1RP-1728

2nd QTR GW Monitoring Results LP J-4-2 Pipeline Release

DATE
September 4, 2014

DCP Midstream
370 17th Street, Suite 2500
Denver, CO 80202
303-595-3331
303-605-2226 *FAX*

September 4, 2014

Mr. Leonard Lowe
Environmental Engineer
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RE: 2nd Quarter 2014 Groundwater Monitoring Results
DCP Midstream, LP J-4-2 Pipeline Release (1RP-1728)
Unit C, Section 27, Township 19 South, Range 35 East
Lea County, New Mexico

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, a copy of the 2nd Quarter 2014 Groundwater Monitoring Results for the DCP J-4-2 Pipeline Release located in Lea County, New Mexico (Unit C, Section 27, Township 19 South, Range 35 East).

If you have any questions regarding the report, please call at 303-605-1718 or e-mail me swweathers@dcpmidstream.com .

Sincerely

DCP Midstream, LP

Stephen Weathers, PG
Principal Environmental Specialist

cc: Tomas Oberding, OCD Hobbs District (Via Email)
Environmental Files

Second Quarter 2014 Groundwater Monitoring Summary Report

J-4-2 Pipeline Release
Lea County, New Mexico
1RP-1728

Prepared for:

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

Prepared by:

6899 Pecos Street, Unit C
Denver, Colorado 80221

August 21, 2014

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1. Introduction

This report summarizes groundwater monitoring and remediation activities conducted during the second quarter of 2014 at the J-4-2 pipeline release (Site) in Lea County, New Mexico (Figure 1). Tasman Geosciences, LLC (Tasman) performed these activities on behalf of DCP Midstream, LP (DCP). The field activities described herein were conducted on June 2, 2014 with the purpose of monitoring groundwater flow and quality beneath the Site. The data collected during the reporting period were used to develop a groundwater elevation figure and analytical results figure to assist with evaluating current conditions at the Site.

2. Site Location and Background

The Site is located in the northeastern quarter of the northwestern quarter (Unit C) of Section 27, Township 19 South, Range 35 East approximately 3 miles south of the intersection of US Highway 82 and State Highway 483. The area is sparsely populated and land use is primarily associated with livestock grazing and oil and gas production and gathering.

Based on findings from previous Site investigations, a natural gas condensate release was reported at the Site on August 3, 2005. Environmental Plus Incorporated (EPI) of Eunice, New Mexico, performed initial Site investigation activities. EPI reported that the spill was limited to an approximate area of 2,800 square feet and it did not migrate to any surface water features. EPI installed monitoring wells MW-1, MW-2, and MW-3 as a part of the initial soil and groundwater characterization effort in February 2006. Monitoring wells MW-4, MW-6, MW-7, and MW-8 were installed in September 2006 as part of a Site investigation completed by American Environmental Consulting. Installation of monitoring well MW-5 was not completed during this event due to refusal while advancing the borehole. Groundwater samples collected in 2006 from the newly installed wells indicated that dissolved phase petroleum hydrocarbons and chloride had impacted groundwater at the Site in the vicinity of monitoring wells MW-1 and MW-2. MW-1 and MW-2 have also historically exhibited the presence of Light non-aqueous phase liquid (LNAPL).

3. Groundwater Monitoring

This section describes the groundwater monitoring activities as well as laboratory analyses performed during the second quarter 2014 groundwater monitoring event. Monitoring activities included Site-wide groundwater gauging and groundwater 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 of groundwater elevation at the Site. During the second quarter 2014, groundwater levels were measured at seven monitoring well locations.

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 was later converted to elevation (feet above mean sea level [AMSL]).

Groundwater elevation measurements collected during the reporting period as well as historic groundwater elevations are presented in Table 1. A second quarter 2014 groundwater elevation contour map, included as Figure 3, indicates that groundwater flow at the Site trends to the south-southeast. The range of groundwater elevations, average groundwater elevation change from the previous monitoring event, and the calculated hydraulic gradient at the Site are summarized in the table below.

Summary of Measured Hydraulic Parameters

	Second Quarter 2014 (6/2/14)
Maximum Elevation (Well ID)	3707.31 (MW-4)
Minimum Elevation (Well ID)	3703.40 (MW-8)
Average Change from Previous Monitoring Event – All Wells	-0.20 foot
Hydraulic Gradient (ft/ft) / (Well IDs)	0.005 (MW-4 to MW-8)

3.2 Groundwater Quality Monitoring

Subsequent to recording groundwater level measurements, groundwater samples were collected at each of the seven monitoring wells at the Site using dedicated polyethylene bailers. A minimum of three well casing volumes of groundwater were purged from the subject well prior to the collection of groundwater samples. Groundwater samples were placed in clean laboratory supplied containers, packed in an ice-filled cooler, and maintained at approximately four degrees Celsius (^{0}C) for transportation to the laboratory. Groundwater samples were shipped under chain-of-custody procedures to Accutest Laboratories (Accutest) in Wheat Ridge, Colorado, for analysis.

Water quality samples were collected from seven wells and were submitted for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B, and chloride by USEPA Method 300.

Table 2 summarizes BTEX and chloride concentrations in groundwater samples collected during the reporting period. Historic analytical results up to and including the June 2014 event are presented in Appendix A and the Laboratory analytical report for the second quarter sampling event is included in Appendix B. Analytical results are also displayed on Figure 4.

During the second quarter 2014, BTEX concentrations were below laboratory detection limits at the seven sample locations at the Site. Chloride was detected in all of the monitoring wells with concentrations ranging from 336 milligrams per liter (mg/L) in MW-8 to 2,190 mg/L in MW-4.

3.3 Data Quality Assurance / Quality Control

A trip blank, matrix spike / matrix spike duplicate (MS/MSD), and field duplicate (MW-1) were collected during the sampling event. The data were reviewed for compliance with the analytical method and the associated quality assurance/quality control (QA/QC) procedures. All samples were analyzed using the correct analytical methods and within the correct holding times. Chain of custody forms were in order and properly executed and indicate that samples were received at the proper temperature with no headspace. All data were reported using the correct method number and reporting units. QA/QC items of note for the second quarter 2014 include the following:

- Target analytes were not detected in the trip blank; and
- The duplicate sample collected at MW-1 was in compliance with QA/QC standards.

The overall QA/QC assessment, based on the data review, indicates that overall data precision and accuracy are acceptable.

4. Remediation Activities

Remediation efforts, including periodic enhanced fluid recovery (EFR) events and installation of passive LNAPL recovery bailers have been historically implemented at the Site. However due to the lack of observed LNAPL and dissolved phase detections during the previous two monitoring events, these efforts were not conducted during the second quarter 2014.

5. Conclusions

Comparison of the second quarter 2014 monitoring data and historic information provides the following general observations:

- Groundwater elevations exhibit a declining trend at the Site and the second quarter monitoring event did not deviate from that pattern.
- Dissolved phase hydrocarbon concentrations did not exceed laboratory detection limits in the 7 sampled locations during the reporting period.
- The last time LNAPL was observed at the Site was at MW-2 during the third quarter 2013. The continued lack of measurable LNAPL, coupled with dissolved phase concentrations below laboratory detection limits, represents a positive trend. Ongoing quarterly groundwater sampling will provide for continued monitoring of Site conditions and BTEX concentrations.
- Chloride concentrations in Site monitoring wells have remained relatively stable at levels above the standard of 250 mg/L. The occurrence of these detections in all Site monitoring wells, including the upgradient monitoring well MW-4, indicate that elevated chloride levels are due to an alternate source.

6. Recommendations

Based on evaluation of second quarter 2014 and historical Site observations and monitoring results, recommendations for future activities include:

- Continue quarterly groundwater elevation collection and groundwater sampling at the monitoring locations illustrated on Figure 2.

Tables

TABLE 1
SECOND QUARTER 2014
SUMMARY OF GROUNDWATER ELEVATION DATA
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater [1] (feet)	Depth to Product [1] (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth [2] (feet)	TOC Elevation [3] (feet amsl)	Groundwater Elevation (feet amsl)	Change in Groundwater Elevation Since Previous Event [4] (feet)
MW-1	06/02/2013	32.53			43.05	3740.45	3707.92	-0.27
MW-1	09/10/2013	33.04			43.05	3740.45	3707.41	-0.51
MW-1	12/03/2013	33.00			43.05	3740.45	3707.45	0.04
MW-1	02/26/2014	33.03			NM	3740.45	3707.42	-0.03
MW-1	06/02/2014	33.25			38.40	3740.45	3707.20	-0.22
MW-2	06/02/2013	33.21			43.30	3740.62	3707.41	0.09
MW-2	09/10/2013	33.73	33.69	0.04	43.30	3740.62	3706.92	-0.49
MW-2	12/03/2013	33.64			43.30	3740.62	3706.98	0.06
MW-2	02/26/2014	33.68			NM	3740.62	3706.94	-0.04
MW-2	06/02/2014	33.90			43.11	3740.62	3706.72	-0.22
MW-3	06/02/2013	31.80			35.20	3739.39	3707.59	-0.26
MW-3	09/10/2013	32.30			35.20	3739.39	3707.09	-0.50
MW-3	12/03/2013	32.26			35.20	3739.39	3707.13	0.04
MW-3	02/26/2014	32.30 **			NM	3739.39	3707.09	-0.04
MW-3	06/02/2014	32.53 **			35.33	3739.39	3706.86	-0.23
MW-4	06/02/2013	32.20			37.95	3740.24	3708.04	-0.25
MW-4	09/10/2013	32.69			37.95	3740.24	3707.55	-0.49
MW-4	12/03/2013	32.70			37.95	3740.24	3707.54	-0.01
MW-4	02/26/2014	32.70			NM	3740.24	3707.54	0.00
MW-4	06/02/2014	32.93			37.73	3740.24	3707.31	-0.23
MW-6	06/02/2013	32.51			34.31	3739.96	3707.45	-0.23
MW-6	09/10/2013	33.07			34.31	3739.96	3706.89	-0.56
MW-6	12/03/2013	33.07			34.31	3739.96	3706.89	0.00
MW-6	02/26/2014	33.13			NM	3739.96	3706.83	-0.06
MW-6	06/02/2014	33.25			35.06	3739.96	3706.71	-0.12
MW-7	06/02/2013	35.57			40.41	3740.73	3705.16	-0.22
MW-7	09/10/2013	36.07			40.41	3740.73	3704.66	-0.50
MW-7	12/03/2013	36.09			40.41	3740.73	3704.64	-0.02
MW-7	02/26/2014	36.09			NM	3740.73	3704.64	0.00
MW-7	06/02/2014	36.29			40.63	3740.73	3704.44	-0.20
MW-8	06/02/2013	33.28			38.58	3737.32	3704.04	-0.25
MW-8	09/10/2013	33.70			38.58	3737.32	3703.62	-0.42
MW-8	12/03/2013	33.68			38.58	3737.32	3703.64	0.02
MW-8	02/26/2014	33.71			NM	3737.32	3703.61	-0.03
MW-8	06/02/2014	33.92			39.36	3737.32	3703.40	-0.21
							Average change in groundwater elevation (02/26/14 to 06/02/14)	-0.20

Notes:

1) Depths measured from the north edge of the well casing.

2) Total depths were collected and recorded during the second quarter 2014 monitoring event.

3) TOC elevations for monitoring wells MW-4, MW-6, MW-7, & MW-8 were calculated by adding the PVC stick-up length (in feet) to the surveyed ground surface elevations (in feet amsl).

4) Changes in groundwater elevation are calculated by subtracting the measurement collected during the previous monitoring event from the measurement collected during the most recent monitoring event.

Monitoring well location MW-5 was not installed due to geologic refusal during drilling activities.

Sample locations are shown on Figure 2 and a groundwater elevation contour map is shown on Figure 3

This table includes groundwater elevation data from the previous four monitoring events. Additional historic elevation data are available on request.

amsl - feet above mean sea level.

TOC - top of casing

* Groundwater elevation was corrected for product thickness using the following calculation:

Groundwater elevation = (TOC Elevation - Measured Depth to Water) + (LNAPL Thickness in Well * LNAPL Relative Density)
LNAPL relative density was assumed to be approximately 0.75

** Depth measured from top of well monument. Casing too low inside surface completion to allow measurement from TOC.

TABLE 2
SECOND QUARTER 2014
SUMMARY OF BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Chlorides (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	**250***	
MW-1	06/02/2014	<0.001	<0.002	<0.002	<0.003	1,800	Duplicate sample collected
MW-1 (duplicate)	06/02/2014	<0.001	<0.002	<0.002	<0.003	1,850	
MW-2	06/02/2014	<0.001	<0.002	<0.002	<0.003	2,000	MS/MSD sample collected
MW-3	06/02/2014	<0.001	<0.002	<0.002	<0.003	1,480	
MW-4	06/02/2014	<0.001	<0.002	<0.002	<0.003	2,190	
MW-6	06/02/2014	<0.001	<0.002	<0.002	<0.003	675	
MW-7	06/02/2014	<0.001	<0.002	<0.002	<0.003	1,020	
MW-8	06/02/2014	<0.001	<0.002	<0.002	<0.003	336	
Trip Blank	06/02/2014	<0.001	<0.002	<0.002	<0.003	NA	

Notes:

The environmental cleanup standards for water that are applicable to this site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.

Data presented for the current sampling event. Historic groundwater analytical data are located in Appendix A.

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

Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

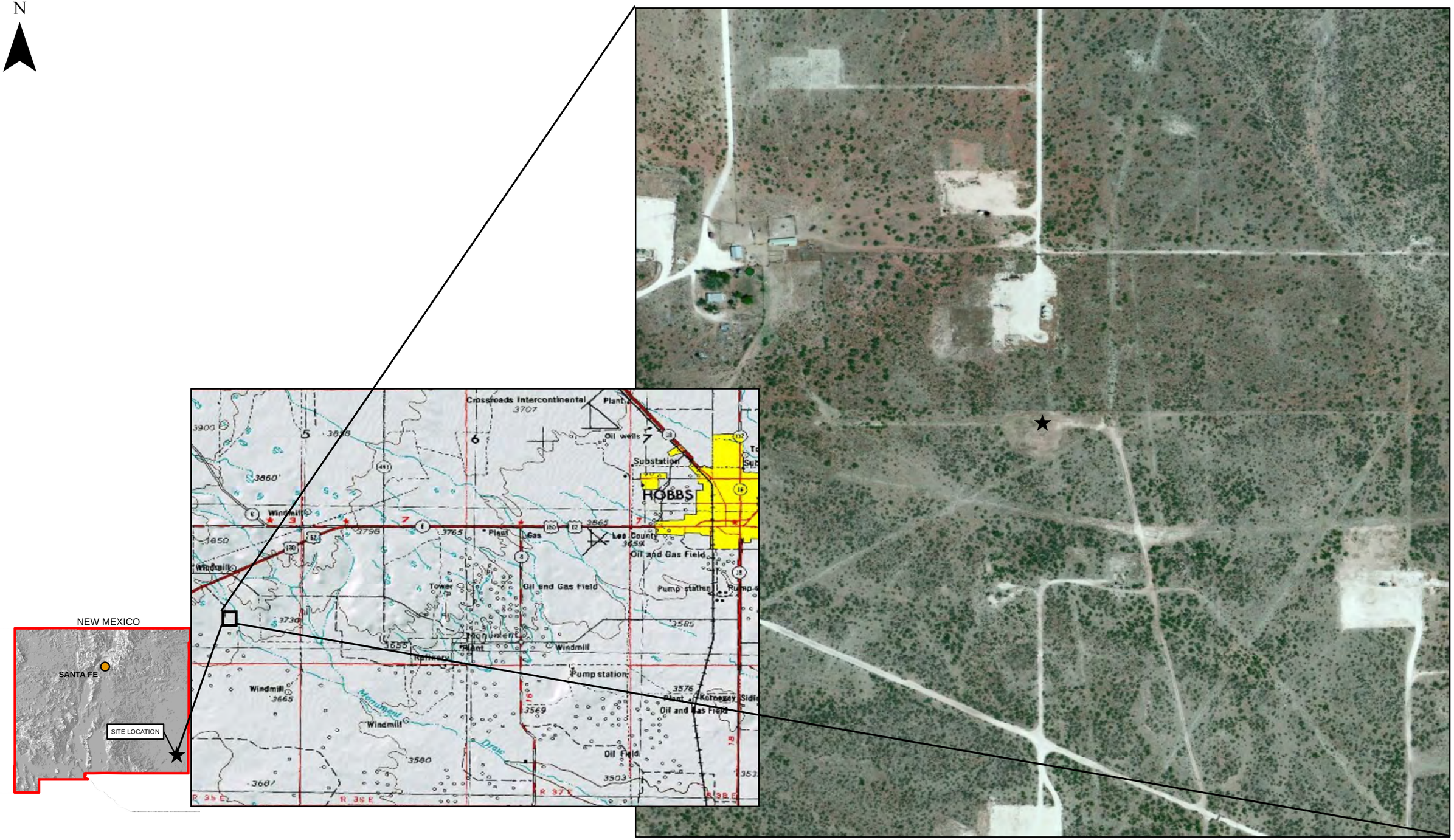
* Chlorides are subject to the National Secondary Drinking Water Regulations (NSDWR) secondary maximum contaminant levels (SMCLs) and not an enforceable regulated constituent. The 250 mg/L standard is established only as a guideline to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

LNAPL = Light Non-Aqueous Phase Liquid

mg/L = milligrams per liter.

Figures

N



DATE: April 2014 DESIGNED BY: T. Johansen DRAWN BY: D. Arnold	TASMAN GEOSCIENCES **Tasman Geosciences, LLC** **6899 Pecos Street - Unit C** **Denver, CO 80221**	**DCP Midstream** **J-4-2 Pipeline Release** NE 1/4, NE 1/4, Section 27, Township 19 South, Range 35 East Lea County, New Mexico	Site Location Map	Figure 1

DATE: June 2014 DESIGNED BY: T. Johansen DRAWN BY: D. Arnold	TASMAN GEOSCIENCES **Tasman Geosciences, LLC** **6899 Pecos Street - Unit C** **Denver, CO 80221**	**DCP Midstream** **J-4-2 Pipeline Release** Second Quarter 2014 Groundwater Monitoring Summary Report	Site Map with Monitoring Well Locations	Figure 2

Legend

- Monitoring Well
- 3706.72 — Measured Groundwater Elevation (feet AMSL)
- Groundwater Flow Direction
- Groundwater Elevation Contour (dashed where inferred)

Notes: AMSL - Above Mean Sea Level

N

0 70 140 Feet

DATE: June 2014 DESIGNED BY: T. Johansen DRAWN BY: D. Arnold	TASMAN GEOSCIENCES **Tasman Geosciences, LLC** **6899 Pecos Street - Unit C** **Denver, CO 80221**	**DCP Midstream** **J-4-2 Pipeline Release** Second Quarter 2014 Groundwater Monitoring Summary Report	Groundwater Elevation Contour Map (June 2, 2014)	Figure 3

MW-4	
Compound	06/02/2014 (mg/L)
Benzene	<0.0010
Toluene	<0.0020
Ethylbenzene	<0.0020
Total Xylenes	<0.0030
Chlorides	2,190

MW-1		
Compound	06/02/2014 (mg/L)	06/02/2014 (Duplicate) (mg/L)
Benzene	<0.0010	<0.0010
Toluene	<0.0020	<0.0020
Ethylbenzene	<0.0020	<0.0020
Total Xylenes	<0.0030	<0.0030
Chlorides	1,800	1,850

MW-6	
Compound	06/02/2014 (mg/L)
Benzene	<0.0010
Toluene	<0.0020
Ethylbenzene	<0.0020
Total Xylenes	<0.0030
Chlorides	675

MW-3	
Compound	06/02/2014 (mg/L)
Benzene	<0.0010
Toluene	<0.0020
Ethylbenzene	<0.0020
Total Xylenes	<0.0030
Chlorides	1,480

MW-7	
Compound	06/02/2014 (mg/L)
Benzene	<0.0010
Toluene	<0.0020
Ethylbenzene	<0.0020
Total Xylenes	<0.0030
Chlorides	1,020

MW-2	
Compound	06/02/2014 (mg/L)
Benzene	<0.0010
Toluene	<0.0020
Ethylbenzene	<0.0020
Total Xylenes	<0.0030
Chlorides	2,000

MW-8	
Compound	06/02/2014 (mg/L)
Benzene	<0.0010
Toluene	<0.0020
Ethylbenzene	<0.0020
Total Xylenes	<0.0030
Chlorides	336

Legend

Monitoring Well

NMWQCC Groundwater Standards	
Compound	(mg/L)
Benzene	0.01
Toluene	0.75
Ethylbenzene	0.75
Total Xylenes	0.62
Chlorides*	250

Notes:

All aqueous analytical results are presented in milligrams per liter (mg/L)

LNAPL - Light Non Aqueous Phase Liquid

* Chlorides are subject to the National Secondary Drinking Water Regulations (NSDWR) secondary maximum contaminant levels (SMCLs) and not an enforceable regulated constituent. The 250 mg/L standard is established only as a guideline to assist public water systems in managing their drinking water for aesthetic considerations,such as taste, color, and odor.

N

0 70 140 Feet

DATE: June 2014
DESIGNED BY: T. Johansen
DRAWN BY: D. Arnold

TASMAN GEOSCIENCES
Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221

DCP Midstream
J-4-2 Pipeline Release
Second Quarter 2014 Groundwater Monitoring Summary Report

Analytical Results Map
(June 2, 2014)

Figure 4

Appendix A

Historic Analytical Results

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Chlorides (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	**250***	
MW-1	02/01/2006	**0.139**	0.326	0.34	0.31		
MW-1	09/01/2006	**0.0487**	0.0058	0.0284	0.0694		
MW-1	12/01/2006	LNAPL	LNAPL	LNAPL	LNAPL		
MW-1	03/01/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	06/01/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	09/01/2007	**0.011**	0.003	0.004	0.098		
MW-1	11/01/2007	**0.107**	0.024	0.014	0.39		
MW-1	03/01/2008	**0.037**	0.0155	0.014	0.215		
MW-1	06/01/2008	LNAPL	LNAPL	LNAPL	LNAPL		
MW-1	09/01/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/01/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	03/11/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	05/18/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	09/24/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/20/2009	<0.002	<0.002	.0014J	0.0418	2,680	
MW-1	03/10/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	06/13/2010	0.0016	<0.001	<0.0003	0.0095	1,800	
MW-1	09/29/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/08/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	03/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	09/16/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/07/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	03/11/2012	<0.001	<0.002	<0.002	<0.004	2,970	
MW-1	06/05/2012	<0.001	<0.002	<0.002	<0.003	2,480	
MW-1	09/07/2012	<0.001	<0.002	<0.002	<0.003	2,060	
MW-1	12/04/2012	<0.001	<0.002	<0.002	<0.003	2,240	Duplicate sample collected
MW-1	02/22/2013	0.00027	<0.002	<0.002	<0.003	2,110	
MW-1	06/02/2013	<0.001	<0.002	<0.002	<0.003	2,010	Duplicate sample collected
MW-1	09/10/2013	<0.001	<0.002	<0.002	<0.003	1,900	Duplicate sample collected
MW-1	12/03/2013	<0.001	<0.002	<0.002	<0.003	1,960	Duplicate sample collected
MW-1	02/26/2014	<0.001	<0.002	<0.002	<0.003	1,850	Duplicate sample collected
MW-1 (duplicate)	02/26/2014	<0.001	<0.002	<0.002	<0.003	1,920	
MW-1	06/02/2014	<0.001	<0.002	<0.002	<0.003	1,800	Duplicate sample collected
MW-1 (duplicate)	06/02/2014	<0.001	<0.002	<0.002	<0.003	1,850	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Chlorides (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	**250***	
MW-2	02/01/2006	**0.026**	0.038	0.04	0.335		
MW-2	09/01/2006	0.0045	<0.001	0.0027	0.0471		
MW-2	12/01/2006	0.006	0.003	0.003	0.0613		
MW-2	03/01/2007	**0.188**	0.006	0.026	0.125		
MW-2	06/01/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	09/01/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	11/01/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	03/01/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	06/01/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	09/01/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/01/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	03/11/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	05/18/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	09/24/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/20/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	03/10/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	06/13/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	09/29/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/08/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	03/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	09/16/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/07/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	03/11/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	06/05/2012	0.00043	<0.002	0.0024	0.0069	2,450	
MW-2	09/07/2012	<0.001	<0.002	<0.002	<0.003	2,280	
MW-2	12/04/2012	<0.001	<0.002	0.0008	0.0028	2,440	
MW-2	02/22/2013	<0.001	<0.002	<0.002	<0.003	2,390	Duplicate sample collected
MW-2	06/02/2013	NS	NS	NS	NS	NS	
MW-2	09/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/03/2013	<0.001	<0.002	<0.002	<0.003	2,370	
MW-2	02/26/2014	<0.001	<0.002	<0.002	<0.003	2,100	
MW-2	06/02/2014	<0.001	<0.002	<0.002	<0.003	2,000	MS/MSD sample collected

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Chlorides (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	**250***	
MW-3	02/01/2006	<0.001	<0.001	<0.001	<0.002		
MW-3	09/01/2006	<0.002	<0.002	<0.002	<0.006		
MW-3	12/01/2006	<0.002	<0.002	<0.002	<0.006		
MW-3	03/01/2007	<0.002	<0.002	<0.002	<0.006	7,800	
MW-3	06/01/2007	0.003	0.005	0.002	0.01	10,800	
MW-3	09/01/2007	<0.001	<0.001	<0.001	<0.001		
MW-3	11/01/2007	0.0011J	<0.002	<0.002	<0.006		
MW-3	03/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-3	06/01/2008	<0.002	<0.002	<0.002	0.007		
MW-3	09/01/2008	<0.002	<0.002	<0.002	<0.006	4,070	
MW-3	12/01/2008	<0.002	<0.002	<0.002	<0.006	2,625	
MW-3	03/11/2009	<0.002	<0.002	<0.002	<0.002	2,860	
MW-3	05/18/2009	<0.002	<0.002	<0.002	<0.002	3,270	
MW-3	09/24/2009	<0.002	<0.002	<0.002	<0.006	3,195	
MW-3	12/20/2009	<0.002	<0.002	<0.002	<0.006	3,605	
MW-3	03/10/2010	<0.001	<0.002	<0.002	<0.004	3,030	
MW-3	06/13/2010	<0.0003	<0.001	<0.0003	<0.0006	2,130	
MW-3	09/29/2010	<0.001	<0.002	<0.002	<0.004	2,220	
MW-3	12/08/2010	<0.001	<0.002	<0.002	<0.004	2,530	
MW-3	03/30/2011	<0.001	<0.002	<0.002	<0.002	2,230	
MW-3	06/11/2011	<0.001	<0.002	<0.002	<0.004	2,210	
MW-3	09/16/2011	<0.001	<0.002	<0.002	<0.004	2,190	Duplicate sample collected
MW-3	12/07/2011	<0.001	<0.002	<0.002	<0.004	2,230	Duplicate sample collected
MW-3	03/11/2012	<0.001	<0.002	<0.002	<0.004	2,210	
MW-3	06/05/2012	<0.001	<0.002	<0.002	<0.003	2,080	
MW-3	09/07/2012	<0.001	<0.002	<0.002	<0.003	2,180	
MW-3	12/04/2012	<0.001	<0.002	<0.002	<0.003	2,170	
MW-3	02/22/2013	<0.001	<0.002	<0.002	<0.003	2,050	
MW-3	06/02/2013	<0.001	<0.002	<0.002	<0.003	1,910	
MW-3	09/10/2013	<0.001	<0.002	<0.002	<0.003	1,730	
MW-3	12/03/2013	<0.001	<0.002	<0.002	<0.003	1,860	
MW-3	02/26/2014	<0.001	<0.002	<0.002	<0.003	1,570	
MW-3	06/02/2014	<0.001	<0.002	<0.002	<0.003	1,480	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Chlorides (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	**250***	
MW-4	06/01/2006	0.0086	.00093J	0.0092	0.0061		
MW-4	12/01/2006	**0.025**	0.005	<0.002	0.0065		
MW-4	03/01/2007	0.004	0.0006	<0.002	0.003	1,300	
MW-4	06/01/2007	<0.001	<0.001	<0.001	<0.001	1,380	
MW-4	09/01/2007	<0.001	<0.001	<0.001	<0.001		
MW-4	11/01/2007	<0.002	<0.002	<0.002	<0.006		
MW-4	03/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-4	06/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-4	09/01/2008	<0.002	<0.002	<0.002	.0041J	1,440	
MW-4	12/01/2008	<0.002	<0.002	<0.002	<0.006	70	
MW-4	03/11/2009	<0.002	<0.002	<0.002	<0.002	1,390	
MW-4	05/18/2009	<0.002	<0.002	<0.002	<0.002	1,440	
MW-4	09/24/2009	<0.002	<0.002	<0.002	<0.006	1,490	
MW-4	12/20/2009	<0.002	<0.002	<0.002	<0.006	1,740	
MW-4	03/10/2010	<0.001	<0.002	<0.002	<0.004	1,950	
MW-4	06/13/2010	<0.0003	<0.001	<0.0003	<0.0006	2,150	
MW-4	09/29/2010	<0.001	<0.002	<0.002	<0.004	2,130	
MW-4	12/08/2010	<0.001	<0.002	<0.002	<0.004	2,740	
MW-4	03/30/2011	<0.001	<0.002	<0.002	<0.002	2,300	
MW-4	06/11/2011	<0.001	<0.002	<0.002	<0.004	2,230	
MW-4	09/16/2011	<0.001	<0.002	<0.002	<0.004	1,980	
MW-4	12/07/2001	<0.001	<0.002	<0.002	<0.004	2,010	
MW-4	03/11/2012	<0.001	<0.002	<0.002	<0.004	1,960	Duplicate sample collected
MW-4	06/05/2012	<0.001	<0.002	<0.002	<0.003	1,790	Duplicate sample collected
MW-4	09/07/2012	<0.001	<0.002	<0.002	<0.003	1,910	Duplicate sample collected
MW-4	12/04/2012	<0.001	<0.002	<0.002	<0.003	1,940	
MW-4	02/22/2013	<0.001	<0.002	<0.002	<0.003	1,900	
MW-4	06/02/2013	<0.001	<0.002	<0.002	<0.003	1,950	
MW-4	09/10/2013	<0.001	<0.002	<0.002	<0.003	1,860	
MW-4	12/03/2013	<0.001	<0.002	<0.002	<0.003	2,250	
MW-4	02/26/2014	<0.001	<0.002	<0.002	<0.003	2,000	
MW-4	06/02/2014	<0.001	<0.002	<0.002	<0.003	2,190	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Chlorides (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	**250***	
MW-6	09/01/2006	<0.002	<0.002	<0.002	<0.006		
MW-6	12/01/2006	<0.002	<0.002	<0.002	<0.006		
MW-6	03/01/2007	<0.002	<0.002	<0.002	<0.006	669	
MW-6	06/01/2007	<0.001	<0.001	<0.001	<0.001	544	
MW-6	09/01/2007	<0.001	<0.001	<0.001	<0.001		
MW-6	11/01/2007	<0.002	<0.002	<0.002	<0.006		
MW-6	03/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-6	06/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-6	09/01/2008	<0.002	<0.002	<0.002	<0.006	537	
MW-6	12/01/2008	<0.002	<0.002	<0.002	<0.002	391	
MW-6	03/11/2009	<0.002	<0.002	<0.002	<0.002	363	
MW-6	05/18/2009	<0.002	<0.002	<0.002	<0.006	383	
MW-6	09/24/2009	<0.002	<0.002	<0.002	<0.006	373	
MW-6	12/20/2009	<0.002	<0.002	<0.002	<0.006	1,090	
MW-6	03/10/2010	NS	NS	NS	NS	NS	
MW-6	06/13/2010	<0.0003	<0.001	<0.0003	<0.006	533	
MW-6	09/29/2010	<0.001	<0.002	<0.002	<0.004	445	
MW-6	12/08/2010	<0.001	<0.002	<0.002	<0.004	513	
MW-6	03/30/2011	<0.001	<0.002	<0.002	<0.002	491	
MW-6	06/11/2011	<0.001	<0.002	<0.002	<0.004	503	
MW-6	09/16/2011	<0.001	<0.002	<0.002	<0.004	476	
MW-6	12/07/2011	<0.001	<0.002	<0.002	<0.004	526	
MW-6	03/11/2012	<0.001	<0.002	<0.002	<0.004	522	
MW-6	06/05/2012	<0.001	<0.002	<0.002	<0.003	532	
MW-6	09/07/2012	NS	NS	NS	NS	NS	
MW-6	12/04/2012	<0.001	<0.002	<0.002	<0.003	578	
MW-6	02/22/2013	<0.001	<0.002	<0.002	<0.003	536	
MW-6	06/02/2013	<0.001	<0.002	<0.002	<0.003	603	
MW-6	09/10/2013	<0.001	<0.002	<0.002	<0.003	619	
MW-6	12/03/2013	<0.001	<0.002	<0.002	<0.003	674	
MW-6	02/26/2014	<0.001	<0.002	<0.002	<0.003	595	
MW-6	06/02/2014	<0.001	<0.002	<0.002	<0.003	675	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Chlorides (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	**250***	
MW-7	09/01/2006	<0.002	<0.002	<0.002	<0.006		
MW-7	12/01/2006	<0.002	<0.002	<0.002	<0.006		
MW-7	03/01/2007	<0.002	<0.002	<0.002	<0.006	1,230	
MW-7	06/01/2007	<0.001	<0.001	<0.001	0.003	1,150	
MW-7	09/01/2007	<0.001	<0.001	<0.001	<0.001		
MW-7	11/01/2007	<0.002	<0.002	<0.002	<0.006		
MW-7	03/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-7	06/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-7	09/01/2008	<0.002	<0.002	<0.002	<0.006	1,180	
MW-7	12/01/2008	<0.002	<0.002	<0.002	<0.002	1,050	
MW-7	03/11/2009	<0.002	<0.002	<0.002	<0.002	944	
MW-7	05/18/2009	<0.002	<0.002	<0.002	<0.006	1,090	
MW-7	09/24/2009	<0.002	<0.002	<0.002	<0.006	1,140	
MW-7	12/20/2009	<0.002	<0.002	<0.002	<0.006	1,440	
MW-7	03/10/2010	<0.001	<0.002	<0.002	<0.004	1,230	
MW-7	06/13/2010	<0.0003	<0.001	<0.0003	<0.006	1,280	
MW-7	09/29/2010	<0.001	<0.002	<0.002	<0.004	1,210	
MW-7	12/08/2010	<0.001	<0.002	<0.002	<0.004	1,180	
MW-7	03/30/2011	<0.001	<0.002	<0.002	<0.002	1,210	
MW-7	06/11/2011	<0.001	<0.002	<0.002	<0.004	1,210	
MW-7	09/16/2011	<0.001	<0.002	<0.002	<0.004	1,170	
MW-7	12/07/2011	<0.001	<0.002	<0.002	<0.004	1,200	
MW-7	03/11/2012	<0.001	<0.002	<0.002	<0.004	1,220	
MW-7	06/05/2012	<0.001	<0.002	<0.002	<0.003	1,120	
MW-7	09/07/2012	<0.001	<0.002	<0.002	<0.003	1,140	
MW-7	12/04/2012	<0.001	<0.002	<0.002	<0.003	1,120	
MW-7	02/22/2013	<0.001	<0.002	<0.002	<0.003	1,090	
MW-7	06/02/2013	<0.001	<0.002	<0.002	<0.003	1,040	
MW-7	09/10/2013	<0.001	<0.002	<0.002	<0.003	1,050	
MW-7	12/03/2013	<0.001	<0.002	<0.002	<0.003	1,150	
MW-7	02/26/2014	<0.001	<0.002	<0.002	<0.003	1,030	
MW-7	06/02/2014	<0.001	<0.002	<0.002	<0.003	1,020	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Chlorides (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	**250***	
MW-8	09/01/2006	<0.002	<0.002	<0.002	<0.006		
MW-8	12/01/2006	<0.002	<0.002	<0.002	<0.006		
MW-8	03/01/2007	<0.002	<0.002	<0.002	<0.006	609	
MW-8	06/01/2007	<0.001	<0.001	<0.001	<0.001	617	
MW-8	09/01/2007	<0.001	<0.001	<0.001	<0.001		
MW-8	11/01/2007	<0.002	<0.002	<0.002	<0.006		
MW-8	03/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-8	06/01/2008	<0.002	<0.002	<0.002	<0.006		
MW-8	09/01/2008	<0.002	<0.002	<0.002	<0.006	735	
MW-8	12/01/2008	<0.002	<0.002	<0.002	<0.002	480	
MW-8	03/11/2009	<0.002	<0.002	<0.002	<0.002	417	
MW-8	05/18/2009	<0.002	<0.002	<0.002	<0.006	378	
MW-8	09/24/2009	<0.002	<0.002	<0.002	<0.006	403	
MW-8	12/20/2009	<0.002	<0.002	<0.002	<0.006	308	
MW-8	03/10/2010	<0.001	<0.002	<0.002	<0.004	414	
MW-8	06/13/2010	<0.0003	<0.001	<0.0003	<0.006	415	
MW-8	09/29/2010	<0.001	<0.002	<0.002	<0.004	347	
MW-8	12/08/2010	<0.001	<0.002	<0.002	<0.004	336	
MW-8	03/30/2011	<0.001	<0.002	<0.002	<0.002	383	
MW-8	06/11/2011	<0.001	<0.002	<0.002	<0.004	454	
MW-8	09/16/2011	<0.001	<0.002	<0.002	<0.004	368	
MW-8	12/07/2011	<0.001	<0.002	<0.002	<0.004	348	
MW-8	03/11/2012	<0.001	<0.002	<0.002	<0.004	345	
MW-8	06/05/2012	<0.001	<0.002	<0.002	<0.003	316	
MW-8	09/07/2012	<0.001	<0.002	<0.002	<0.003	308	
MW-8	12/04/2012	<0.001	<0.002	<0.002	<0.003	304	
MW-8	02/22/2013	<0.001	<0.002	<0.002	<0.003	290	
MW-8	06/02/2013	<0.001	<0.002	<0.002	<0.003	291	
MW-8	09/10/2013	<0.001	<0.002	<0.002	<0.003	297	
MW-8	12/03/2013	<0.001	<0.002	<0.002	<0.003	345	
MW-8	02/26/2014	<0.001	<0.002	<0.002	<0.003	319	
MW-8	06/02/2014	<0.001	<0.002	<0.002	<0.003	336	
Trip Blank	06/02/2014	<0.001	<0.002	<0.002	<0.003	NA	

Notes:

The environmental cleanup standards for water that are applicable to this site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.

Monitoring well location MW-5 was not installed due geologic refusal during drilling activities.

Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

* Chlorides are subject to the National Secondary Drinking Water Regulations (NSDWR) secondary maximum contaminant levels (SMCLs) and not an enforceable regulated constituent. The 250 mg/L standard is established only as a guideline to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

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

LNAPL = Light Non-Aqueous Phase Liquid

NS = Not sampled

NA = Not applicable

mg/L = milligrams per liter.

Appendix B

Laboratory Analytical Report

- Accutest Job #: D58324

Mountain States ACCUTEST LABORATORIES

06/06/14

Technical Report for

DCP Midstream, LP

TASMCOA:DCP J-4-2

Accutest Job Number: D58324

Sampling Date: 06/02/14

Report to:

Tasman Geosciencec LLC
6899 Pecos Street Unit C
Denver, CO 80221
tjohansen@tasman-geo.com; dbaggus@tasman-geo.com;
swweathers@dcpmidstream.com; cwasko@tasman-geo.com
ATTN: Don Baggus

Total number of pages in report: **33**

NELAP ACCREDITED TNI LABORATORY

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Scott Heideman
Laboratory Director

Client Service contact: Renea Jackson 303-425-6021

Certifications: CO (CO00049), ID, NE (CO00049), ND (R-027), NJ (CO 0007), OK (D9942), UT (NELAP CO00049), TX (T104704511)

Sections: 1 2 3 4 5 6 7

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Sample Summary

DCP Midstream, LP

Job No: D58324

TASMCOA:DCP J-4-2

Sample Number	Collected Date	Time	By	Received	Matrix Code	Matrix Type	Client Sample ID
D58324-1	06/02/14	14:30	DB	06/03/14	AQ	Ground Water	MW-1 060214
D58324-2	06/02/14	14:40	DB	06/03/14	AQ	Ground Water	MW-2 060214
D58324-2D	06/02/14	14:40	DB	06/03/14	AQ	Water Dup/MSD	MW-2 060214
D58324-2M	06/02/14	14:40	DB	06/03/14	AQ	Water Matrix Spike	MW-2 060214
D58324-3	06/02/14	15:00	DB	06/03/14	AQ	Ground Water	MW-3 060214
D58324-4	06/02/14	14:50	DB	06/03/14	AQ	Ground Water	MW-4 060214
D58324-5	06/02/14	14:00	DB	06/03/14	AQ	Ground Water	MW-6 060214
D58324-6	06/02/14	13:35	DB	06/03/14	AQ	Ground Water	MW-7 060214
D58324-7	06/02/14	13:20	DB	06/03/14	AQ	Ground Water	MW-8 060214
D58324-8	06/02/14	00:00	DB	06/03/14	AQ	Ground Water	DUP
D58324-9	06/02/14	13:00	DB	06/03/14	AQ	Trip Blank Water	TRIP BLANK

CASE NARRATIVE / CONFORMANCE SUMMARY

Client:	DCP Midstream, LP	**Job No**	D58324
Site:	TASMCOA:DCP J-4-2	**Report Date**	6/6/2014 2:13:37 PM

On 06/03/2014, 8 sample(s), 1 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 2.9 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D58324 was assigned to the project. The lab sample ID, client sample ID, and date of sample collection are detailed in the report's Results Summary.

Specified quality control criteria were achieved for this job except as noted below. For more information, please refer to the analytical results and QC summary pages.

Volatiles by GCMS By Method SW846 8260B

Matrix AQ **Batch ID:** V3V1807

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58324-2MS, D58324-2MSD were used as the QC samples indicated.
- D58324-6: The pH of the sample aliquot for VOA analysis was >2 at time of analysis.
- D58324-5: The pH of the sample aliquot for VOA analysis was >2 at time of analysis.

Wet Chemistry By Method EPA 300.0/SW846 9056

Matrix AQ **Batch ID:** GP12733

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58376-2MS, D58376-2MSD were used as the QC samples for the Chloride analysis.

Matrix AQ **Batch ID:** GP12750

- All samples were prepared within the recommended method holding time.
- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D58324-5MS were used as the QC samples for the Chloride analysis.

AMS certifies that data reported for samples received, listed on the associated custody chain or analytical task order, were produced to specifications meeting AMS's Quality System precision, accuracy and completeness objectives except as noted.

Estimated non-standard method measurement uncertainty data is available on request, based on quality control bias and implicit for standard methods. Acceptable uncertainty requires tested parameter quality control data to meet method criteria.

AMS is not responsible for data quality assumptions if partial reports are used and recommends that this report be used in its entirety. This report is authorized by AMS indicated via signature on the report cover.

Summary of Hits

Job Number: D58324
Account: DCP Midstream, LP
Project: TASMCOA:DCP J-4-2
Collected: 06/02/14

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D58324-1	**MW-1 060214**					
Chloride		1800	50		mg/l	EPA 300.0/SW846 9056
D58324-2	**MW-2 060214**					
Chloride		2000	50		mg/l	EPA 300.0/SW846 9056
D58324-3	**MW-3 060214**					
Chloride		1480	25		mg/l	EPA 300.0/SW846 9056
D58324-4	**MW-4 060214**					
Chloride		2190	50		mg/l	EPA 300.0/SW846 9056
D58324-5	**MW-6 060214**					
Chloride		675	25		mg/l	EPA 300.0/SW846 9056
D58324-6	**MW-7 060214**					
Chloride		1020	25		mg/l	EPA 300.0/SW846 9056
D58324-7	**MW-8 060214**					
Chloride		336	10		mg/l	EPA 300.0/SW846 9056
D58324-8	**DUP**					
Chloride		1850	50		mg/l	EPA 300.0/SW846 9056
D58324-9	**TRIP BLANK**					

No hits reported in this sample.

Mountain States ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1 060214		
Lab Sample ID:	D58324-1	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V30890.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		62-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	96%		69-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-1 060214		
Lab Sample ID:	D58324-1	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
		Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1800	50	mg/l	100	06/04/14 21:34	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID: MW-2 060214
Lab Sample ID: D58324-2
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: TASMCOA:DCP J-4-2

Date Sampled: 06/02/14
Date Received: 06/03/14
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V30891.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		62-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	96%		69-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-2 060214		
Lab Sample ID:	D58324-2	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
		Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2000	50	mg/l	100	06/04/14 21:49	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3 060214		
Lab Sample ID:	D58324-3	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V30894.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	95%		69-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-3 060214		
Lab Sample ID:	D58324-3	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
		Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1480	25	mg/l	50	06/04/14 16:21	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-4 060214		
Lab Sample ID:	D58324-4	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V30895.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	96%		69-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-4 060214		
Lab Sample ID:	D58324-4	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
		Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2190	50	mg/l	100	06/05/14 18:38	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-6 060214		
Lab Sample ID:	D58324-5	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3V30896.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	94%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	97%		69-130%

(a) The pH of the sample aliquot for VOA analysis was > 2 at time of analysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-6 060214		
Lab Sample ID:	D58324-5	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
		Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	675	25	mg/l	50	06/05/14 19:18	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-7 060214		
Lab Sample ID:	D58324-6	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 [a]	3V30897.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	96%		69-130%

(a) The pH of the sample aliquot for VOA analysis was > 2 at time of analysis.

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-7 060214		
Lab Sample ID:	D58324-6	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
		Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1020	25	mg/l	50	06/05/14 14:03	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8 060214		
Lab Sample ID:	D58324-7	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V30898.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	94%		69-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW-8 060214		
Lab Sample ID:	D58324-7	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
		Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	336	10	mg/l	20	06/05/14 14:16	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	D58324-8	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V30899.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	97%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	95%		69-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	DUP		
Lab Sample ID:	D58324-8	**Date Sampled:**	06/02/14
Matrix:	AQ - Ground Water	**Date Received:**	06/03/14
		Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1850	50	mg/l	100	06/05/14 19:44	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	D58324-9	**Date Sampled:**	06/02/14
Matrix:	AQ - Trip Blank Water	**Date Received:**	06/03/14
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	3V30900.D	1	06/03/14	BR	n/a	n/a	V3V1807
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00031	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	96%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	97%		69-130%

ND = Not detected MDL = Method Detection Limit
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Mountain States ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

PAGE 1 OF 1

ACCUTEST LABORATORIES

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL. 303-425-6021 FAX: 303-425-6854
www.accutest.com

FED-EX Tracking # 805534199 4430 | Bottle Order Control #
Accutest Quote # | Accutest Job # D58324

Client / Reporting Information

Company Name: Tasman Geosciences
Street Address: 6899 Pecos St - Unit C
City: Denver, CO 80221
Project Contact: Don Baggus dbaggus@tasman-geo.com
Phone #: (720) 635-9675
Sampler(s) Name(s):

Project Information

Project Name: DCP J-4-2 Pipeline Release
Street:
City State:
Project #:
Client Purchase Order #:
Project Manager: Renea Jackson

Billing Information (if different from Report to)

Company Name:
Street Address:
City:
Attention:

Requested Analysis (see TEST CODE sheet)

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Water; SW - Surface Water; SO - Soil; SL- Sludge; SED-Sediment; OI - Oil; LIQ - Other Liquid; AIR - Air; SOL - Other Solid; WP - Wipe; FB-Field Blank; EB-Equipment Blank; RB- Rinse Blank; TB-Trip Blank

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	V8260BTX	CHL	MS/MSD for V8260BTX	LAB USE ONLY
	MW-1 - 060214		6/2/14	1430	DB	GW	4	3				1				X	X		01
	MW-2 - 060214			1440		GW	4	3				1				X	X		02
	MW-3 - 060214			1500		GW	4	3				1				X	X		03
	MW-4 - 060214			1450		GW	4	3				1				X	X		04
	MW-6 - 060214			1400		GW	4	3				1				X	X		05
	MW-7 - 060214			1335		GW	4	3				1				X	X		06
	MW-8 - 060214			1320		GW	4	3				1				X	X		07
	~~MW-8 MS/MSD~~ MW-2 - MS/MSD			1440		GW	6	6										X	02 MS/MSD
	DUP			—		GW	4	3				1				X	X		08
	TRIP BLANK			1300		W	2	2								X			09
																			MS/MSD 6/3/14

Data Deliverable Information

- [ ] Std. 15 Business Days
- [X] Std. 10 Business Days
- [ ] 5 Day RUSH
- [ ] 3 Day Emergency
- [ ] 2 Day Emergency
- [ ] 1 Day Emergency
- [ ]

Approved By (Accutest PM): / Date:

Emergency & Rush T/A data available VIA Labtrack

- [ ] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [X] COMMBN
- [ ] COMMBN+
- [ ]
- [ ] State Forms Required
- [ ] Send Forms to State
- [ ] Report by Fax
- [X] Report by PDF ONLY
- [ ] EDD Format

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary
Commercial BN = Results/QC/Narrative (+ = chromatograms)

Comments / Special Instructions

6/3/14

	Relinquished by Sampler:	Received By:	Relinquished By:	Date Time:	Received By:
1	Don Baggus 6/2/14 1720	Janet Perth 6/3/14 1020			
2					
3					
4					
5					

Custody Seal # Fx | [X] Intact [ ] Not Intact | Preserved where applicable [X] | On Ice [X] | Cooler Temp. 2.9 | T186

D58324: Chain of Custody
Page 1 of 1

Mountain States ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries

Method Blank Summary

Job Number: D58324
Account: DCPMCODN DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V1807-MB	3V30888.D	1	06/03/14	BR	n/a	n/a	V3V1807

The QC reported here applies to the following samples: **Method:** SW846 8260B

D58324-1, D58324-2, D58324-3, D58324-4, D58324-5, D58324-6, D58324-7, D58324-8, D58324-9

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.25	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.31	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	1.5	ug/l	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	95%	62-130%
2037-26-5	Toluene-D8	96%	70-130%
460-00-4	4-Bromofluorobenzene	96%	69-130%

Blank Spike Summary

Job Number: D58324
Account: DCPMCODN DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V3V1807-BS	3V30889.D	1	06/03/14	BR	n/a	n/a	V3V1807

The QC reported here applies to the following samples: **Method:** SW846 8260B

D58324-1, D58324-2, D58324-3, D58324-4, D58324-5, D58324-6, D58324-7, D58324-8, D58324-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	47.2	94	70-130
100-41-4	Ethylbenzene	50	49.7	99	70-130
108-88-3	Toluene	50	47.0	94	70-130
1330-20-7	Xylene (total)	150	139	93	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	96%	62-130%
2037-26-5	Toluene-D8	97%	70-130%
460-00-4	4-Bromofluorobenzene	100%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: D58324
Account: DCPMCODN DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D58324-2MS	3V30892.D	1	06/03/14	BR	n/a	n/a	V3V1807
D58324-2MSD	3V30893.D	1	06/03/14	BR	n/a	n/a	V3V1807
D58324-2	3V30891.D	1	06/03/14	BR	n/a	n/a	V3V1807

The QC reported here applies to the following samples: **Method:** SW846 8260B

D58324-1, D58324-2, D58324-3, D58324-4, D58324-5, D58324-6, D58324-7, D58324-8, D58324-9

CAS No.	Compound	D58324-2 ug/l	Q	Spike ug/l	MS ug/l	MS %	Spike ug/l	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		50	46.7	93	50	48.3	97	3	62-130/30
100-41-4	Ethylbenzene	ND		50	50.1	100	50	51.5	103	3	63-130/30
108-88-3	Toluene	ND		50	47.1	94	50	48.4	97	3	60-130/30
1330-20-7	Xylene (total)	ND		150	139	93	150	143	95	3	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D58324-2	Limits
17060-07-0	1,2-Dichloroethane-D4	93%	94%	94%	62-130%
2037-26-5	Toluene-D8	97%	98%	97%	70-130%
460-00-4	4-Bromofluorobenzene	100%	100%	96%	69-130%

* = Outside of Control Limits.

Mountain States ACCUTEST LABORATORIES

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D58324
Account: DCPMCODN - DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP12733/GN24956	0.50	0.0	mg/l	5	4.87	97.4	90-110%
Chloride	GP12750/GN24978	0.50	0.0	mg/l	5	5.01	100.2	90-110%
Nitrogen, Nitrate	GP12733/GN24956	0.010	0.0	mg/l	0.1	0.108	108.0	90-110%
Nitrogen, Nitrate	GP12750/GN24978	0.010	0.0	mg/l	0.1	0.103	103.0	90-110%
Nitrogen, Nitrite	GP12733/GN24956	0.0040	0.0	mg/l	0.05	0.0523	104.6	90-110%
Nitrogen, Nitrite	GP12750/GN24978	0.0040	0.0	mg/l	0.05	0.0520	104.0	90-110%
Sulfate	GP12750/GN24978	0.50	0.0	mg/l	5	5.18	103.6	90-110%

Associated Samples:
Batch GP12733: D58324-1, D58324-2, D58324-3
Batch GP12750: D58324-4, D58324-5, D58324-6, D58324-7, D58324-8
(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D58324
Account: DCPMCODN - DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP12733/GN24956	D58376-2	mg/l	14.3	5	19.3	100.0	80-120%
Chloride	GP12750/GN24978	D58324-5	mg/l	675	250	931	102.4	80-120%
Nitrogen, Nitrate	GP12733/GN24956	D58376-2	mg/l	0.16	0.1	0.26	100.0	80-120%
Nitrogen, Nitrate	GP12750/GN24978	D58324-5	mg/l	0.79	5	5.7	98.2	80-120%
Nitrogen, Nitrite	GP12733/GN24956	D58376-2	mg/l	0.011	0.05	0.062	102.0	80-120%
Nitrogen, Nitrite	GP12750/GN24978	D58324-5	mg/l	0.0	2.5	2.5	100.0	80-120%
Sulfate	GP12750/GN24978	D58324-5	mg/l	60.9	250	312	100.4	80-120%

Associated Samples:
Batch GP12733: D58324-1, D58324-2, D58324-3
Batch GP12750: D58324-4, D58324-5, D58324-6, D58324-7, D58324-8
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D58324
Account: DCPMCODN - DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Chloride	GP12733/GN24956	D58376-2	mg/l	14.3	5	19.3	0.0	20%
Nitrogen, Nitrate	GP12733/GN24956	D58376-2	mg/l	0.16	0.1	0.26	0.0	20%
Nitrogen, Nitrite	GP12733/GN24956	D58376-2	mg/l	0.011	0.05	0.062	0.0	20%

Associated Samples:
Batch GP12733: D58324-1, D58324-2, D58324-3
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits