

Fourth Quarter 2015 Groundwater Monitoring Summary Report

Tampa Compressor Station Release Weld County, Colorado Remediation #9353

Prepared for:



370 17th St., Suite 2500
Denver, CO 80202

Prepared by:



6899 Pecos Street, Unit C
Denver, Colorado 80221

January 18, 2016

Table of Contents

1. Introduction	1
2. Site Location and Background.....	1
3. Groundwater Monitoring.....	2
3.1 Groundwater Elevation Monitoring.....	2
3.2 Groundwater Quality Monitoring	2
4. Conclusions	3
6. Recommendations	3

Tables

1	Fourth Quarter 2015 Summary of Groundwater Elevation Data
2	Fourth Quarter 2015 Summary of BTEX Concentrations in Groundwater

Figures

1	Site Location Map
2	Site Map with Monitoring Well Locations
3	Groundwater Elevation Contour Map – November 12, 2015
4	Analytical Results Map – November 12, 2015

Appendices

A	Historic Analytical Results – BTEX Concentrations in Groundwater
B	Laboratory Analytical Report - 1511093

1. Introduction

This report summarizes the groundwater monitoring activities conducted during the fourth quarter 2015 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 November 12, 2015.

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). It is 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 were 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 (yd³) 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. On February 19, 2015 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. Locations of the soil borings 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 of liquid was removed during that event. Additional source area excavation activities were conducted at the site between May 6 and 22, 2015, and approximately 210 yd³ of impacted soil and 33 barrels (bbl) of groundwater were removed during excavation. Soil samples were collected during excavation activities and based on the laboratory analytical results, 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 soil was left in place and will be addressed through in-situ remediation activities. 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 and replaced the destroyed BH01 (Figure 2). Furthermore, DCP initiated approved groundwater monitoring activities at the Site. As such, monitoring activities that were conducted during the fourth quarter 2015 are discussed herein.

3. Groundwater Monitoring

This section describes the field and laboratory activities performed during the fourth quarter 2015 groundwater monitoring event. Quarterly monitoring activities were conducted on November 12, 2015, and included Site-wide groundwater gauging and sampling. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site.

3.1 Groundwater Elevation Monitoring

Groundwater levels were measured in order to evaluate hydraulic characteristics and provide information regarding seasonal fluctuations in groundwater elevations at the Site. During the fourth quarter 2015, groundwater levels were measured at 12 monitoring well locations (BH01R – 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 levels and the calculated groundwater elevations are presented in Table 1.

A fourth quarter 2015 groundwater elevation contour map, included as Figure 3, indicates that groundwater flow at the Site generally trends to the northeast. The range of groundwater elevations, average elevation change from the previous monitoring event, and the calculated average hydraulic gradient (using elevations from BH05 and BH08) at the Site are summarized in the table below.

Summary of Measured Hydraulic Parameters

	Fourth Quarter 2015 (11/12/15)
Maximum Elevation (Well ID)	4,794.96 (BH04)
Minimum Elevation (Well ID)	4,793.76 (BH03)
Average Change from Previous Monitoring Event – All Wells	NA
Average Hydraulic Gradient (ft/ft) / (Well IDs)	0.006 (BH05 to BH08)

3.2 Groundwater Quality Monitoring

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

A minimum of three well casing volumes of groundwater were purged from each monitor well 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. Historic analytical results up to and including the fourth quarter 2015 event are included in Appendix A and the laboratory analytical report for the fourth quarter 2015 is included in Appendix B. Analytical results are also displayed on Figure 4.

Analytical results/observations are summarized below:

- Benzene concentrations in groundwater samples from wells BH01R (82 micrograms per liter ($\mu\text{g/L}$), BH05 (6,700 $\mu\text{g/L}$), BH07 (1,600 $\mu\text{g/L}$), BH08 (160 $\mu\text{g/L}$), BH09 (610 $\mu\text{g/L}$) and BH11 (2,100 $\mu\text{g/L}$) were in exceedance of the COGCC Table 910-1 standard of 5 $\mu\text{g/L}$.
- Toluene concentrations in groundwater samples from wells BH05 (590 $\mu\text{g/L}$), BH07 (1,000 $\mu\text{g/L}$), and BH11 (1,800 $\mu\text{g/L}$) were in exceedance of the COGCC Table 910-1 standard of 560 $\mu\text{g/L}$.
- Total Xylenes in groundwater samples from BH05 (2,300 $\mu\text{g/L}$) was in exceedance of the COGCC Table 910-1 standard of 1,400 $\mu\text{g/L}$.
- BTEX concentrations from the remaining sample locations were below COGCC standards and/or below laboratory detection limits.

4. Conclusions

Observations of the fourth quarter 2015 monitoring data provides the following:

- The groundwater flow direction is to the northeast.
- LNAPL was observed in BH03, BH04, and BH06 during the fourth quarter 2015
- Benzene concentration in exceedance of the COGCC applicable groundwater standard was found in six (6) wells sampled.

6. Recommendations

Based on evaluation of data from the fourth quarter 2015, recommendations for future activities include:

- Continue quarterly groundwater monitoring and sampling at the monitoring well locations illustrated on Figure 2.
- Based on the occurrence of LNAPL at the Site, implement the operation and monitoring of a Clean Earth Technology Spill Buster automatic LNAPL recovery system or deploy passive bailers to recover mobile LNAPL in BH03, BH04, and BH06.

Tables

TABLE 1
NOVEMBER 2015 MONITORING EVENT
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 (1) (feet)
BH01R	11/12/2015	11.48			16.41	4,805.57	4,794.09	NA
BH02	11/12/2015	13.64			18.90	4,807.70	4,794.06	NA
BH03	11/12/2015	11.79	10.13	1.66	NM	4,804.31	4,793.76	NA
BH04	11/12/2015	12.58	11.79	0.79	16.36	4,806.95	4,794.96	NA
BH05	11/12/2015	12.29			16.18	4,806.51	4,794.22	NA
BH06	11/12/2015	12.44	12.29	0.15	16.37	4,806.46	4,794.13	NA
BH07	11/12/2015	12.02			15.26	4,806.01	4,793.99	NA
BH08	11/12/2015	9.97			15.13	4,803.78	4,793.81	NA
BH09	11/12/2015	10.24			15.25	4,804.08	4,793.84	NA
BH10	11/12/2015	11.25			15.14	4,805.37	4,794.12	NA
BH11	11/12/2015	11.00			14.44	4,804.97	4,793.97	NA
BH12	11/12/2015	11.27			15.24	4,805.13	4,793.86	NA

Notes:

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

NM = Not Measured

NA = Not Applicable

TD = Total Depth

TABLE 2
NOVEMBER 2015 MONITORING EVENT
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
COGCC Standards (µg/L)		5	560	700	1,400	
BH01R	11/12/2015	82	<1.0	7.5	3.8	
BH02	11/12/2015	<1.0	1.6	<1.0	4.5	
BH03	11/12/2015	NS	NS	NS	NS	LNAPL
BH04	11/12/2015	NS	NS	NS	NS	LNAPL
BH05	11/12/2015	6,700	590	610	2,300	
BH06	11/12/2015	NS	NS	NS	NS	LNAPL
BH07	11/12/2015	1,600	1,000	290	1,000	
BH08	11/12/2015	160	16	11	40	
BH09	11/12/2015	610	46	18	80	
BH10	11/12/2015	<1.0	<1.0	<1.0	<1.0	
BH11	11/12/2015	2,100	1,800	200	840	
BH12	11/12/2015	<1.0	<1.0	<1.0	<1.0	

Notes:

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

NS = Not sampled.

µg/L = micrograms per liter.

Figures

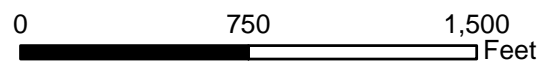
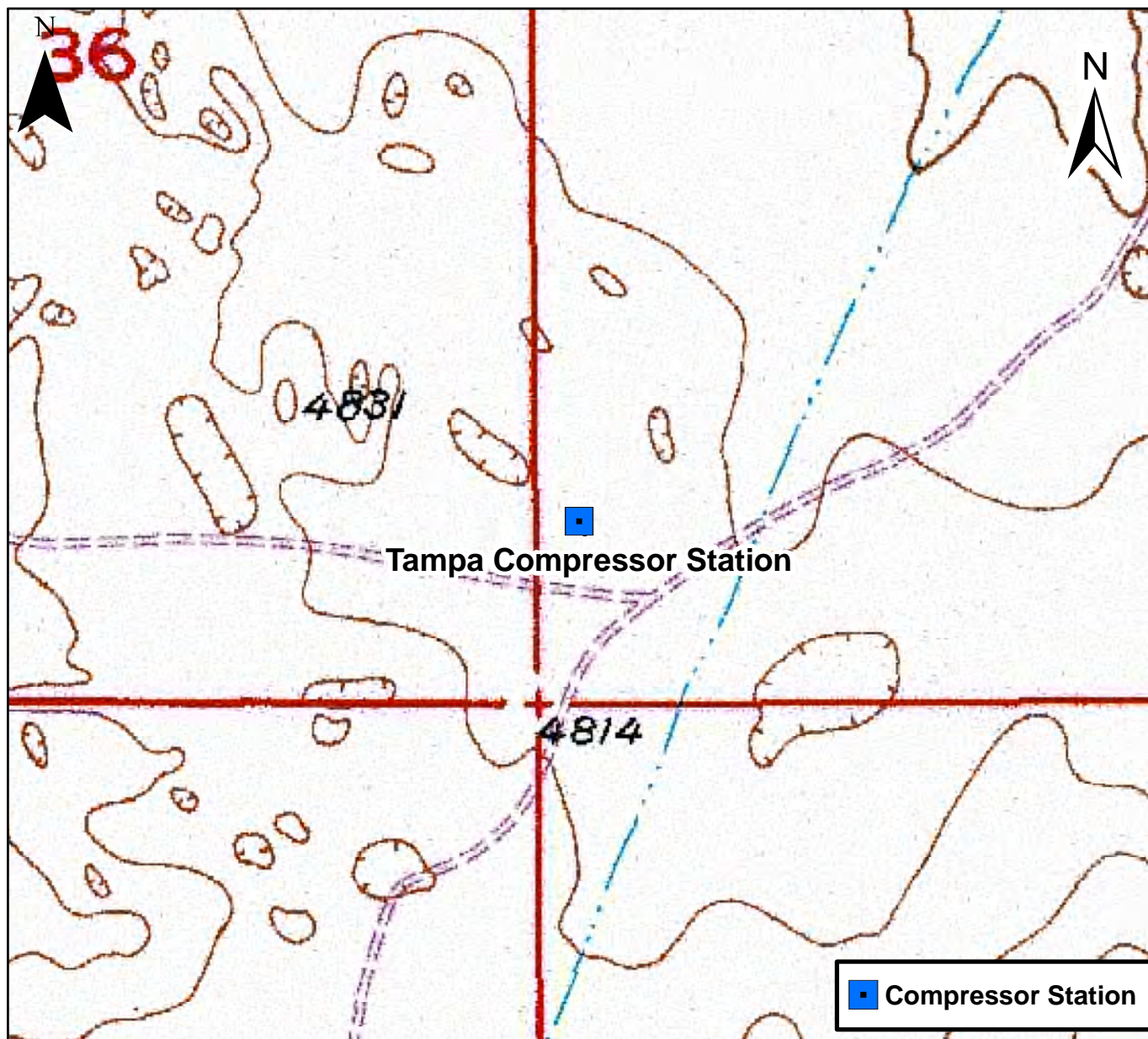
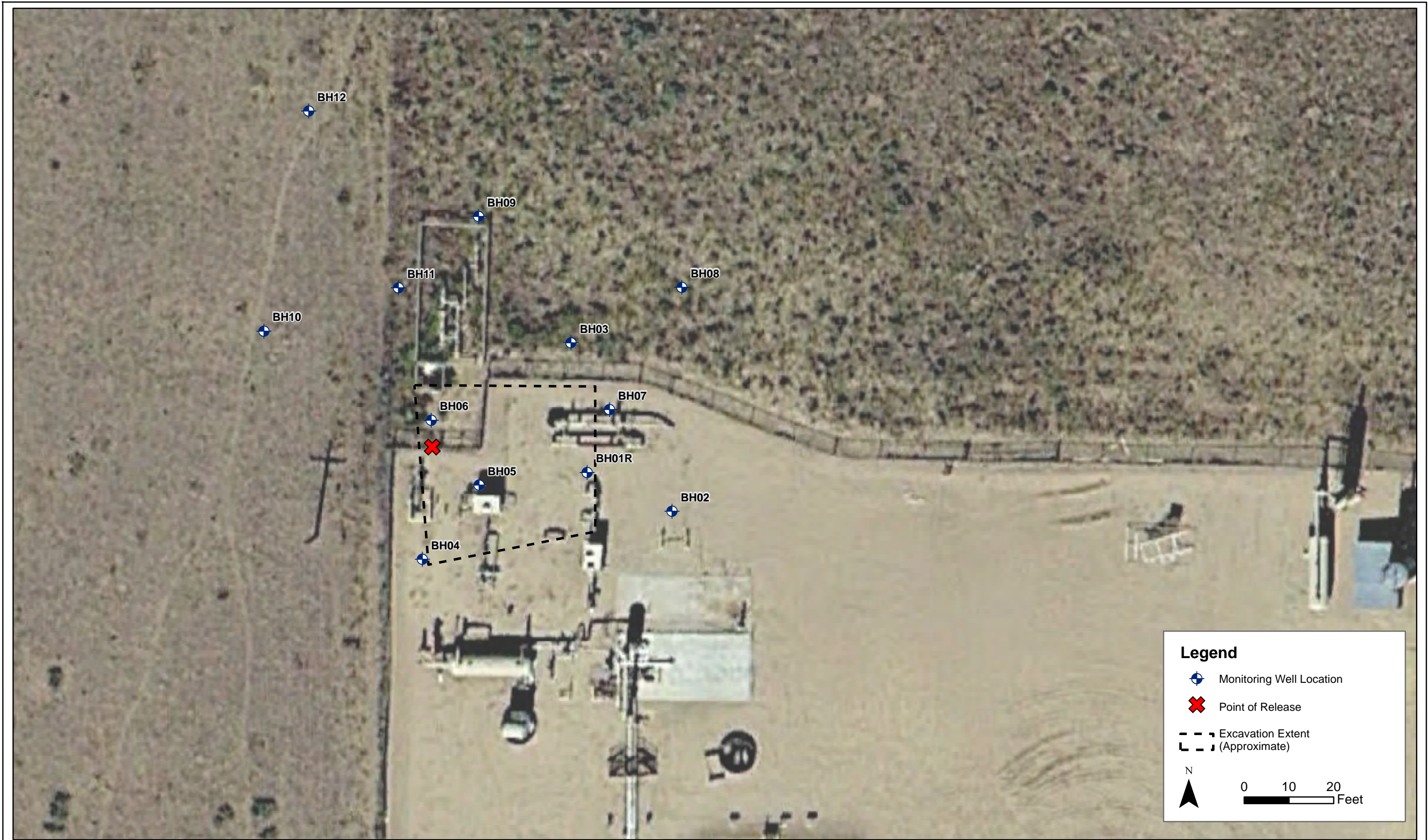


Figure 1

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





DATE:	January 2016
DESIGNED BY:	B. Humphrey
DRAWN BY:	D. Arnold



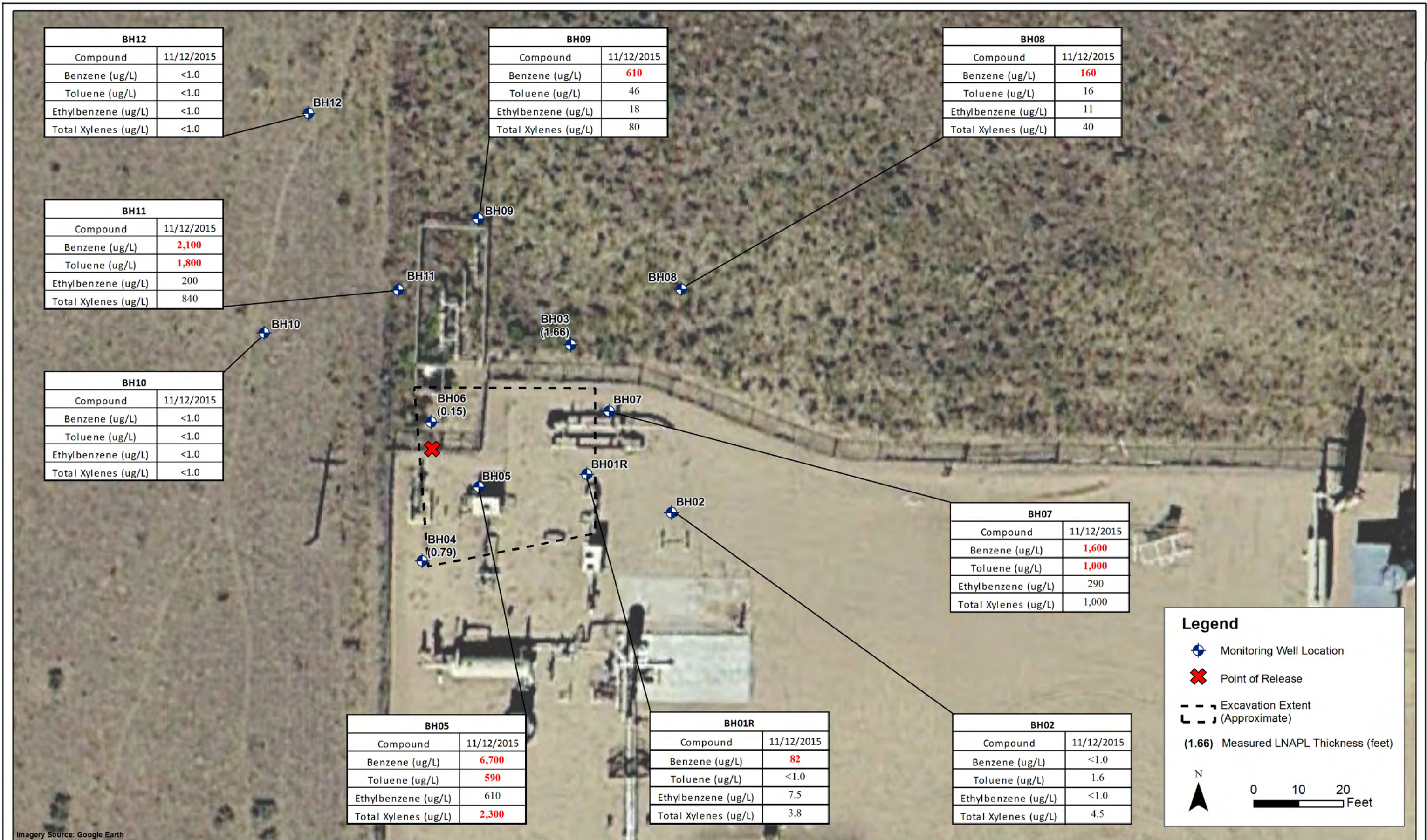
Tasman Geosciences Inc.
6899 Pecos Street - Unit C
Denver, CO 80221

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

Site Map with
Monitoring Well Location

Figure
2





DATE:	January 2016
DESIGNED BY:	B. Humphrey
DRAWN BY:	D. Arnold

Appendix A

Historic Analytical Results

**APPENDIX A
HISTORIC 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
COGCC Standards (µg/L)		5	560	700	1,400	
BH01	2/19/2015	NS	NS	NS	NS	LNAPL
BH01R	11/12/2015	82	<1.0	7.5	3.8	
BH02	2/19/2015	<1.0	1.7	<1.0	1.1	
BH02	11/12/2015	<1.0	1.6	<1.0	4.5	
BH03	2/19/2015	NS	NS	NS	NS	LNAPL
BH03	11/12/2015	NS	NS	NS	NS	LNAPL
BH04	11/12/2015	NS	NS	NS	NS	LNAPL
BH05	11/12/2015	6,700	590	610	2,300	
BH06	11/12/2015	NS	NS	NS	NS	LNAPL
BH07	11/12/2015	1,600	1,000	290	1,000	
BH08	11/12/2015	160	16	11	40	
BH09	11/12/2015	610	46	18	80	
BH10	11/12/2015	<1.0	<1.0	<1.0	<1.0	
BH11	11/12/2015	2,100	1,800	200	840	
BH12	11/12/2015	<1.0	<1.0	<1.0	<1.0	

Notes:

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

NS = Not sampled.

µg/L = micrograms per liter.

Appendix B

Laboratory Analytical Report
Summit Scientific - 1511093

Summit Scientific

741 Corporate Circle – Suite I ♦ Golden, Colorado 80401

303.277.9310 - laboratory ♦ 303.277.9531 - fax

November 18, 2015

Brian Humphrey
DCP Midstream
370 17th Street #2500
Denver, CO 80202
RE: Tampa Compressor Station

Enclosed are the results of analyses for samples received by Summit Scientific on 11/12/15 16:40. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'P. Shrewsbury', with a stylized, cursive script.

Paul Shrewsbury
President



DCP Midstream
370 17th Street #2500
Denver CO, 80202

Project: Tampa Compressor Station

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
BH01R	1511093-01	Water	11/12/15 13:00	11/12/15 16:40
BH02R	1511093-02	Water	11/12/15 13:05	11/12/15 16:40
BH05	1511093-03	Water	11/12/15 13:10	11/12/15 16:40
BH07	1511093-04	Water	11/12/15 13:15	11/12/15 16:40
BH08	1511093-05	Water	11/12/15 13:20	11/12/15 16:40
BH09	1511093-06	Water	11/12/15 13:25	11/12/15 16:40
BH10	1511093-07	Water	11/12/15 13:30	11/12/15 16:40
BH11	1511093-08	Water	11/12/15 13:35	11/12/15 16:40
BH12	1511093-09	Water	11/12/15 13:40	11/12/15 16:40

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station

Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

Summit Scientific

1511093

741 Corporate Circle Suite 100 Golden, Colorado 80401
303-277-9310 • 303-374-5933 Fax

Client: DCP/Tasman

Page 1 of 1

Address:

City/State/Zip:

Phone: 303-945-5394 Fax:

Sampler Name: Mike Dillon - Houston

Project Manager: B Humphrey

E-Mail: bhumphrey@tasman-geo.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 ₃	None	Other (Specify)	Groundwater	Soil	Air - Canister Serial #		
BH 01R	11/12/15	1300	3									
BH 02		1305										
BH 05		1310										
BH 07		1315										
BH 08		1320										
BH 09		1325										
BH 10		1330										
BH 11		1335										
BH 12		1340										

Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/12/15 1600</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11/12/15 1640</u>	Turn Around Time (Check)	Notes: <u>on ice</u>
Relinquished by: <u>[Signature]</u>	Date/Time: <u>11/12/15 1720</u>	Received by: <u>[Signature]</u>	Date/Time: <u>11-12-15 1720</u>	Same Day <input type="checkbox"/> 72 Hours <input checked="" type="checkbox"/> 24 Hours <input type="checkbox"/> Standard <input type="checkbox"/> 48 Hours <input type="checkbox"/>	
Relinquished by:	Date/Time:	Received in Lab by:	Date/Time:	Sample Integrity: Temperature Upon Receipt: <u>4.4°C</u> Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

www.s2scientific.com



DCP Midstream
370 17th Street #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH01R
1511093-01 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	82	1.0	ug/l	1	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	7.5	1.0	"	"	"	"	"	"	
Xylenes (total)	3.8	1.0	"	"	"	"	"	"	

Date Sampled: 11/12/15 13:00

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		105 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		97.9 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %	45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH02R
1511093-02 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	1.6	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	4.5	1.0	"	"	"	"	"	"	

Date Sampled: 11/12/15 13:05

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		102 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		98.0 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		102 %	45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH05
1511093-03 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:10

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	6700	100		ug/l	100	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	590	100		"	"	"	"	"	"	
Ethylbenzene	610	100		"	"	"	"	"	"	
Xylenes (total)	2300	100		"	"	"	"	"	"	

Date Sampled: 11/12/15 13:10

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<i>Surrogate: 1,2-Dichloroethane-d4</i>		115 %		37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		101 %		45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.4 %		45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH07
1511093-04 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	1600	10	ug/l	10	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	1000	10	"	"	"	"	"	"	
Ethylbenzene	290	10	"	"	"	"	"	"	
Xylenes (total)	1000	10	"	"	"	"	"	"	

Date Sampled: 11/12/15 13:15

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		109 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		103 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		99.4 %	45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH08
1511093-05 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:20

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	160	1.0		ug/l	1	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	16	1.0		"	"	"	"	"	"	
Ethylbenzene	11	1.0		"	"	"	"	"	"	
Xylenes (total)	40	1.0		"	"	"	"	"	"	

Date Sampled: 11/12/15 13:20

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %		37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		100 %		45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %		45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH09
1511093-06 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:25

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
Benzene	610	10		ug/l	10	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	46	10		"	"	"	"	"	"	
Ethylbenzene	18	10		"	"	"	"	"	"	
Xylenes (total)	80	10		"	"	"	"	"	"	

Date Sampled: 11/12/15 13:25

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
<i>Surrogate: 1,2-Dichloroethane-d4</i>		107 %		37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		99.6 %		45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		102 %		45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH10
1511093-07 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:30

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Benzene	ND	1.0	ug/l	1	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 11/12/15 13:30

Analyte	Result	Reporting	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit							
Surrogate: 1,2-Dichloroethane-d4		104 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		97.7 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		101 %	45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH11
1511093-08 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	2100	10	ug/l	10	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	1800	10	"	"	"	"	"	"	
Ethylbenzene	200	10	"	"	"	"	"	"	
Xylenes (total)	840	10	"	"	"	"	"	"	

Date Sampled: 11/12/15 13:35

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<i>Surrogate: 1,2-Dichloroethane-d4</i>		111 %	37-154		"	"	"	"	
<i>Surrogate: Toluene-d8</i>		104 %	45-149		"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		104 %	45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

BH12
1511093-09 (Water)

Summit Scientific

Volatile Organic Compounds by EPA Method 8260B

Date Sampled: 11/12/15 13:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Benzene	ND	1.0	ug/l	1	1511133	11/17/15	11/17/15	EPA 8260B	
Toluene	ND	1.0	"	"	"	"	"	"	
Ethylbenzene	ND	1.0	"	"	"	"	"	"	
Xylenes (total)	ND	1.0	"	"	"	"	"	"	

Date Sampled: 11/12/15 13:40

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Surrogate: 1,2-Dichloroethane-d4		101 %	37-154		"	"	"	"	
Surrogate: Toluene-d8		95.3 %	45-149		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		97.0 %	45-146		"	"	"	"	

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Summit Scientific

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

Batch 1511133 - EPA 5030 Water MS

Blank (1511133-BLK1)

Prepared & Analyzed: 11/17/15

Benzene	ND	1.0	ug/l							
Toluene	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes (total)	ND	1.0	"							
Surrogate: 1,2-Dichloroethane-d4	14.2		"	13.2		107	37-154			
Surrogate: Toluene-d8	13.2		"	13.3		98.9	45-149			
Surrogate: 4-Bromofluorobenzene	13.6		"	13.3		102	45-146			

LCS (1511133-BS1)

Prepared & Analyzed: 11/17/15

Benzene	31.9	1.0	ug/l	33.3		95.8	51-132			
Toluene	30.3	1.0	"	33.3		91.0	51-138			
Ethylbenzene	34.8	1.0	"	33.1		105	58-146			
m,p-Xylene	67.2	2.0	"	66.5		101	57-144			
o-Xylene	32.3	1.0	"	32.8		98.4	53-146			
Surrogate: 1,2-Dichloroethane-d4	14.6		"	13.2		110	37-154			
Surrogate: Toluene-d8	13.4		"	13.3		101	45-149			
Surrogate: 4-Bromofluorobenzene	12.6		"	13.3		94.1	45-146			

Matrix Spike (1511133-MS1)

Source: 1511093-02

Prepared & Analyzed: 11/17/15

Benzene	33.3	1.0	ug/l	33.3	ND	99.8	34-141			
Toluene	33.0	1.0	"	33.3	1.55	94.4	27-151			
Ethylbenzene	38.2	1.0	"	33.1	ND	115	29-160			
m,p-Xylene	73.4	2.0	"	66.5	2.99	106	20-166			
o-Xylene	35.1	1.0	"	32.8	1.48	103	33-159			
Surrogate: 1,2-Dichloroethane-d4	13.8		"	13.2		105	37-154			
Surrogate: Toluene-d8	13.1		"	13.3		98.4	45-149			
Surrogate: 4-Bromofluorobenzene	12.8		"	13.3		96.2	45-146			

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

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

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

Batch 1511133 - EPA 5030 Water MS

Matrix Spike Dup (1511133-MSD1)		Source: 1511093-02			Prepared & Analyzed: 11/17/15					
Benzene	34.0	1.0	ug/l	33.3	ND	102	34-141	2.05	32	
Toluene	33.7	1.0	"	33.3	1.55	96.5	27-151	2.13	25	
Ethylbenzene	39.0	1.0	"	33.1	ND	118	29-160	2.15	50	
m,p-Xylene	75.1	2.0	"	66.5	2.99	108	20-166	2.36	36	
o-Xylene	36.2	1.0	"	32.8	1.48	106	33-159	3.03	26	
Surrogate: 1,2-Dichloroethane-d4	13.5		"	13.2		102	37-154			
Surrogate: Toluene-d8	13.3		"	13.3		100	45-149			
Surrogate: 4-Bromofluorobenzene	13.1		"	13.3		98.0	45-146			

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 #2500
Denver CO, 80202

Project: Tampa Compressor Station
Project Number: [none]
Project Manager: Brian Humphrey

Reported:
11/18/15 06:45

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

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.

A handwritten signature in black ink, appearing to be 'MSM'.