; however, the air stripper was deactivated due to an inoperable float switch. Once repairs were completed, the vapor-phase carbon vessels were monitored in September 2020. Based on field measurements, the carbon treatment efficiency was calculated to be 97.1 percent. Future monitoring will continue to measure breakthrough of the carbon vessels.

Copyright © 2021 EarthCon Consultants, Inc. All Rights Reserved
EarthCon Consultants, Inc.
14405 Walters Road
Suite 700
Houston, TX 77014
P: 281-240-5200
www.earthcon.com
Environmental Challenges
BUSINESS SOLUTIONS ®

Table 3-5a. Summary of Groundwater Analytical Results - Other Constituents Detected
Transwestern Compressor Station No. 9 - Roswell, NM

Well	Sampling Date	Chloroethane	Isopropyl benzene	n-Propylbenzene	1,2,4-Trichlorobenzene	Napthalene	cis-1,2-Dichloroethene	Acetone	1,4-Dioxane
NMWQCC Human Health Standard		--	--	--	70	-	70	--	-
USEPA MCL		--	--	--	70	--	70	--	--
Tap Water (2012)		-	679	-	4.12	1.43	73	21800	6.72
Groundwater Cleanup Level (GCL)		-	679	-	70	1.43	70	21800	6.72
MW-20	05/17/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
	11/20/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
MW-22	05/17/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
	11/20/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
MW-26	05/17/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
	11/20/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
MW-39	05/17/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
	11/30/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
MW-40	05/17/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
	11/30/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
MW-41	05/17/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
	11/30/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
MW-42	05/17/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
	11/30/20	<2.0	<1.0	<1.0	<1.0	*<2.0*	<1.0	<10	<1.0
SVE-28	09/10/20	NA	NA	NA	NA	NA	NA	NA	<1.0
SVE-30	09/10/20	**10**	**6**	**2**	<1.0	**6.0**	**1.0**	<50	**5.9**
	11/23/20	**4**	**4.1**	**3.1**	**3.3**	*<2.0*	<1.0	<10	**6**
RW-1	09/10/20	<2.0	**3**	<5.0	<5.0	*<10*	<5.0	<10	<1.0
	11/23/20	<2.0	**3.9**	**3.2**	<1.0	**4.0**	**3.6**	<10	*<25*

Notes:

Results only shown for other detected constituents in wells. All other constiutents for wells not shown are below laboratory detection limits.

-- data not available or established

Results reported in micrograms per liter (µg/L)

NMWQCC - New Mexico Water Quality Control Commission Standard

NMWQCC Human Health Standards - from New Mexico Administrative Code (NMAC) 20.6.2, Part A, Human Health Standards. Used as GCL for target cleanup if lower than the MCL.

USEPA MCL - United States Environmental Protection Agency's Maximum Concentration Limit. Used as GCL for target cleanup if lower than the NMWQCC Human Health Standard.

Tap Water (2012) - From Table A-1 for the 2012 NMED Risk Assessment Guidance for Site Investigation and Remediation. Used as GCL for target cleanup if WQCC standard nor MCL has been established.

Prepared by: SWS 10/12/21
Checked by: HRB 10/12/21

Table 4-3. Groundwater Treatment System
Mass Removal Calculations for Total BTEX
Transwestern Compressor Station No. 9 - Roswell, NM

Date	Water Totalizer Meter Reading (gals)	Water Volume (gals)	Elapsed Time (days)	Flow Rate (gals/day)	Total BTEX (ug/L)	Mass Removal Rate (lbs/day)	Mass Removed (lbs)	Mass Removed (equivalent gals)
05/01/09	964,480	NA	NA	NA	NA	NA	NA	NA
05/25/09	1,003,890	39,410	24	1,642	4,339	0.0595	1.4	0.225
06/22/09	1,064,810	60,920	28	2,176	9,810	0.1782	5.0	0.788
07/21/09	1,107,950	43,140	29	1,488	9,910	0.1231	3.6	0.564
08/24/09	1,145,780	37,830	34	1,113	9,400	0.0873	3.0	0.469
09/28/09	1,165,680	19,900	35	569	6,230	0.0296	1.0	0.164
10/29/09	1,180,920	15,240	31	492	10,080	0.0414	1.3	0.203
11/18/09	1,214,350	33,430	20	1,672	6,840	0.0955	1.9	0.302
						2009 Total	**17.185**	**2.715**
06/20/10	1,223,490	NA	NA	NA	NA	NA	NA	NA
06/30/10	1,227,190	3,700	10	370	7,120	0.0220	0.2	0.035
07/31/10	1,248,140	20,950	31	676	5,340	0.0301	0.9	0.148
08/30/10	1,265,630	17,490	30	583	6,350	0.0309	0.9	0.147
11/10/10	1,292,380	26,750	72	372	8,260	0.0256	1.8	0.291
						2010 Total	**3.927**	**0.620**
08/01/11	1,304,610	NA	NA	NA	NA	NA	NA	NA
08/10/11	1,312,240	7,630	9	848	4,400	0.0311	0.3	0.044
10/09/11	1,344,310	32,070	60	535	10,540	0.0470	2.8	0.446
11/03/11	1,357,820	13,510	25	540	10,540	0.0476	1.2	0.188
						2011 Total	**4.292**	**0.678**
04/20/12	1,390,930	NA	NA	NA	NA	NA	NA	NA
04/30/12	1,413,930	23,000	10	2,300	8,800	0.1690	1.7	0.267
06/05/12	1,450,860	36,930	36	1,026	8,920	0.0764	2.8	0.435
06/28/12	1,459,530	8,670	23	377	10,050	0.0316	0.7	0.115
07/25/12	1,479,740	20,210	27	749	10,460	0.0654	1.8	0.279
08/15/12	1,486,280	6,540	21	311	8,970	0.0233	0.5	0.077
09/23/12	1,513,290	27,010	39	693	8,870	0.0513	2.0	0.316
10/25/12	1,524,400	11,110	32	347	10,480	0.0304	1.0	0.154
11/28/12	1,541,110	16,710	34	491	8,530	0.0350	1.2	0.188
						2012 Total	**11.587**	**1.831**
04/30/13	1,553,090	NA	NA	NA	NA	NA	NA	NA
05/16/13	1,576,010	22,920	16	1,433	10,560	0.1263	2.0	0.319
06/17/13	1,614,920	38,910	32	1,216	9,760	0.0991	3.2	0.501
07/17/13	1,641,540	26,620	30	887	11,170	0.0828	2.5	0.392
						2013 Total	**7.675**	**1.213**
07/24/14	1,641,550	NA	NA	NA	NA	NA	NA	NA
07/31/14	1,645,550	4,000	7	571	4,270	0.0204	0.1	0.023
08/25/14	1,667,720	22,170	25	887	4,410	0.0327	0.8	0.129
09/17/14	1,683,180	15,460	23	672	7,280	0.0409	0.9	0.148
10/15/14	1,714,440	31,260	28	1,116	8,500	0.0792	2.2	0.351
						2014 Total	**4.118**	**0.651**
07/01/15	46,250	NA	NA	NA	NA	NA	NA	NA
07/15/15	56,930	10,680	14	763	7,360	0.0469	0.7	0.104
10/27/15	91,500	34,570	104	332	4,600	0.0128	1.3	0.210
11/20/15	104,710	13,210	24	550	8,660	0.0398	1.0	0.151
						2015 Total	**2.940**	**0.464**

Table 4-3. Groundwater Treatment System
Mass Removal Calculations for Total BTEX
Transwestern Compressor Station No. 9 - Roswell, NM

Date	Water Totalizer Meter Reading (gals)	Water Volume (gals)	Elapsed Time (days)	Flow Rate (gals/day)	Total BTEX (ug/L)	Mass Removal Rate (lbs/day)	Mass Removed (lbs)	Mass Removed (equivalent gals)
03/23/16	114,640	NA	NA	NA	NA	NA	NA	NA
05/19/16	127,415	12,775	57	224	4,160	0.0078	0.4	0.070
06/28/16	148,810	21,395	40	535	3,720	0.0166	0.7	0.105
07/07/16	155,900	7,090	9	788	6,360	0.0418	0.4	0.059
08/24/16	190,170	34,270	48	714	6,370	0.0380	1.8	0.288
09/21/16	204,940	14,770	28	528	6,690	0.0295	0.8	0.130
10/24/16	225,540	20,600	33	624	4,040	0.0211	0.7	0.110
11/03/16	234,090	8,550	10	855	7,280	0.0520	0.5	0.082
						2016 Total	**5.348**	**0.845**
07/05/17	242,360	NA	NA	NA	NA	NA	NA	NA
07/11/17	248,050	5,690	6	948	15,194	0.1203	0.7	0.114
08/24/17	272,050	24,000	44	545	9,100	0.0414	1.8	0.288
09/25/17	296,160	24,110	32	753	12,450	0.0783	2.5	0.396
10/23/17	316,010	19,850	28	709	12,100	0.0716	2.0	0.317
11/27/17	331,400	15,390	35	440	12,100	0.0444	1.6	0.246
						2017 Total	**8.613**	**1.361**
06/11/18	332,910	NA	NA	NA	NA	NA	NA	NA
06/25/18	342,410	9,500	14	679	4,620	0.0262	0.4	0.058
07/23/18	350,000	7,590	28	271	7,300	0.0165	0.5	0.073
08/06/18	354,640	4,640	14	331	9,780	0.0271	0.4	0.060
09/24/18	363,300	8,660	49	177	10,850	0.0160	0.8	0.124
10/22/18	374,330	11,030	28	394	12,260	0.0403	1.1	0.178
						2018 Total	**3.122**	**0.493**
01/01/19	374,330	0	71	0	NA	NA	NA	NA
06/30/19	374,790	460	180	3	NA	NA	NA	NA
08/20/19	377,060	980	14	70	NA	NA	NA	NA
09/16/19	383,000	10,017	27	371	12,540	0.0389	1.049	0.166
10/29/19	398,410	15,410	43	358	11,890	0.0355	1.528	0.241
						2019 Total	**2.577**	**0.407**
04/14/20	5,600	4,700	6	783	11,750	0.0769	0.5	0.073
05/31/20	26,600	21,000	47	447	9,870	0.0368	1.7	0.273
06/25/20	36,200	9,600	25	384	8,780	0.0282	0.7	0.111
09/21/20	58,300	22,100	88	251	10,130	0.0212	1.869	0.295
10/26/20	95,700	37,400	35	1,069	10,570	0.0943	3.301	0.522
						2020 Total	**8.067**	**1.274**
						Total	**79**	**12.551**

Notes:
BTEX - benzene, toluene, ethylbenzene, xylenes
gals - gallons
ug/L - micrograms per liter
lbs - pounds
NA - not applicable, system deactivated during winter months
Total BTEX concentrations are reported from analytical results of monthly influent samples.
1) Specific gravity of VOC is 0.76 based on Fingerprinting Analytical performed by Core Laboratories in October 2012.
2) Between June and August 2019, system was deactivated due to semi-annual sampling delays and malfunctions with the system; therefore water treatment samples were not collected.
3) New water meter installed on 4/9/2020

Prepared by: SWS 2/1/21
Checked by: HRB 2/24/21

Table 4-6. Historical Hydrocarbon Removal Summary
Transwestern Compressor Station No. 9 - Roswell, NM

Year	Extracted Groundwater (gals)	PSH Recovered (gal)	PSH Recovered (lbs)	Dissolved-Phase Mass Removed (lbs)	Vapor-Phase Mass Removal (lbs)
2015	64,140	310	1,962	2.94	2,405
2016	137,650	350	2,216	5.35	2,026
2017	90,550	1,550	9,812	8.60	3,038
2018	41,420	1,330	8,419	3.12	8,356
2019	24,080	1,550	9,812	2.58	5,760
2020	97,400	940	5,950	8.07	2,918

Notes:
gals - gallons
PSH - phase separated hydrocarbons

Prepared by: HRB 10/12/21
Checked by: SWS 10/12/21

Received by OCD: 10/21/2022 8:09:38 AM

Accepted for the record
11/22/2022

NV

TRANSWESTERN PIPELINE COMPANY
An ENERGY TRANSFER Company

May 9, 2022

Mr. Rick Shean
New Mexico Environment Department
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505

RE: Response to Comment 4
Chloride and Sulfate Communication Summary
Roswell Compressor Station No. 9
Transwestern Pipeline Company
Roswell, Chaves County, New Mexico
NMOCD Abatement Plan #AP-125 (formerly #GW-052)
EPA ID No. NMD986676955
HWB-TWP-21-001

Dear Mr. Shean;

Transwestern Pipeline, LLC (Transwestern) submits this *Response to Comment 4* regarding the comment received from the New Mexico Environment Department (NMED) via the letter titled *[Response To] Approval with Modifications Report of 2020 Groundwater Remediation Activities Transwestern Compressor Station No. 9.* dated January 12, 2022, for the above referenced Site.

Based on the January 12, 2022, correspondence, NMED requested Transwestern to contact the New Mexico Oil Conservation Division (NMOCD) to discuss the chloride and sulfate concentrations in the post treatment water samples that have been above the New Mexico Water Quality Control Commission (NMWQCC) standards of 250 and 600 mg/L, respectively since 2009.

On March 31, 2022, Transwestern discussed via Microsoft® Teams with Mr. Bradford Billings of NMOCD about the chloride and sulfate concentrations in the post treatment water samples and reviewed historical chloride and sulfate concentrations in soil and groundwater for the site prior to installation of the groundwater treatment system. Based on the discussion, NMOCD has no concerns with the chloride and sulfate concentrations in the post treatment water samples.

If you have any further questions or comments regarding these responses, please do not hesitate to contact me at (210) 870-2725 or Steve Diamond of WSP USA, Inc. at (770) 973-2100.

Sincerely,

SBoultinghouse

Ms. Stacy Boultinghouse, PG
Environmental Manager
Transwestern Pipeline Company, LLC
Stacy.Boultinghouse@energytransfer.com

Released to Imaging: 11/22/2022 9:07:27 AM

Received by OCD: 10/21/2022 8:09:38 AM

Cc: D. Cobrain, NMED HWB
M. Suzuki, NMED HWB
M. Bratcher, NMOCD
B. Billings, NMOCD
L. King, USEPA Region 6
JD Haines, WSP
S. Diamond, WSP

Released to Imaging: 11/22/2022 9:07:27 AM

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 152533

CONDITIONS

Operator: Transwestern Pipeline Company, LLC 8501 Jefferson NE Ave Albuquerque, NM 87113	OGRID: 329750
	Action Number: 152533
	Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Accepted for the record. See app ID 154725 for most updated status.	11/22/2022