

Third Quarter 2018  
Groundwater Monitoring Summary Report

Tampa Compressor Station Release  
Weld County, Colorado  
Remediation #9353

Prepared for:



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**September 19, 2018**

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## 1. Introduction

This report summarizes the groundwater monitoring activities conducted during the third quarter 2018 at the Tampa Compressor Station, Weld County, Colorado (Figure 1). Tasman Geosciences (Tasman) performed these activities on behalf of DCP Midstream, LP (DCP). The field activities were conducted with the purpose of monitoring groundwater flow and quality conditions in the Site subsurface. Current Site conditions were evaluated from field data and analytical laboratory results collected during the reporting period on August 28, 2018.

## 2. Site Location and Background

The Site is located in the southwestern quarter of the southwestern quarter of Section 31, Township 3 North, Range 63 West (approximate coordinates 40.176595 degrees north and -104.489837 degrees west), approximately 5 miles north on County Road (CR) 59 from Keenesburg, Colorado.

A petroleum hydrocarbon release originating from an underground pipeline occurred at the Site resulting in surface soil staining. DCP submitted an initial Form 19 on February 2, 2015, with a Supplemental Form 19 submitted on February 10, 2015, and the Colorado Oil and Gas Conservation Commission (COGCC) issued a spill tracking facility ID# 440770 for the Site.

Initial soil investigation activities conducted on February 2, 2015, indicated that surface soil impacts were above COGCC standards. On February 6, 2015, hydrovacuum excavation and soil removal activities of the surface stained soils to approximately 1-foot below ground surface (bgs) was conducted and approximately 14 cubic yards (yd<sup>3</sup>) of material was removed.

On February 13, 2015, three soil borings (BH01 – BH03) were advanced and soil samples were collected from just above the saturated interval at each location. Subsequently, these soil borings were completed as monitoring wells (BH01 – BH03). On February 19, 2015, initial groundwater monitoring activities were conducted at the well locations and light non-aqueous phase liquid (LNAPL) was observed in monitoring wells BH01 and BH03 with measured thicknesses of 3.14 feet and 1.83 feet, respectively. A groundwater sample was collected from BH02 and the laboratory analytical results from that well were below COGCC Table 910-1 standards. The monitoring well locations are illustrated on Figure 2.

On April 28, 2015, a vacuum enhanced fluid recovery (EFR) event was conducted at monitoring wells BH01 and BH03 and approximately 5 barrels (bbl) of liquid was removed. Additional source area excavation activities were conducted at the site between May 6 and 22, 2015, and approximately 210 yd<sup>3</sup> of impacted soil and 33 bbl of groundwater were removed during excavation. Soil samples were collected during excavation activities and reported laboratory analytical results indicated impacted soil within the vadose zone remains in place in the northwest corner of the Site. Due to the existing infrastructure and off-site conditions, the impacted soil was left in place and in-situ remediation activities have been conducted. Additionally, during the May 2015 excavation activities, monitoring well BH01 was destroyed.

A Form 27 was submitted to the COGCC on November 4, 2015, and the COGCC issued remediation #9353 for the Site. In accordance with the approved work plan described in the Form 27, DCP installed an additional nine (9) temporary monitoring wells (BH04 through BH12) and replaced the destroyed BH01 with monitoring well BH01R (Figure 2). Quarterly groundwater monitoring activities were initiated at the Site in November 2015.

### 3. Groundwater Monitoring

This section describes the field and laboratory activities performed during the third quarter 2018 groundwater monitoring event. Quarterly monitoring activities were conducted on August 28, 2018 and included Site-wide groundwater gauging and sampling. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site. LNAPL was not observed within any of the Site monitoring wells during the third quarter 2018 and LNAPL has not been detected since the second quarter 2017 monitoring event.

#### 3.1 Groundwater Elevation Monitoring

Groundwater levels were measured to evaluate hydraulic characteristics and provide information regarding seasonal fluctuations in groundwater and LNAPL elevations at the Site. During the third quarter 2018, groundwater levels were measured at 12 monitoring well locations (BH01R through BH12).

Groundwater levels were measured on the north side of the well casing to the nearest 0.01-foot using an oil-water interface probe (IP). Groundwater level data were later converted to elevation (feet above mean sea level [AMSL]). Measured groundwater and LNAPL levels and the calculated groundwater elevations are presented in Table 1.

A third quarter 2018 groundwater elevation contour map, included as Figure 3, indicates that groundwater flow at the Site generally trends to the northeast which is similar to previous quarterly monitoring data. The range of groundwater elevations, average elevation change from the previous monitoring event, and the calculated average hydraulic gradient (using elevations from BH10 and BH08) at the Site are summarized in the table below.

**Summary of Measured Hydraulic Parameters**

	<b>Third Quarter 2018 (8/28/2018)</b>
Maximum Elevation (Well ID)	4,795.94 (BH10)
Minimum Elevation (Well ID)	4,795.29 (BH11)
Average Change from Previous Monitoring Event – All Wells	0.43 feet
Average Hydraulic Gradient (ft/ft) / (Well IDs)	0.007 (BH10 to BH08)

## 3.2 Groundwater Quality Monitoring

Subsequent to recording groundwater level measurements at each monitoring well location, groundwater samples were collected from 12 monitor wells using disposable polyethylene bailers.

A minimum of three well casing volumes of groundwater were purged from each monitor well or the water column was purged dry and allowed to sufficiently recover prior to collecting groundwater samples. Groundwater samples were placed in clean laboratory supplied containers for the selected analytical methods, packed in an ice-filled cooler and maintained at approximately four degrees Celsius (°C) for transportation to the laboratory. Groundwater samples were then delivered under chain-of-custody procedures to Summit Scientific Laboratories (Summit) in Golden, Colorado for analysis.

Water quality samples were submitted for analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B.

Table 2 summarizes BTEX concentrations in groundwater samples collected during the reporting period. Historical analytical results up to and including the third quarter 2018 event are included in Appendix A and the laboratory analytical report is included in Appendix B. Analytical results are also displayed on Figure 4.

Analytical results/observations are summarized below:

- LNAPL was not measured in any of the twelve (12) monitoring well locations, although a visible sheen was observed on purge water generated at monitoring locations BH04 and BH06, which have historically exhibited elevated BTEX concentrations or measurable LNAPL.
- The benzene concentrations at BH05 (7.6 micrograms per liter [ $\mu\text{g/L}$ ]) and BH06 (370  $\mu\text{g/L}$ ) were in exceedance of the COGCC Table 910-1 standard of 5  $\mu\text{g/L}$ . Benzene concentrations at the remaining well locations were below COGCC Table 910-1 standards and/or laboratory detection limits.
- Toluene concentrations were not in exceedance of the COGCC Table 910-1 standard of 560  $\mu\text{g/L}$  in any of the sampled monitor well locations. However, toluene was reported above laboratory detection limits at BH06 (17  $\mu\text{g/L}$ ), and BH10 (9.5  $\mu\text{g/L}$ ).
- Ethylbenzene concentrations were not in exceedance of the COGCC Table 910-1 standard of 700  $\mu\text{g/L}$  in any of the sampled monitor well locations. However, ethylbenzene was reported above laboratory detection limits at BH01R (3.4  $\mu\text{g/L}$ ), BH04 (160  $\mu\text{g/L}$ ), BH05 (3.6  $\mu\text{g/L}$ ), BH06 (560  $\mu\text{g/L}$ ), BH08 (9.7  $\mu\text{g/L}$ ) and BH10 (540  $\mu\text{g/L}$ ).
- The total xylenes concentration at BH06 (2,000  $\mu\text{g/L}$ ) was in exceedance of the COGCC Table 910-1 standard of 1,400  $\mu\text{g/L}$ . Total xylenes concentrations at the remaining well locations were below the COGCC Table 910-1 standards and/or laboratory detection limits.

## 4. Remediation Activities

As reported in previous quarterly summary reports, and in accordance with the approved Form 27 Remediation Work Plan, vacuum enhanced fluid recovery (EFR) remediation activities were initiated at the Site during the second quarter 2016 to mitigate dissolved phase petroleum hydrocarbons and residual LNAPL within groundwater at the Site. EFR remediation activities have been ongoing through May 17, 2017, in which a project total of approximately 1,188 barrels (bbls) of groundwater was removed between the second quarter 2016 and second quarter 2017 EFR remediation events. Recovered groundwater through EFR remediation was subsequently transported and disposed of at the NGL Water Solutions DJ, LLC, C-3 disposal well in LaSalle, CO. Subsequent to the EFR event conducted on May 17, 2017, EFR activities were discontinued to evaluate LNAPL recovery and dissolved phase petroleum hydrocarbon concentration trends.

Due to typically elevated dissolved phase petroleum hydrocarbon concentrations reported at BH05, BH06, and BH07, an alternative remedial approach utilizing mobile air sparge (AS) and soil vapor extraction (SVE) (AS/SVE) techniques was initiated at the Site on August 29, 2017. AS compressed air was delivered to monitoring wells BH05 and BH07 concurrent with SVE at monitoring wells BH01R, BH03, BH04, and BH06 for a continuous six-hour period. AS/SVE remediation activities were performed on a weekly schedule through February 7, 2018. Average AS delivery pressures were operated at 20 pounds per square inch (psi) with air delivery flow rates ranging between 14-32 cubic feet per minute (CFM). SVE vacuum pressures were operated between 25 and 150 inches of water (in/H<sub>2</sub>O), depending on individual well performance conditions. Subsequent to the February 7, 2018 AS/SVE remedial event, AS/SVE efforts were discontinued to evaluate dissolved phase petroleum hydrocarbon concentration trends.

## 5. Conclusions

Evaluation of the third quarter 2018 monitoring data provides the following observations:

- LNAPL was not observed in any of the twelve (12) monitoring well locations during the monitoring event and LNAPL has not been observed at the Site since May 2017.
- Benzene was reported above COGCC applicable groundwater standards at monitoring well locations BH05 and BH06 during the third quarter 2018.
- Total xylenes concentrations were reported above applicable COGCC groundwater standards at monitoring well BH06 during the third quarter 2018.
- While benzene increased to slightly above the COGCC standards at BH05 during the third quarter 2018 monitoring event, overall decreasing trends in BTEX concentrations have been observed at well locations typically exhibiting impacts throughout the Site. These observations, as well as measurable LNAPL thickness last recorded at BH06 in May 2017, indicate that remedial efforts at the Site have been effective.

## 6. Recommendations

Based on evaluation of data from the third quarter 2018, recommendations for future activities include:

- Continue quarterly groundwater monitoring and sampling activities at the monitoring well locations illustrated on Figure 2.

Tables

**TABLE 1**  
**THIRD QUARTER 2018**  
**SUMMARY OF GROUNDWATER ELEVATION DATA**  
**DCP TAMPA COMPRESSOR STATION**  
**WELD COUNTY, COLORADO**

Location	Date	Depth to Groundwater (feet)	Depth to Product (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (*) (feet amsl)	Change in Groundwater Elevation Since Previous Event <sup>(1)</sup> (feet)
BH01R	11/28/2017	10.36			NM	4,805.57	4,795.21	-0.15
BH01R	2/15/2018	10.36			15.32	4,805.57	4,795.21	0.00
BH01R	5/3/2018	10.45			15.45	4,805.57	4,795.12	-0.09
BH01R	8/28/2018	10.09			15.61	4,805.57	4,795.48	0.36
BH02	11/28/2017	12.35			NM	4,807.70	4,795.35	0.00
BH02	2/15/2018	12.45			18.52	4,807.70	4,795.25	-0.10
BH02	5/3/2018	12.43			18.63	4,807.70	4,795.27	0.02
BH02	8/28/2018	12.05			18.48	4,807.70	4,795.65	0.38
BH03	11/28/2017	9.01			NM	4,804.31	4,795.30	0.42
BH03	2/15/2018	9.20			16.44	4,804.31	4,795.11	-0.19
BH03	5/3/2018	9.18			16.36	4,804.31	4,795.13	0.02
BH03	8/28/2018	8.82			16.33	4,804.31	4,795.49	0.36
BH04	11/28/2017	11.35			NM	4,806.95	4,795.60	-0.03
BH04	2/15/2018	11.46			16.18	4,806.95	4,795.49	-0.11
BH04	5/3/2018	11.63			16.29	4,806.95	4,795.32	-0.17
BH04	8/28/2018	11.04			16.29	4,806.95	4,795.91	0.59
BH05	11/28/2017	11.27			NM	4,806.51	4,795.24	-0.26
BH05	2/15/2018	11.97			15.50	4,806.51	4,794.54	-0.70
BH05	5/3/2018	11.54			15.95	4,806.51	4,794.97	0.43
BH05	8/28/2018	10.88			15.67	4,806.51	4,795.63	0.66
BH06	11/28/2017	11.02			NM	4,806.46	4,795.44	0.05
BH06	2/15/2018	11.37			16.30	4,806.46	4,795.09	-0.35
BH06	5/3/2018	11.34			16.22	4,806.46	4,795.12	0.03
BH06	8/28/2018	10.94			16.22	4,806.46	4,795.52	0.40
BH07	11/28/2017	11.02			NM	4,806.01	4,794.99	-0.26
BH07	2/15/2018	11.24			15.43	4,806.01	4,794.77	-0.22
BH07	5/3/2018	11.21			15.32	4,806.01	4,794.80	0.03
BH07	8/28/2018	10.59			15.16	4,806.01	4,795.42	0.62
BH08	11/28/2017	8.71			NM	4,803.78	4,795.07	0.00
BH08	2/15/2018	8.81			15.29	4,803.78	4,794.97	-0.10
BH08	5/3/2018	8.80			15.14	4,803.78	4,794.98	0.01
BH08	8/28/2018	8.42			15.14	4,803.78	4,795.36	0.38
BH09	11/28/2017	8.95			NM	4,804.08	4,795.13	0.02
BH09	2/15/2018	9.03			15.37	4,804.08	4,795.05	-0.08
BH09	5/3/2018	9.03			15.26	4,804.08	4,795.05	0.00
BH09	8/28/2018	8.69			15.27	4,804.08	4,795.39	0.34
BH10	11/28/2017	9.93			NM	4,805.37	4,795.44	0.02
BH10	2/15/2018	10.02			15.30	4,805.37	4,795.35	-0.09
BH10	5/3/2018	10.02			15.24	4,805.37	4,795.35	0.00
BH10	8/28/2018	9.43			15.24	4,805.37	4,795.94	0.59

**TABLE 1**  
**THIRD QUARTER 2018**  
**SUMMARY OF GROUNDWATER ELEVATION DATA**  
**DCP TAMPA COMPRESSOR STATION**  
**WELD COUNTY, COLORADO**

Location	Date	Depth to Groundwater (feet)	Depth to Product (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (*) (feet amsl)	Change in Groundwater Elevation Since Previous Event <sup>(1)</sup> (feet)
BH11	11/28/2017	9.77			NM	4,804.97	4,795.20	-0.05
BH11	2/15/2018	9.79			14.45	4,804.97	4,795.18	-0.02
BH11	5/3/2018	9.80			14.45	4,804.97	4,795.17	-0.01
BH11	8/28/2018	9.68			15.25	4,804.97	4,795.29	0.12
BH12	11/28/2017	10.02			NM	4,805.13	4,795.11	0.01
BH12	2/15/2018	10.09			15.30	4,805.13	4,795.04	-0.07
BH12	5/3/2018	10.08			15.22	4,805.13	4,795.05	0.01
BH12	8/28/2018	9.74			15.20	4,805.13	4,795.39	0.34
Average change in groundwater elevation (5/3/2018 to 8/28/18)								0.43

Notes:

1- Changes in groundwater elevation calculated by subtracting the measurement collected during the previous monitoring event from the measurement collected during the most recent monitoring event.

amsl = feet above mean sea level

TOC = top of casing

Groundwater elevation = (TOC Elevation - Measured Depth to Water)

\* Groundwater elevation was corrected for product thickness using the following calculation, when applicable:

Groundwater elevation = (TOC Elevation - Measured Depth to Water) + (LNAPL Thickness in Well \* LNAPL Relative Density)

LNAPL relative density is assumed to be approximately 0.75

NA = Not Applicable

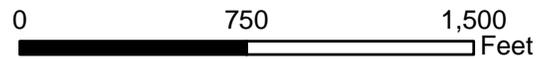
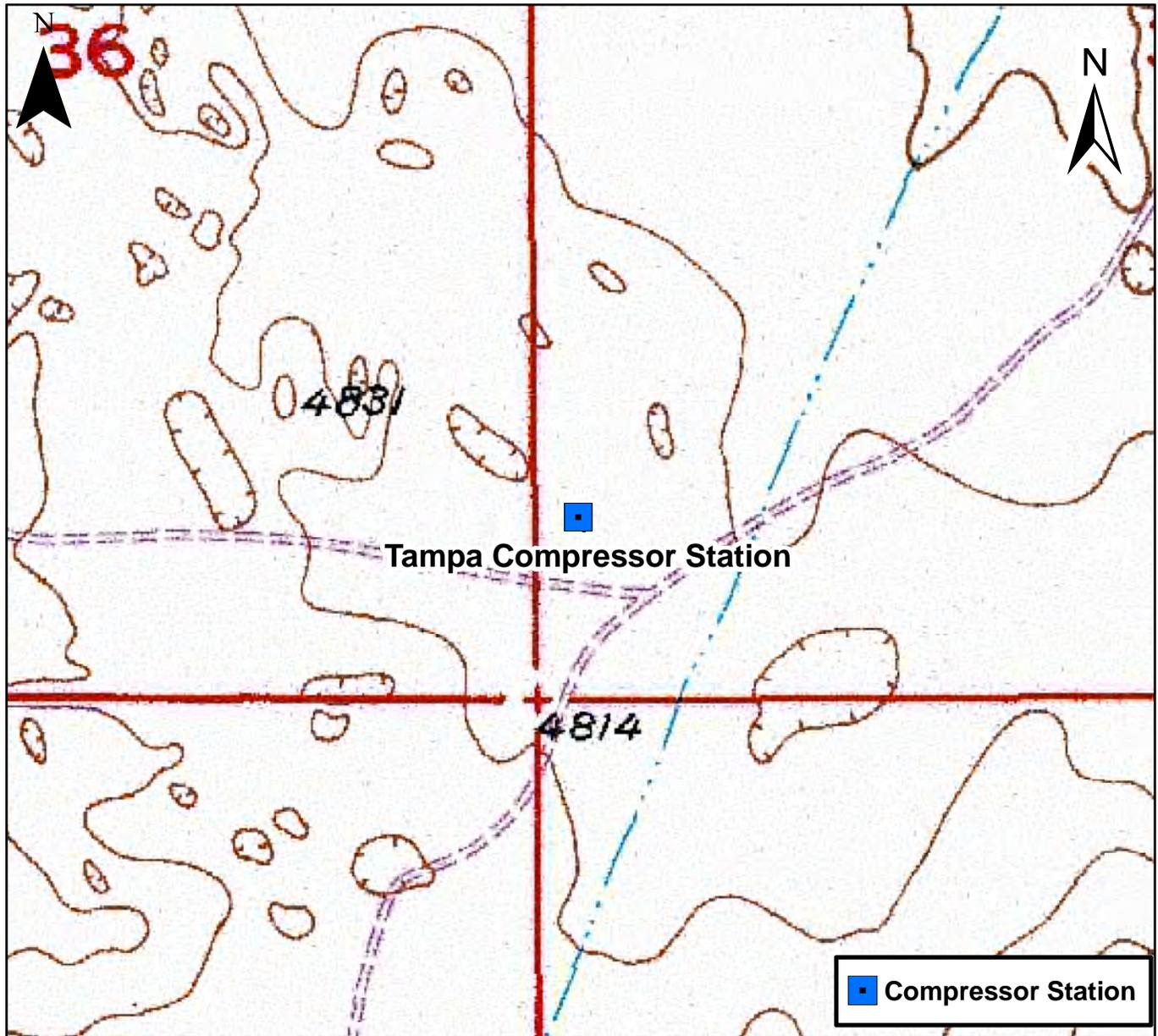
TD = Total Depth

**TABLE 2**  
**THIRD QUARTER 2018**  
**SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER**  
**DCP TAMPA COMPRESSOR STATION**  
**WELD COUNTY, COLORADO**

Location Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Comments
<b>COGCC Standards (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	
BH01R	8/28/2018	<1.0	<1.0	3.4	<2.0	
BH02	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH03	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH04	8/28/2018	<1.0	1.0	160	370	
BH05	8/28/2018	<b>7.6</b>	<1.0	3.6	7.3	
BH06	8/28/2018	<b>370</b>	17	560	<b>2,000</b>	
BH07	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH08	8/28/2018	<1.0	<1.0	9.7	<2.0	
BH09	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH10	8/28/2018	<1.0	9.5	540	380	
BH11	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH12	8/28/2018	<1.0	<1.0	<1.0	<2.0	

Notes:  
1). The environmental cleanup standards for groundwater that are applicable to this site are the Colorado Oil and Gas Conservation Commission (COGCC) standards for contaminants in groundwater according to Table 910-1 of the COGCC 900 Series Rule for E&P Waste Management. **Bold red** values indicate an exceedance of the COGCC groundwater standards for the Site.  
µg/L = micrograms per liter.

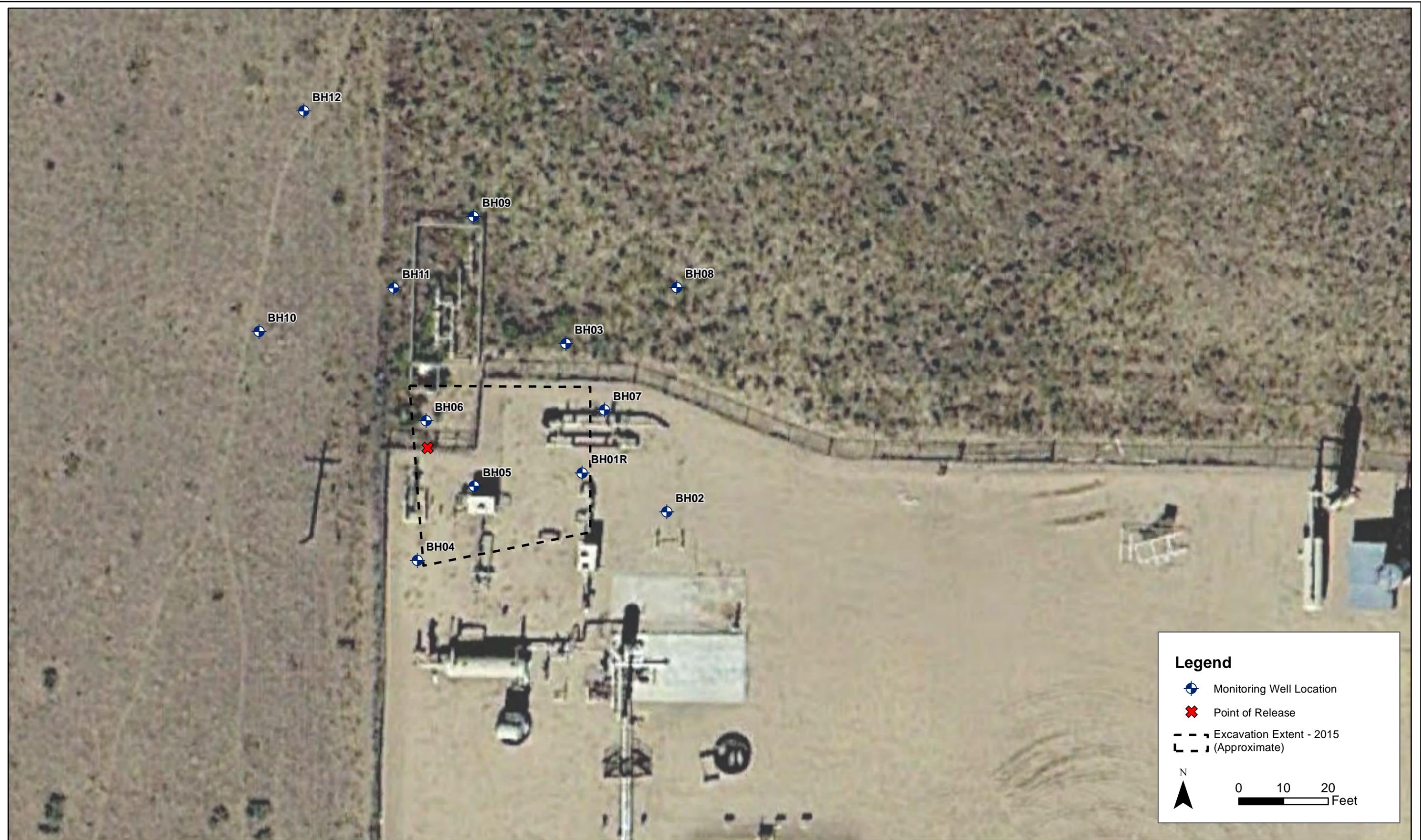
## Figures



**Figure 1**

Site Location Map  
 Tampa Compressor Station  
 SWSW S31 T3N R63W  
 Weld County, Colorado





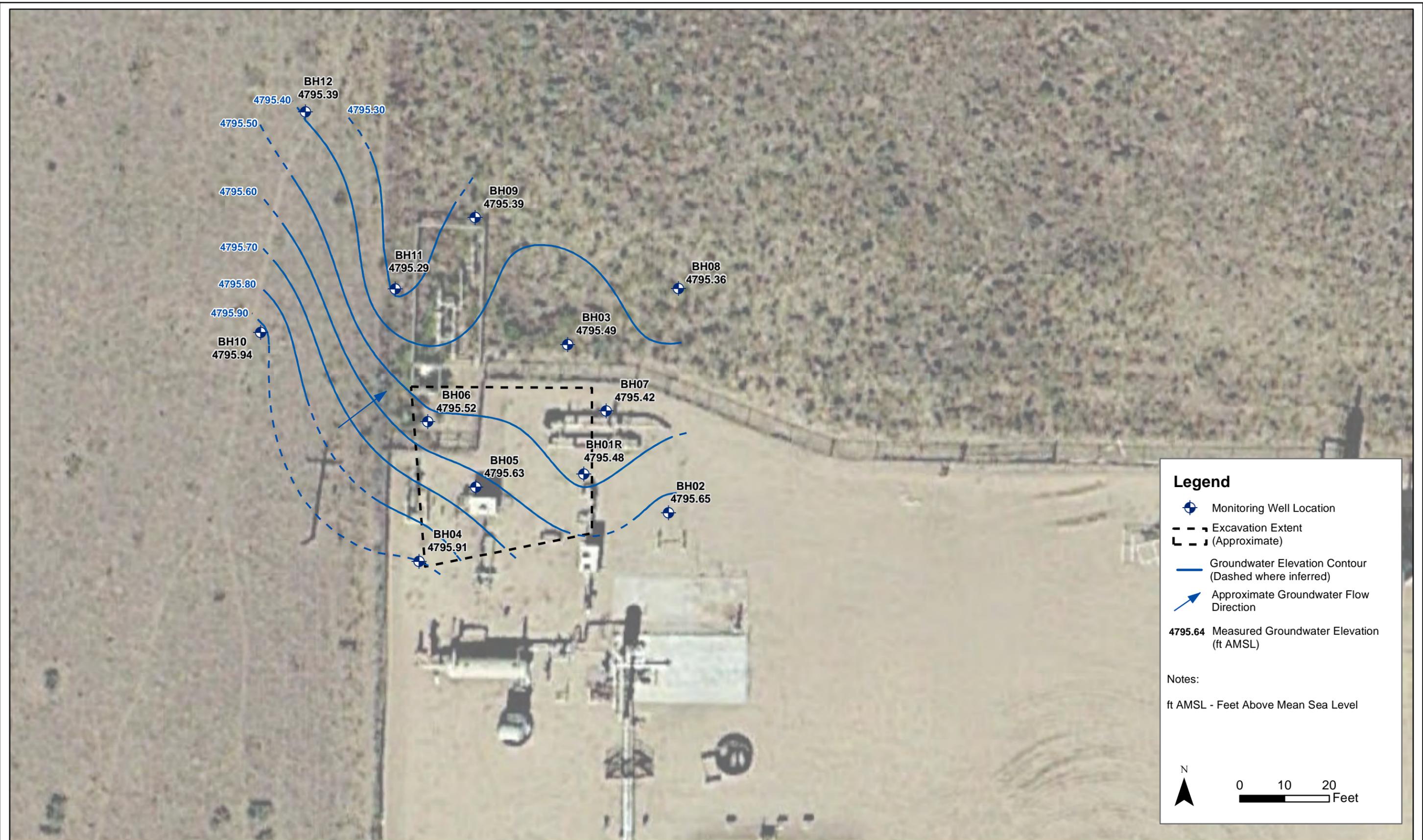
DATE: April 2018  
 DESIGNED BY: B. Humphrey  
 DRAWN BY: D. Arnold



**DCP Midstream  
 Tampa Compressor Station**  
 SWSW Section 31, Township 3 North, Range 63 West  
 Weld County, Colorado

Site Map with  
 Monitoring Well Locations

Figure  
 2



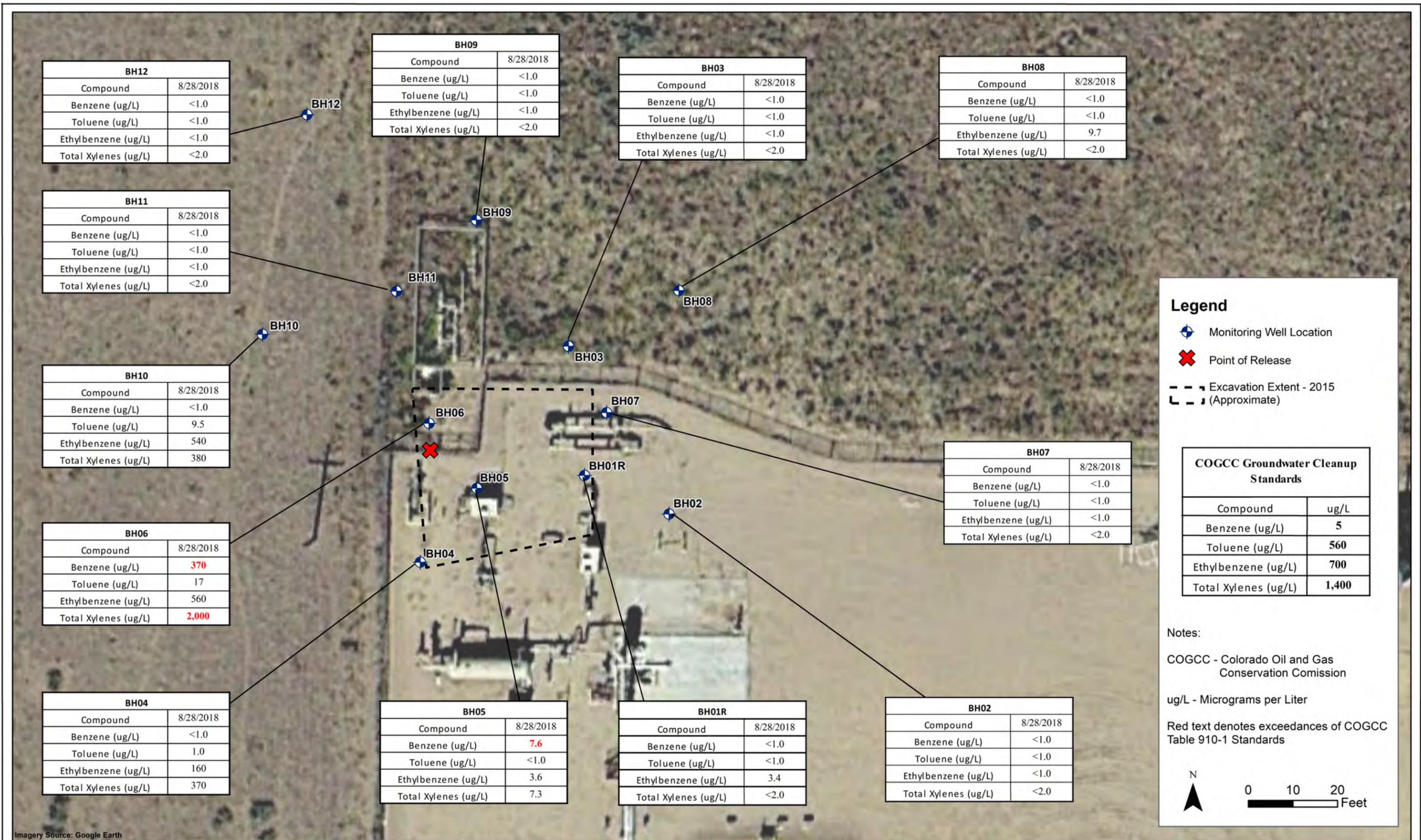
DATE: September 2018  
DESIGNED BY: B. Humphrey  
DRAWN BY: D. Arnold



**DCP Midstream  
Tampa Compressor Station**  
SWSW Section 31, Township 3 North, Range 63 West  
Weld County, Colorado

Groundwater Elevation  
Contour Map  
(August 28, 2018)

Figure  
3



DATE: September 2018  
 DESIGNED BY: B. Humphrey  
 DRAWN BY: D. Arnold



**DCP Midstream  
 Tampa Compressor Station**  
 SWSW Section 31, Township 3 North, Range 63 West  
 Weld County, Colorado

Groundwater Analytical Results  
 Map  
 (August 28, 2018)

Figure  
 4

## Appendix A

### Historical Groundwater Analytical Results

**APPENDIX A  
HISTORICAL GROUNDWATER ANALYTIC DATA  
DCP TAMPA COMPRESSOR STATION  
WELD COUNTY, COLORADO**

Location Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Comments
<b>COGCC Standards (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	
BH01	2/19/2015	NS	NS	NS	NS	LNAPL
BH01R	11/12/2015	<b>82</b>	<1.0	7.5	3.8	
BH01R	2/23/2016	<b>35</b>	<1.0	3.7	1.5	
BH01R	5/27/2016	4.2	<1.0	2.0	<1.0	
BH01R	8/17/2016	<1.0	<1.0	<1.0	<1.0	
BH01R	11/9/2016	<1.0	<1.0	3.4	<1.0	
BH01R	2/1/2017	<1.0	<1.0	<1.0	<1.0	
BH01R	5/1/2017	<1.0	<1.0	<1.0	<2.0	
BH01R	8/2/2017	<1.0	<1.0	<1.0	<2.0	
BH01R	11/28/2017	<1.0	<1.0	<1.0	<2.0	
BH01R	2/15/2018	<1.0	<1.0	<1.0	<2.0	
BH01R	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH01R	8/28/2018	<1.0	<1.0	3.4	<2.0	
BH02	2/19/2015	<1.0	1.7	<1.0	1.1	
BH02	11/12/2015	<1.0	1.6	<1.0	4.5	
BH02	2/23/2016	<1.0	<1.0	<1.0	<1.0	
BH02	5/27/2016	<1.0	<1.0	<1.0	<1.0	
BH02	8/17/2016	<1.0	<1.0	<1.0	<1.0	
BH02	11/9/2016	<1.0	<1.0	<1.0	<1.0	
BH02	2/1/2017	<1.0	<1.0	1.9	<1.0	
BH02	5/1/2017	<1.0	<1.0	<1.0	<2.0	
BH02	8/2/2017	<1.0	<1.0	<1.0	<2.0	
BH02	11/28/2017	<1.0	<1.0	<1.0	<2.0	
BH02	2/15/2018	<1.0	<1.0	<1.0	<2.0	
BH02	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH02	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH03	2/19/2015	NS	NS	NS	NS	LNAPL
BH03	11/12/2015	NS	NS	NS	NS	LNAPL
BH03	2/23/2016	NS	NS	NS	NS	LNAPL
BH03	5/27/2016	<b>53</b>	65	100	700	
BH03	8/17/2016	<1.0	<1.0	<1.0	<1.0	
BH03	11/9/2016	<1.0	<1.0	<1.0	<1.0	
BH03	2/1/2017	<1.0	<1.0	<1.0	<1.0	
BH03	5/1/2017	<1.0	<1.0	<1.0	<2.0	
BH03	8/2/2017	1.1	<1.0	<1.0	<2.0	
BH03	11/28/2017	<1.0	<1.0	<1.0	<2.0	
BH03	2/15/2018	<1.0	<1.0	<1.0	<2.0	
BH03	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH03	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH04	11/12/2015	NS	NS	NS	NS	LNAPL
BH04	2/23/2016	NS	NS	NS	NS	LNAPL
BH04	5/27/2016	<b>120</b>	490	560	<b>2,600</b>	
BH04	8/17/2016	<b>28</b>	73	140	840	LNAPL
BH04	11/9/2016	<b>120</b>	<b>590</b>	<b>1,800</b>	<b>5,500</b>	LNAPL
BH04	2/1/2017	3.9	46	220	560	
BH04	5/1/2017	1.0	13	83	280	
BH04	8/2/2017	<1.0	8.6	190	390	
BH04	11/28/2017	<1.0	3.7	140	440	
BH04	2/15/2018	<1.0	2.7	200	520	
BH04	5/3/2018	<1.0	<1.0	180	350	
BH04	8/28/2018	<1.0	1.0	160	370	

**APPENDIX A  
HISTORICAL GROUNDWATER ANALYTIC DATA  
DCP TAMPA COMPRESSOR STATION  
WELD COUNTY, COLORADO**

Location Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Comments
<b>COGCC Standards (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	
BH05	11/12/2015	<b>6,700</b>	<b>590</b>	610	<b>2,300</b>	
BH05	2/23/2016	<b>2,900</b>	180	540	<b>1,500</b>	
BH05	5/27/2016	<b>2,300</b>	130	610	<b>2,900</b>	
BH05	8/17/2016	<b>1,800</b>	30	100	1,100	
BH05	11/9/2016	<b>19,000</b>	<b>2,000</b>	<b>3,500</b>	<b>15,000</b>	
BH05	2/1/2017	<b>2,300</b>	95	450	<b>1,800</b>	
BH05	5/1/2017	<b>1,500</b>	17	210	1,000	
BH05	8/2/2017	<b>1,700</b>	<1.0	230	<b>1,400</b>	
BH05	11/28/2017	<1.0	<1.0	<1.0	<2.0	
BH05	2/15/2018	1.6	<1.0	<1.0	<2.0	
BH05	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH05	8/28/2018	<b>7.6</b>	<1.0	3.6	7.3	
BH06	11/12/2015	NS	NS	NS	NS	LNAPL
BH06	2/23/2016	NS	NS	NS	NS	LNAPL
BH06	5/27/2016	<b>6,500</b>	<b>6,200</b>	<b>2,500</b>	<b>14,000</b>	
BH06	8/17/2016	<b>5,400</b>	<b>3,100</b>	<b>1,400</b>	<b>7,600</b>	
BH06	11/9/2016	NS	NS	NS	NS	LNAPL
BH06	2/1/2017	<b>2,000</b>	<b>800</b>	510	<b>2,100</b>	LNAPL
BH06	5/1/2017	<b>1,100</b>	<b>620</b>	260	<b>1,900</b>	LNAPL
BH06	8/2/2017	<b>3,000</b>	<b>2,600</b>	570	<b>4,100</b>	
BH06	11/28/2017	<b>1,400</b>	<b>770</b>	190	<b>1,900</b>	
BH06	2/15/2018	<b>1,300</b>	340	1.7	<b>2,100</b>	
BH06	5/3/2018	<b>690</b>	500	230	<b>2,200</b>	
BH06	8/28/2018	<b>370</b>	17	560	<b>2,000</b>	
BH07	11/12/2015	<b>1,600</b>	<b>1,000</b>	290	1,000	
BH07	2/23/2016	<b>130</b>	70	170	110	
BH07	5/27/2016	<b>3,100</b>	<b>1,500</b>	500	<b>2,700</b>	
BH07	8/17/2016	<b>2,500</b>	170	550	<b>2,600</b>	
BH07	11/9/2016	<b>790</b>	71	510	<b>2,400</b>	
BH07	2/1/2017	<b>240</b>	30	410	<b>2,000</b>	
BH07	5/1/2017	<b>56</b>	9.3	300	<b>1,400</b>	
BH07	8/2/2017	<b>26</b>	5.3	130	<b>1,600</b>	
BH07	11/28/2017	<1.0	<1.0	<1.0	<2.0	
BH07	2/15/2018	<1.0	<1.0	<1.0	<2.0	
BH07	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH07	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH08	11/12/2015	<b>160</b>	16	11	40	
BH08	2/23/2016	<b>150</b>	37	15	74	
BH08	5/27/2016	<b>60</b>	10	19	110	
BH08	8/17/2016	<b>5.1</b>	6.2	20	320	
BH08	11/9/2016	<1.0	<1.0	<1.0	9.1	
BH08	2/1/2017	4.6	<1.0	11	32	
BH08	5/1/2017	<1.0	<1.0	4.7	6.8	
BH08	8/2/2017	<1.0	<1.0	<1.0	<2.0	
BH08	11/28/2017	1.6	<1.0	7.5	41	
BH08	2/15/2018	<1.0	<1.0	<1.0	<2.0	
BH08	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH08	8/28/2018	<1.0	<1.0	9.7	<2.0	

**APPENDIX A**  
**HISTORICAL GROUNDWATER ANALYTIC DATA**  
**DCP TAMPA COMPRESSOR STATION**  
**WELD COUNTY, COLORADO**

Location Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Comments
<b>COGCC Standards (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	
BH09	11/12/2015	<b>610</b>	46	18	80	
BH09	2/23/2016	<b>23</b>	<1.0	<1.0	<1.0	
BH09	5/27/2016	<b>8.0</b>	<1.0	<1.0	<1.0	
BH09	8/17/2016	<1.0	<1.0	<1.0	<1.0	
BH09	11/9/2016	<1.0	<1.0	<1.0	<1.0	
BH09	2/1/2017	<1.0	<1.0	<1.0	<1.0	
BH09	5/1/2017	<1.0	<1.0	<1.0	<2.0	
BH09	8/2/2017	<1.0	<1.0	<1.0	<2.0	
BH09	11/28/2017	<1.0	<1.0	<1.0	<2.0	
BH09	2/15/2018	<1.0	<1.0	<1.0	<2.0	
BH09	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH09	8/28/2018	<1.0	<1.0	<1.0	<2.0	
BH10	11/12/2015	<1.0	<1.0	<1.0	<1.0	
BH10	2/23/2016	<1.0	<1.0	<1.0	<1.0	
BH10	5/27/2016	<1.0	<1.0	<1.0	<1.0	
BH10	8/17/2016	<1.0	<1.0	<1.0	<1.0	
BH10	11/9/2016	<1.0	<1.0	<1.0	<1.0	
BH10	2/1/2017	<1.0	<1.0	<1.0	<1.0	
BH10	5/1/2017	<1.0	<1.0	<1.0	<2.0	
BH10	8/2/2017	<1.0	<1.0	<1.0	<2.0	
BH10	11/28/2017	<1.0	<1.0	<1.0	<2.0	
BH10	2/15/2018	<1.0	<1.0	<1.0	<2.0	
BH10	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH10	8/28/2018	<1.0	9.5	540	380	
BH11	11/12/2015	<b>2,100</b>	<b>1,800</b>	200	840	
BH11	2/23/2016	NS	NS	NS	NS	LNAPL
BH11	5/27/2016	<b>2,100</b>	180	600	<b>1,900</b>	
BH11	8/17/2016	<b>1,100</b>	3.5	34	770	
BH11	11/9/2016	<b>27</b>	<1.0	100	260	
BH11	2/1/2017	2.0	<1.0	290	330	
BH11	5/1/2017	<1.0	<1.0	160	14	
BH11	8/2/2017	<1.0	<1.0	<1.0	<2.0	
BH11	11/28/2017	<1.0	22	370	430	
BH11	2/15/2018	<1.0	32	210	440	
BH11	5/3/2018	<1.0	9.4	30	310	
BH11	8/28/2018	<1.0	<1.0	<1.0	<2.0	

**APPENDIX A  
HISTORICAL GROUNDWATER ANALYTIC DATA  
DCP TAMPA COMPRESSOR STATION  
WELD COUNTY, COLORADO**

Location Identification	Sample Date	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Comments
<b>COGCC Standards (µg/L)</b>		<b>5</b>	<b>560</b>	<b>700</b>	<b>1,400</b>	
BH12	11/12/2015	<1.0	<1.0	<1.0	<1.0	
BH12	2/23/2016	<1.0	<1.0	<1.0	<1.0	
BH12	5/27/2016	<1.0	<1.0	<1.0	<1.0	
BH12	8/17/2016	<1.0	<1.0	<1.0	<1.0	
BH12	11/9/2016	<1.0	<1.0	<1.0	<1.0	
BH12	2/1/2017	<1.0	<1.0	<1.0	<1.0	
BH12	5/1/2017	<1.0	<1.0	<1.0	<2.0	
BH12	8/2/2017	<1.0	<1.0	<1.0	<2.0	
BH12	11/28/2017	<1.0	<1.0	<1.0	<2.0	
BH12	2/15/2018	<1.0	<1.0	<1.0	<2.0	
BH12	5/3/2018	<1.0	<1.0	<1.0	<2.0	
BH12	8/28/2018	<1.0	<1.0	<1.0	<2.0	

Notes:

1). The environmental cleanup standards for groundwater that are applicable to this site are the Colorado Oil and Gas Conservation Commission (COGCC) standards for contaminants in groundwater according to Table 910-1 of the COGCC 900 Series Rule for E&P Waste Management.

**Bold red** values indicate an exceedance of the COGCC groundwater standards for the Site.

NS = Not sampled.

µg/L = micrograms per liter.

LNAPL - Light non-aqueous phase liquid

## Appendix B

Laboratory Analytical Report  
Summit Scientific – 1808365

# Summit Scientific

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741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

September 05, 2018

Steve Weathers

DCP Midstream

370 17th Street, Suite 2500

Denver, CO 80202-5604

RE: Tampa Compressor Station

Enclosed are the results of analyses for samples received by Summit Scientific on 08/28/18 18:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Paul Shrewsbury For Ben Shrewsbury

Laboratory Manager



DCP Midstream  
370 17th Street, Suite 2500  
Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
Project Manager: Steve Weathers

**Reported:**  
09/05/18 07:48

### ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01R	1808365-01	Water	08/28/18 11:45	08/28/18 18:50
BH02	1808365-02	Water	08/28/18 11:25	08/28/18 18:50
BH03	1808365-03	Water	08/28/18 10:55	08/28/18 18:50
BH04	1808365-04	Water	08/28/18 12:15	08/28/18 18:50
BH05	1808365-05	Water	08/28/18 11:55	08/28/18 18:50
BH06	1808365-06	Water	08/28/18 12:35	08/28/18 18:50
BH07	1808365-07	Water	08/28/18 11:35	08/28/18 18:50
BH08	1808365-08	Water	08/28/18 10:45	08/28/18 18:50
BH09	1808365-09	Water	08/28/18 11:05	08/28/18 18:50
BH10	1808365-10	Water	08/28/18 12:05	08/28/18 18:50
BH11	1808365-11	Water	08/28/18 11:15	08/28/18 18:50
BH12	1808365-12	Water	08/28/18 10:35	08/28/18 18:50

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*

# Summit Scientific

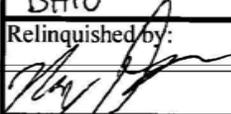
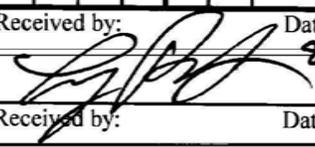
1808365.1

741 Corporate Circle Suite I ♦ Golden, Colorado 80401  
303-277-9310 ♦ 303-374-5933 Fax

Page 1 of 2

Client: DCP/TASMAN  
Address: 6899 N Pecos St.  
City/State/Zip: Denver/CO/80221  
Phone: 9704816909 Fax: \_\_\_\_\_  
Sampler Name: Max Dahlgren

Project Manager: Steve Weathers  
E-Mail: SWeathers@DCPmidstream.com  
Project Name: TAMPA Compressor Station  
Project Number: \_\_\_\_\_

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:				Special Instructions
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)				
BH01R	8/28/18	1145	3	X				X				X	BTEX		
BH02		1125													
BH03		1055													
BH04		1215				X									
BH05		1155		X											
BH06		1235													
BH07		1135													
BH08		1045													
BH09		1105													
BH10		1205													
Relinquished by: 		Date/Time: 8/28/18 1950	Received by: 		Date/Time: 8-28-18 1950		Turn Around Time (Check)				Notes:				
							Same Day	<input type="checkbox"/>	72 Hours	<input type="checkbox"/>					
							24 Hours	<input type="checkbox"/>	Standard	<input checked="" type="checkbox"/>					
							48 Hours	<input type="checkbox"/>							
Relinquished by:		Date/Time:	Received in Lab by:		Date/Time:		Sample Integrity:								
							Temperature Upon Receipt: <u>14.1</u>								
							Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								

# Summit Scientific

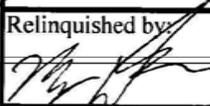
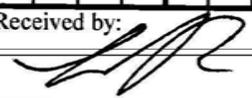
1808365.2

741 Corporate Circle Suite 1 ♦ Golden, Colorado 80401  
303-277-9310 ♦ 303-374-5933 Fax

Page 2 of 2

Client: DCP/TASMAN  
Address: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
Sampler Name: \_\_\_\_\_

Project Manager: \_\_\_\_\_  
E-Mail: \_\_\_\_\_  
Project Name: TAMPA Compressor Station  
Project Number: \_\_\_\_\_

Sample Description	Date Sampled	Time Sampled	Number of Containers	Preservative				Matrix			Analyze For:				Special Instructions	
				HCl	HNO <sub>3</sub>	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #	Other (Specify)	BTX				
BH11	8/28/18	1115	3	X				X				X				
BH12	I	1035	I	X				X				X				
Relinquished by: 	Date/Time: 8/28/18 1850	Received by: 	Date/Time: 8-28-18 1850	Turn Around Time (Check)				Notes:								
				Same Day	<input type="checkbox"/>	72 Hours	<input type="checkbox"/>									
				24 Hours	<input type="checkbox"/>	Standard	<input checked="" type="checkbox"/>									
				48 Hours	<input type="checkbox"/>											
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity:												
				Temperature Upon Receipt:	14.5											
				Intact: Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>									

**Sample Receipt Checklist**

S2 Work Order: 1808365

Client: DCP/Tasman Client Project ID: Tampa Compressor Station

Shipped Via: Pickup Airbill #: \_\_\_\_\_  
(UPS, FedEx, Hand Delivered, Pick-up, etc.)

Matrix (check all that apply):  Air  Soil/Solid  Water  Other: \_\_\_\_\_  
(Describe)

Temp (°C)	<u>14.1</u>
-----------	-------------

Thermometer ID: 61857155-K

	Yes	No	N/A	Comments (if any)
If samples require cooling, was the temperature at 4°C +/- 2°C <sup>(1)</sup> ?				
NOTE: If samples are delivered the same day of sampling, this requirement is met provided that there is evidence that cooling has begun.	/			
Were all samples received intact <sup>(1)</sup> ?	/			
Was adequate sample volume provided <sup>(1)</sup> ?	/			
If custody seals are present, are they intact <sup>(1)</sup> ?			/	
Are samples with holding times due within 48 hours sample due within 48 hours present?			/	
Is a chain-of-custody (COC) form present and filled out completely <sup>(1)</sup> ?	/			
Does the COC agree with the number and type of sample bottles received <sup>(1)</sup> ?	/			
Do the sample IDs on the bottle labels match the COC <sup>(1)</sup> ?	/			
Is the COC properly relinquished by the client w/ date and time recorded <sup>(1)</sup> ?	/			
For volatiles in water – is there headspace present? If yes, contact client and note in narrative.		/		
Are samples preserved that require preservation (excluding cooling) <sup>(1)</sup> ? Note the type of preservative in the Comments column – HCl, H <sub>2</sub> SO <sub>4</sub> , NaOH, HNO <sub>3</sub> , ect	/			HCl
If samples are acid preserved for metals, is the pH ≤ 2 <sup>(1)</sup> ? Record the pH in Comments.			/	
If dissolved metals are requested, were samples field filtered?			/	
Additional Comments (if any):				
<b><sup>(1)</sup> If NO, then contact the client before proceeding with analysis and note in case narrative.</b>				

WP  
 Custodian Printed Name or Initials

[Signature]  
 Signature or Initials of Custodian

8-28-18 1850  
 Date/Time



DCP Midstream  
 370 17th Street, Suite 2500  
 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH01R**  
**1808365-01 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1808354	08/29/18	08/29/18	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>3.4</b>	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	2.0	"	"	"	"	"	"	

Date Sampled: **08/28/18 11:45**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		85.3 %	23-173		"	"	"	"	
Surrogate: Toluene-d8		96.8 %	20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.9 %	21-167		"	"	"	"	

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



DCP Midstream  
 370 17th Street, Suite 2500  
 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH02**  
**1808365-02 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 11:25**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 11:25**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		82.1 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		94.7 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.7 %		21-167		"	"	"	"	

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



DCP Midstream  
 370 17th Street, Suite 2500  
 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH03**  
**1808365-03 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 10:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 10:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		80.4 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		90.3 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.9 %		21-167		"	"	"	"	

Summit Scientific

*The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.*



DCP Midstream  
 370 17th Street, Suite 2500  
 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH04**  
**1808365-04 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 12:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
<b>Toluene</b>	<b>1.0</b>	1.0		"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>160</b>	1.0		"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>370</b>	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 12:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		80.6 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		98.6 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		88.0 %		21-167		"	"	"	"	

Summit Scientific

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DCP Midstream  
 370 17th Street, Suite 2500  
 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH05**  
**1808365-05 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>7.6</b>	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>3.6</b>	1.0		"	"	"	"	"	"	
<b>Xylenes (total)</b>	<b>7.3</b>	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 11:55**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		82.4 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		96.4 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.1 %		21-167		"	"	"	"	

Summit Scientific

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 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH06**  
**1808365-06 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 12:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<b>Benzene</b>	<b>370</b>	10		ug/l	10	1808354	08/29/18	08/30/18	EPA 8260B	
<b>Toluene</b>	<b>17</b>	1.0		"	1	"	"	"	"	
<b>Ethylbenzene</b>	<b>560</b>	10		"	10	"	"	"	"	
<b>Xylenes (total)</b>	<b>2000</b>	20		"	"	"	"	"	"	

Date Sampled: **08/28/18 12:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<i>Surrogate: 1,2-Dichloroethane-d4</i>		80.1 %		23-173		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		101 %		20-170		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		86.6 %		21-167		"	"	"	"	

Summit Scientific

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DCP Midstream  
 370 17th Street, Suite 2500  
 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH07**  
**1808365-07 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 11:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 11:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		82.2 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		92.8 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		93.6 %		21-167		"	"	"	"	

Summit Scientific

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 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH08**  
**1808365-08 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 10:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>9.7</b>	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 10:45**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		82.7 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		95.7 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.0 %		21-167		"	"	"	"	

Summit Scientific

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 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH09**  
**1808365-09 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 11:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 11:05**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		81.6 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		93.9 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		98.9 %		21-167		"	"	"	"	

Summit Scientific

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 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH10**  
**1808365-10 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
<b>Toluene</b>	<b>9.5</b>	1.0	"	"	"	"	"	"	
<b>Ethylbenzene</b>	<b>540</b>	10	"	10	"	"	"	"	
<b>Xylenes (total)</b>	<b>380</b>	2.0	"	1	"	"	"	"	

Date Sampled: **08/28/18 12:05**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		80.5 %		23-173	"	"	"	"	
Surrogate: Toluene-d8		101 %		20-170	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		89.1 %		21-167	"	"	"	"	

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 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH11**  
**1808365-11 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 11:15**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		81.8 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		94.7 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.9 %		21-167		"	"	"	"	

Summit Scientific

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 Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**BH12**  
**1808365-12 (Water)**

**Summit Scientific**

**Volatile Organic Compounds by EPA Method 8260B**

Date Sampled: **08/28/18 10:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	ND	1.0		ug/l	1	1808354	08/29/18	08/30/18	EPA 8260B	
Toluene	ND	1.0		"	"	"	"	"	"	
Ethylbenzene	ND	1.0		"	"	"	"	"	"	
Xylenes (total)	ND	2.0		"	"	"	"	"	"	

Date Sampled: **08/28/18 10:35**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Surrogate: 1,2-Dichloroethane-d4		82.4 %		23-173		"	"	"	"	
Surrogate: Toluene-d8		92.6 %		20-170		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		96.6 %		21-167		"	"	"	"	

Summit Scientific

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Project: Tampa Compressor Station

Project Number: [none]  
Project Manager: Steve Weathers

Reported:  
09/05/18 07:48

### Volatile Organic Compounds by EPA Method 8260B - Quality Control

#### Summit Scientific

Analyte	Result	Reporting		Spike Level	Source		%REC		RPD		Notes
		Limit	Units		Result	%REC	Limits	RPD	Limit		

#### Batch 1808354 - EPA 5030 Water MS

##### Blank (1808354-BLK1)

Prepared & Analyzed: 08/29/18

Benzene	ND	1.0	ug/l								
Toluene	ND	1.0	"								
Ethylbenzene	ND	1.0	"								
Xylenes (total)	ND	2.0	"								
Surrogate: 1,2-Dichloroethane-d4	10.8		"	13.2		81.4		23-173			
Surrogate: Toluene-d8	12.6		"	13.3		94.4		20-170			
Surrogate: 4-Bromofluorobenzene	13.0		"	13.3		97.1		21-167			

##### LCS (1808354-BS1)

Prepared & Analyzed: 08/29/18

Benzene	30.1	1.0	ug/l	33.3		90.2		70-130			
Toluene	31.4	1.0	"	33.3		94.1		70-130			
Ethylbenzene	32.4	1.0	"	33.3		97.1		70-130			
m,p-Xylene	59.6	2.0	"	66.7		89.4		70-130			
o-Xylene	30.2	1.0	"	33.3		90.5		70-130			
Surrogate: 1,2-Dichloroethane-d4	11.2		"	13.2		84.5		23-173			
Surrogate: Toluene-d8	13.5		"	13.3		101		20-170			
Surrogate: 4-Bromofluorobenzene	12.5		"	13.3		93.5		21-167			

##### Matrix Spike (1808354-MS1)

Source: 1808365-01

Prepared & Analyzed: 08/29/18

Benzene	30.3	1.0	ug/l	33.3	ND	90.8		70-130			
Toluene	31.9	1.0	"	33.3	ND	95.8		70-130			
Ethylbenzene	35.2	1.0	"	33.3	3.38	95.3		70-130			
m,p-Xylene	61.9	2.0	"	66.7	ND	92.8		70-130			
o-Xylene	31.2	1.0	"	33.3	ND	93.7		70-130			
Surrogate: 1,2-Dichloroethane-d4	11.5		"	13.2		86.8		23-173			
Surrogate: Toluene-d8	13.4		"	13.3		101		20-170			
Surrogate: 4-Bromofluorobenzene	12.5		"	13.3		93.9		21-167			

Summit Scientific

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Project: Tampa Compressor Station

Project Number: [none]  
 Project Manager: Steve Weathers

**Reported:**  
 09/05/18 07:48

**Volatile Organic Compounds by EPA Method 8260B - Quality Control**  
**Summit Scientific**

Analyte	Reporting			Spike	Source	%REC			RPD	Notes
	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	

**Batch 1808354 - EPA 5030 Water MS**

<b>Matrix Spike Dup (1808354-MSD1)</b>	<b>Source: 1808365-01</b>			<b>Prepared &amp; Analyzed: 08/29/18</b>						
Benzene	26.9	1.0	ug/l	33.3	ND	80.7	70-130	11.8	30	
Toluene	28.7	1.0	"	33.3	ND	86.0	70-130	10.8	30	
Ethylbenzene	32.3	1.0	"	33.3	3.38	86.9	70-130	8.33	30	
m,p-Xylene	56.7	2.0	"	66.7	ND	85.1	70-130	8.72	30	
o-Xylene	29.0	1.0	"	33.3	ND	87.2	70-130	7.20	30	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>11.4</i>		<i>"</i>	<i>13.2</i>		<i>86.4</i>	<i>23-173</i>			
<i>Surrogate: Toluene-d8</i>	<i>13.1</i>		<i>"</i>	<i>13.3</i>		<i>98.3</i>	<i>20-170</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>12.5</i>		<i>"</i>	<i>13.3</i>		<i>93.5</i>	<i>21-167</i>			

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Denver CO, 80202-5604

Project: Tampa Compressor Station

Project Number: [none]  
Project Manager: Steve Weathers

**Reported:**  
09/05/18 07:48

### Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference