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February 26, 2014

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

**RE: 4th Quarter 2013 Groundwater Results
DCP Midstream, LP RR Ext. Pipeline Release (AP #55)
Unit C, Section 19, Township 20 South, Range 37 East
Lea County, New Mexico**

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, one copy of the 4th Quarter 2013 Groundwater Results for the DCP RR Ext. Pipeline Release located in Lea County, New Mexico (Unit C, Section 19, Township 20 South, Range 37 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: Geoffrey Leking, Hobbs District (Copy on CD)
Environmental Files

Fourth Quarter 2013 Groundwater Monitoring and Activities Summary Report

RR Extension Pipeline Release Lea County, New Mexico AP #55

Prepared for:



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

Prepared by:



6899 Pecos Street, Unit C
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January 29, 2014

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1. Introduction

This report summarizes the remediation and groundwater monitoring activities conducted during the fourth quarter 2013, at the RR-Extension pipeline release (Site) in Lea County, New Mexico (Figure 1). Tasman Geosciences, LLC (Tasman) conducted these activities on behalf of DCP Midstream, LP (DCP). The field activities were conducted with the purpose of monitoring groundwater flow and quality conditions and assessing the presence of light non-aqueous phase liquid (LNAPL) hydrocarbons in the Site subsurface. Current Site conditions were evaluated from field data and analytical laboratory results collected during the reporting period on December 3, 2013.

2. Site Location and Background

The Site is located in the northeastern quarter of the northwestern quarter (Unit C) of Section 19, Township 20 South, Range 37 East (approximate coordinates 32.562339 degrees north and 103.291739 degrees west). It is approximately 4.25 miles south of the intersection of US Highway 322 and County Road 41. The area is sparsely populated and land use is primarily associated with livestock grazing and oil and gas production and gathering.

Based on information included in historical Site investigation reports, a natural gas condensate release of approximately 30 barrels (bbl) was reported on December 13, 2006 (Assigned Site Reference #130040). Subsequent to preliminary investigation and characterization activities, an excavation was conducted at the Site (November 10, 2008 to December 7, 2008) whereby approximately 11,356 cubic yards of impacted material were removed. The excavation extended to approximately 20-feet below ground surface over a surface area of approximately 14,800 square feet. Backfill material was placed into the excavation and surface restoration was completed by January 12, 2009. These activities are described within the document *Closure Report – RR Extension Release Site* dated February 2009 prepared by Environmental Plus, Inc.

LNAPL has been identified immediately above the water table, which is at a depth of approximately 30-feet below the ground surface. LNAPL continues to be observed at monitoring well locations to the south and east of the original release and excavation limits.

Investigation activities conducted at the Site include installation of groundwater monitoring wells and excavation during the time periods listed below:

- MW-1 through MW-5: Installed March 2008.
- MW-6 through MW-8: Installed June 2008.
- Excavation and Backfill: Initiated – November 10, 2008; Completed – January 12, 2009.
- MW-9 through MW-12: Installed June 2010.
- MW-13 through MW-16: Installed January 2011.

Ongoing monitoring and sampling of the Site wells listed above has been conducted on an approximate quarterly basis following installation. The historical monitoring data indicate the presence of LNAPL and dissolved-phase impacts in the area of the original release. Progressive installation of monitoring wells has delineated the area in which these impacts are observed.

Boring logs for the Site monitoring wells indicate that the subsurface geology is typical of unconsolidated fine-grained sand, silt, and clay sediments. This general characteristic has been utilized in evaluating the historic and current LNAPL behavior.

3. Groundwater Monitoring

This section describes the groundwater field and laboratory activities performed during the reporting period on December 3, 2013. Monitoring activities included Site-wide groundwater gauging, LNAPL measurements, and groundwater sampling. Figure 2 illustrates the groundwater monitoring network utilized to perform these activities at the Site.

3.1 Groundwater and LNAPL Elevation Monitoring

Groundwater and LNAPL 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 2013, groundwater levels were measured at sixteen Site 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 were later converted to elevation (feet above mean sea level [AMSL]). Measured groundwater levels and calculated groundwater elevation data are presented in Table 1 and a fourth quarter 2013 groundwater elevation contour map is illustrated on Figure 3. LNAPL levels, where detected by the IP, are also presented in Table 1.

Groundwater elevations ranged from 3,504.25 feet AMSL at monitoring well MW-6 to 3,504.98 feet AMSL at monitoring well MW-13. As illustrated on Figure 3, groundwater flow at the Site generally trends to the southeast with a gradient of approximately 0.0014 foot per foot between monitoring wells MW-8 and MW-11.

LNAPL was detected at the following locations, with measured thickness indicated in parenthesis:

- MW-3 (0.10-ft)
- MW-4 (0.12-ft)
- MW-5 (1.03-ft)
- MW-9 (1.06-ft)
- MW-10 (1.13-ft)

3.2 Groundwater Quality Monitoring

Subsequent to recording groundwater level measurements at each monitoring well, groundwater samples were collected for each of the eleven monitoring wells that did not contain measurable LNAPL.

During sampling, a minimum of three well casing volumes of groundwater were purged from each monitoring well prior to collecting groundwater samples. Groundwater samples were collected using dedicated polyethylene bailers, placed in clean laboratory supplied containers for the selected analytical methods, packed in an ice-filled cooler and maintained at approximately four degrees Celsius ($^{\circ}\text{C}$) for transportation to the laboratory. Groundwater samples were then shipped under chain-of-custody procedures to Accutest Laboratories (Accutest) in Wheat Ridge, 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 and chloride by USEPA Method 300.

Detections/observations which exceed the applicable remediation standard are summarized below:

- Benzene concentrations were in exceedance of New Mexico Water Quality Control Commission (NMWQCC) Standards at two sample locations, MW-1 and MW-2. The remaining nine sample locations exhibited BTEX concentrations below laboratory detection limits.
- LNAPL was detected at five locations as indicated in Section 3.1 above.

Figure 4 displays analytical results from the fourth quarter 2013 event as well as the third quarter 2013 analytical results. Table 2 presents fourth quarter 2013 monitoring data along with data collected during the previous 4 quarters. Historical analytical results up to and including the December 2013 event are contained in Appendix A. Laboratory analytical reports for the event are included as Appendix B.

Chloride was detected in all eleven of the sampled wells with concentrations ranging from 330 mg/L in MW-13 to 519 mg/L in MW-14. Chloride values in all of the wells exceeded the NMWQCC suggested guideline of 250 mg/L.

3.3 Data Quality Assurance / Quality Control

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. A trip blank, matrix spike/matrix spike duplicate (MS/MSD) and field duplicate sample were collected during the sampling event. The trip blank was fully in control, having no detection of targets.

The duplicate sample collected at MW-1 was out of compliance with QA/QC standards. The two samples collected from MW-1 returned results for benzene of 0.0155 mg/L and 0.0067 mg/L.

The overall QA/QC assessment of the data, based on the data review, indicate that both field precision and overall data precision and accuracy are acceptable.

4. Remediation Activities

A vacuum enhanced LNAPL recovery event was conducted during the reporting period on December 4th. In addition, a passive LNAPL collection bailer has been installed in MW-4.

4.1 Vacuum Enhanced LNAPL Recovery

Vacuum enhanced LNAPL recovery was performed at the Site monitoring wells with measurable LNAPL (MW-3, MW-4, MW-5, MW-9, and MW-10). During the eight hour event, vacuum was applied to each well for approximately 2 hours. A total of 55 barrels were recovered during the event. The recovered volume was transported to and disposed of at the Cooper Disposal Facility in Hobbs, New Mexico.

4.2 LNAPL Collection Bailer

A passive LNAPL collection bailer is installed at monitoring well MW-4. During the fourth quarter 2013 monitoring event, approximately 1 liter of LNAPL was recovered from the bailer. The LNAPL collection bailer was replaced within MW-4 at the level of the product/water interface.

5. Conclusions

Comparison of the fourth quarter 2013 monitoring data and historic information provides the following general observations:

The groundwater elevation beneath the Site has remained stable with minor seasonal and annual fluctuations since monitoring was initiated in 2008. There was no significant deviation from this trend during the reporting period.

Benzene concentrations in exceedance of NMWQCC standards persist in MW-1 and MW-2. The remaining 9 sample locations exhibited BTEX concentrations below laboratory detection limits during the fourth quarter 2013 suggesting the dissolved phase petroleum hydrocarbon plume is stagnant possibly due to attenuation, low permeability aquifer material, low hydraulic gradient, or a combination of these factors.

LNAPL persists in monitoring wells MW-3, MW-4, MW-5, MW-9 and MW-10.

6. Recommendations

Based on evaluation of data from the fourth quarter 2013 and historical Site observations and monitoring results, recommendations for future activities include:

- Continue quarterly groundwater monitoring and sampling at the monitoring locations illustrated on Figure 2.
- Continue assessment of the LNAPL bail-down and recovery tests conducted at the Site.
- Continue to monitor and recover LNAPL from the passive collection bailer installed at MW-4.
- Conduct quarterly vacuum enhanced recovery events at all 5 Site monitoring wells containing measurable LNAPL.

Tables

TABLE 1
FOURTH QUARTER 2013
SUMMARY OF GROUNDWATER ELEVATION DATA
RR-EXTENSION 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 (feet amsl)	Groundwater Elevation* (feet amsl)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-1	12/4/2012	29.75			39.05	3534.57	3504.82	0.00
MW-1	2/22/2013	29.62			39.05	3534.57	3504.95	0.13
MW-1	6/2/2013	29.60			39.05	3534.57	3504.97	0.02
MW-1	9/10/2013	29.89			39.05	3534.57	3504.68	-0.29
MW-1	12/3/2013	29.81			39.05	3534.57	3504.76	0.08
MW-2	12/4/2012	30.50			39.81	3535.18	3504.68	0.01
MW-2	2/22/2013	30.39			39.81	3535.18	3504.79	0.11
MW-2	6/2/2013	30.35			39.81	3535.18	3504.83	0.04
MW-2	9/10/2013	30.68			39.81	3535.18	3504.50	-0.33
MW-2	12/3/2013	30.57			39.81	3535.18	3504.61	0.11
MW-3*	12/4/2012	32.40	31.50	0.90		3536.57	3504.85	-0.02
MW-3*	2/22/2013	32.03	31.47	0.56		3536.57	3504.96	0.11
MW-3*	6/2/2013	31.83	31.50	0.33		3536.57	3504.99	0.03
MW-3*	9/10/2013	32.02	31.74	0.28		3536.57	3504.76	-0.23
MW-3*	12/3/2013	31.98	31.88	0.10		3537.57	3505.67	0.90
MW-4*	12/4/2012	31.60	30.62	0.98		3535.20	3504.34	0.09
MW-4*	2/22/2013	31.50	30.60	0.90		3535.20	3504.38	0.04
MW-4*	6/2/2013	31.12	30.54	0.58		3535.20	3504.52	0.14
MW-4*	9/10/2013	31.71	30.90	0.81		3535.20	3504.10	-0.42
MW-4*	12/3/2013	31.09	30.97	0.12		3536.20	3505.20	1.10
MW-5*	12/4/2012	32.31	31.18	1.13		3535.92	3504.46	-0.01
MW-5*	2/22/2013	31.98	31.14	0.84		3535.92	3504.57	0.11
MW-5*	6/2/2013	31.78	31.14	0.64		3535.92	3504.62	0.05
MW-5*	9/10/2013	32.35	31.37	0.98		3535.92	3504.31	-0.31
MW-5*	12/3/2013	32.42	31.39	1.03		3536.92	3505.27	0.97
MW-6	12/4/2012	31.81			40.35	3536.16	3504.35	-0.03
MW-6	2/22/2013	31.71			40.35	3536.16	3504.45	0.10
MW-6	6/2/2013	31.66			40.35	3536.16	3504.50	0.05
MW-6	9/10/2013	31.95			40.35	3536.16	3504.21	-0.29
MW-6	12/3/2013	31.91			40.35	3536.16	3504.25	0.04
MW-7	12/4/2012	32.52			40.25	3537.09	3504.57	0.01
MW-7	2/22/2013	32.41			40.25	3537.09	3504.68	0.11
MW-7	6/2/2013	32.37			40.25	3537.09	3504.72	0.04
MW-7	9/10/2013	32.67			40.25	3537.09	3504.42	-0.30
MW-7	12/3/2013	32.62			40.25	3537.09	3504.47	0.05
MW-8	12/4/2012	31.45			39.42	3536.41	3504.96	0.00
MW-8	2/22/2013	31.33			39.42	3536.41	3505.08	0.12
MW-8	6/2/2013	31.31			39.42	3536.41	3505.10	0.02
MW-8	9/10/2013	31.60			39.42	3536.41	3504.81	-0.29
MW-8	12/3/2013	31.52			39.42	3536.41	3504.89	0.08
MW-9*	12/4/2012	30.03	29.10	0.93		3534.20	3504.87	0.01
MW-9*	2/22/2013	29.83	29.02	0.81		3534.20	3504.98	0.11
MW-9*	6/2/2013	29.76	29.00	0.76		3534.20	3505.01	0.03
MW-9*	9/10/2013	30.28	29.26	1.02		3534.20	3504.69	-0.33
MW-9*	12/3/2013	30.33	29.27	1.06		3535.20	3505.67	0.98

TABLE 1
FOURTH QUARTER 2013
SUMMARY OF GROUNDWATER ELEVATION DATA
RR-EXTENSION 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 (feet amsl)	Groundwater Elevation* (feet amsl)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-10*	12/4/2012	29.80	29.54	0.26		3534.21	3504.61	0.00
MW-10*	2/22/2013	29.60	29.44	0.16		3534.21	3504.73	0.13
MW-10*	6/2/2013	29.53	29.40	0.13		3534.21	3504.78	0.05
MW-10*	9/10/2013	29.93	29.71	0.22		3534.21	3504.45	-0.33
MW-10*	12/3/2013	30.65	29.52	1.13		3535.21	3505.41	0.96
MW-11	12/4/2012	31.73			39.69	3536.19	3504.46	-0.02
MW-11	2/22/2013	31.62			39.69	3536.19	3504.57	0.11
MW-11	6/2/2013	31.56			39.69	3536.19	3504.63	0.06
MW-11	9/10/2013	31.91			39.69	3536.19	3504.28	-0.35
MW-11	12/3/2013	31.83			39.69	3536.19	3504.36	0.08
MW-12	12/4/2012	30.00			38.56	3534.47	3504.47	-0.03
MW-12	2/22/2013	29.88			38.56	3534.47	3504.59	0.12
MW-12	6/2/2013	29.82			38.56	3534.47	3504.65	0.06
MW-12	9/10/2013	30.16			38.56	3534.47	3504.31	-0.34
MW-12	12/3/2013	30.09			38.56	3534.47	3504.38	0.07
MW-13	12/4/2012	31.03			39.31	3536.08	3505.05	0.00
MW-13	2/22/2013	29.94			39.31	3536.08	3506.14	1.09
MW-13	6/2/2013	30.90			39.31	3536.08	3505.18	-0.96
MW-13	9/10/2013	31.20			39.31	3536.08	3504.88	-0.30
MW-13	12/3/2013	31.10			39.31	3536.08	3504.98	0.10
MW-14	12/4/2012	30.18			42.05	3534.96	3504.78	-0.01
MW-14	2/22/2013	30.10			42.05	3534.96	3504.86	0.08
MW-14	6/2/2013	30.02			42.05	3534.96	3504.94	0.08
MW-14	9/10/2013	30.35			42.05	3534.96	3504.61	-0.33
MW-14	12/3/2013	30.27			42.05	3534.96	3504.69	0.08
MW-15	12/4/2012	30.40			36.55	3534.90	3504.50	0.00
MW-15	2/22/2013	30.29			36.55	3534.90	3504.61	0.11
MW-15	6/2/2013	30.23			36.55	3534.90	3504.67	0.06
MW-15	9/10/2013	30.57			36.55	3534.90	3504.33	-0.34
MW-15	12/3/2013	30.51			36.55	3534.90	3504.39	0.06
MW-16	12/4/2012	29.29			42.91	3533.68	3504.39	-0.04
MW-16	2/22/2013	29.15			42.91	3533.68	3504.53	0.14
MW-16	6/2/2013	29.01			42.91	3533.68	3504.67	0.14
MW-16	9/10/2013	29.43			42.91	3533.68	3504.25	-0.42
MW-16	12/3/2013	29.36			42.91	3533.68	3504.32	0.07
Average change in groundwater elevation since the previous monitoring event								0.07

Notes:

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

2- Total depths were collected and recorded during the fourth quarter 2013 monitoring event (with the exception of wells that contained LNAPL).

3- 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. Wells containing LNAPL were not used to calculate the average change in groundwater elevation.

Data presented for well locations includes previous four sampling events, when available. Historic groundwater elevation data for these locations may be found in Appendix B.

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

amsl - feet above mean sea level.

TOC - top of casing

* For wells that contained LNAPL, groundwater elevation was corrected for product thickness using the following calculation:

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

LNAPL density was assumed to be approximately 0.75 grams per cubic centimeter

TABLE 2
FOURTH QUARTER 2013
SUMMARY OF BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
RR-EXTENSION 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	12/4/2012	0.0194	<0.002	0.0024	<0.003	445	Duplicate Sample Collected
MW-1	2/22/2013	0.0063	<0.002	0.00066	<0.003	474	Duplicate Sample Collected
MW-1	6/2/2013	0.0313	<0.002	0.0028	<0.003	451	Duplicate Sample Collected
MW-1	9/10/2013	0.0092	<0.002	0.0016	<0.003	400	Duplicate Sample Collected
MW-1	12/3/2013	0.0155	<0.002	0.00075	<0.003	458	Duplicate Sample Collected
MW-2	12/4/2012	1.26	0.115	0.0854	0.116	385	
MW-2	2/22/2013	4.53 ⁽³⁾	0.474	0.298	0.482	386	
MW-2	6/2/2013	1.25	0.0582	0.0644	0.103	406	
MW-2	9/10/2013	4.47	0.374	0.226	0.375	339	
MW-2	12/3/2013	0.9	0.0569	0.0442	0.0671	414	
MW-3	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-6	12/4/2012	<0.001	<0.002	<0.002	<0.003	358	
MW-6	2/22/2013	<0.001	<0.002	<0.002	<0.003	385	
MW-6	6/2/2013	<0.001	<0.002	<0.002	<0.003	372	
MW-6	9/10/2013	<0.001	<0.002	<0.002	<0.003	367	
MW-6	12/3/2013	<0.001	<0.002	<0.002	<0.003	373	
MW-7	12/4/2012	<0.001	<0.002	<0.002	<0.003	334	
MW-7	2/22/2013	0.00059	<0.002	<0.002	<0.003	363	
MW-7	6/2/2013	<0.001	<0.002	<0.002	<0.003	361	
MW-7	9/10/2013	<0.001	<0.002	<0.002	<0.003	332	
MW-7	12/3/2013	<0.001	<0.002	<0.002	<0.003	350	
MW-8	12/4/2012	<0.001	<0.002	<0.002	<0.003	500	
MW-8	2/22/2013	0.00048	<0.002	<0.002	<0.003	530	
MW-8	6/2/2013	<0.001	<0.002	<0.002	<0.003	524	
MW-8	9/10/2013	<0.001	<0.002	<0.002	<0.003	489	
MW-8	12/3/2013	<0.001	<0.002	<0.002	<0.003	508	
MW-9	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	

TABLE 2
FOURTH QUARTER 2013
SUMMARY OF BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
RR-EXTENSION 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-11	12/4/2012	<0.001	<0.002	<0.002	<0.003	382	
MW-11	2/22/2013	0.0004	<0.002	<0.002	<0.003	419	
MW-11	6/2/2013	<0.001	<0.002	<0.002	<0.003	424	
MW-11	9/10/2013	<0.001	<0.002	<0.002	<0.003	394	
MW-11	12/3/2013	<0.001	<0.002	<0.002	<0.003	416	
MW-12	12/4/2012	<0.001	<0.002	<0.002	<0.003	469	
MW-12	2/22/2013	0.00041	<0.002	<0.002	<0.003	484	
MW-12	6/2/2013	<0.001	<0.002	<0.002	<0.003	461	
MW-12	9/10/2013	<0.001	<0.002	<0.002	<0.003	428	
MW-12	12/3/2013	<0.001	<0.002	<0.002	0.0031	412	
MW-13	12/4/2012	<0.001	<0.002	<0.002	<0.003	317	
MW-13	2/22/2013	0.00073	<0.002	<0.002	<0.003	337	
MW-13	6/2/2013	<0.001	<0.002	<0.002	<0.003	333	
MW-13	9/10/2013	<0.001	<0.002	<0.002	<0.003	311	
MW-13	12/3/2013	<0.001	<0.002	<0.002	<0.003	330	
MW-14	12/4/2012	<0.001	<0.002	<0.002	<0.003	544	
MW-14	2/22/2013	0.00034	<0.002	<0.002	<0.003	553	
MW-14	6/2/2013	<0.001	<0.002	<0.002	<0.003	538	
MW-14	9/10/2013	<0.001	<0.002	<0.002	<0.003	486	
MW-14	12/3/2013	<0.001	<0.002	<0.002	<0.003	519	
MW-15	12/4/2012	<0.001	<0.002	<0.002	<0.003	313	
MW-15	2/22/2013	0.00034	<0.002	<0.002	<0.003	333	
MW-15	6/2/2013	<0.001	<0.002	<0.002	<0.003	324	
MW-15	9/10/2013	<0.001	<0.002	<0.002	<0.003	331	
MW-15	12/3/2013	<0.001	<0.002	<0.002	<0.003	365	
MW-16	12/4/2012	<0.001	<0.002	<0.002	<0.003	339	
MW-16	2/22/2013	<0.001	<0.002	<0.002	<0.003	358	
MW-16	6/2/2013	<0.001	<0.002	<0.002	<0.003	364	
MW-16	9/10/2013	<0.001	<0.002	<0.002	<0.003	359	
MW-16	12/3/2013	<0.001	<0.002	<0.002	<0.003	394	

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 all well locations includes previous four sampling events, when available. Historic groundwater analytical results for these locations may be found in Appendix A.

Benzene concentration result from second quarter 2013 was from the second analytical run, as indicated in the laboratory report.

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 enforceably 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

NM = Not measured.

mg/L = milligrams per liter.

Figures



DATE:
January 2014
DESIGNED BY:
J. Barker
DRAWN BY:
D. Arnold

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

RR - EXTENSION PIPELINE RELEASE

SITE LOCATION

Figure
1



DATE:
JANUARY 2014

DESIGNED BY:
J. Barker

DRAWN BY:
D. Arnold



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

RR-EXTENSION PIPELINE RELEASE

SITE MAP

Figure
2



DATE: JANUARY 2014
 DESIGNED BY: J. Dawe
 DRAWN BY: D. Arnold

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

RR-EXTENSION PIPELINE RELEASE
 Fourth Quarter 2013 Groundwater Monitoring
 Summary Report

GROUNDWATER ELEVATION
 CONTOUR MAP
 (DECEMBER 3, 2013)

Figure
3

Legend

- Monitoring Well
- (1.06) Measured LNAPL Thickness

MW-1		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	0.0092	0.0155
Toluene	<0.002	<0.002
Ethylbenzene	0.0016	0.00075
Total Xylenes	<0.003	<0.003
Chlorides	400	458

MW-8		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003
Chlorides	489	508

MW-13		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003
Chlorides	311	330

MW-7		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003
Chlorides	332	350

MW-2		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	4.47	0.9
Toluene	0.374	0.0569
Ethylbenzene	0.226	0.0442
Total Xylenes	0.375	0.0671
Chlorides	339	414

MW-14		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003
Chlorides	486	519

MW-15		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003
Chlorides	331	365

MW-16		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003
Chlorides	359	394

MW-12		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	0.0031
Chlorides	428	412

MW-11		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003
Chlorides	394	416

MW-6		
Compound	9/10/2013 (mg/L)	12/3/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.002	<0.002
Ethylbenzene	<0.002	<0.002
Total Xylenes	<0.003	<0.003
Chlorides	367	373

MW-9
(1.06)

MW-3
(0.10)

MW-5
(1.03)

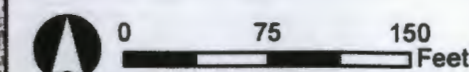
MW-4
(0.12)

MW-10
(1.13)

Notes:

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

LNAPL - Light Non-Aqueous Phase Liquid



DATE:
JANUARY 2014
DESIGNED BY:
J. Barker
DRAWN BY:
D. Arnold



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

RR-EXTENSION PIPELINE RELEASE Fourth Quarter 2013 Groundwater Monitoring Summary Report

ANALYTICAL RESULTS
MAP

Figure
4

Appendix A

Historical Analytical Results

**APPENDIX A
HISTORICAL DATA
SUMMARY OF BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
RR-EXTENSION 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	3/2008	1.4	0.0395	0.948	0.128		
MW-1	6/2008	2.75	0.054	2.17	0.232		
MW-1	9/2008	1.1	0.0375	0.845	0.131	507	
MW-1	12/2008	0.869	0.0385	0.581	0.0709	447	
MW-1	3/2009	0.288	0.0149	0.107	0.0395	432	
MW-1	5/2009	1.38	0.0705	0.175	0.065	462	
MW-1	9/2009	0.267	0.024	0.0332	0.0078	422	
MW-1	12/2009	0.819	0.088	0.0267	0.012	363	
MW-1	3/2010	0.726	0.0879	0.107	0.0278	800	
MW-1	6/2010	0.339	0.0539	0.0329	0.0079	510	
MW-1	9/2010	1.99	0.0951	0.084	0.0219	442	
MW-1	12/2010	0.708	0.0796	0.0099	0.0047	448	
MW-1	3/30/2011	0.0241	<0.001	0.0136	0.0055	457	
MW-1	6/22/2011	0.0735	<0.01	0.0293	<0.02	467	
MW-1	9/17/2011	0.144	0.038	0.0069	0.0087	472	Duplicate sample collected
MW-1	12/8/2011	0.076	0.002	0.0227	0.0024	462	Duplicate sample collected
MW-1	3/10/2012	0.029	<0.002	0.0072	<0.004	497	Duplicate sample collected
MW-1	6/5/2012	0.069	0.0014	0.0112	<0.003	470	Duplicate sample collected
MW-1	9/9/2012	0.0216	<0.002	0.0029	<0.003	465	Duplicate sample collected
MW-1	12/4/2012	0.0194	<0.002	0.0024	<0.003	445	Duplicate sample collected
MW-1	2/22/2013	0.0063	<0.002	0.00066	<0.003	474	Duplicate sample collected
MW-1	6/2/2013	0.0313	<0.002	0.0028	<0.003	451	Duplicate sample collected
MW-1	9/10/2013	0.0092	<0.002	0.0016	<0.003	400	Duplicate sample collected
MW-1	12/3/2013	0.0067	<0.002	0.00075	<0.003	458	Duplicate Sample Collected
MW-2	3/2008	8.98	0.135	6.58	0.765		
MW-2	6/2008	24.3	0.319	18.5	2.58		
MW-2	9/2008	21.7	0.443	9.79	4.25	109	
MW-2	12/2008	Not Sampled: Remediation Activities					
MW-2	3/2009	23.7	0.538	2.34	1.25	114	
MW-2	5/2009	32.7	0.791	1.31	1.69	109	
MW-2	9/2009	29.3	0.491	0.771	0.371	139	
MW-2	12/2009	28.5	0.57	0.347	0.177	199	
MW-2	3/2010	23.8	0.529	0.71	<1.2	700	
MW-2	6/2010	22.9	0.485	0.39	0.128	233	
MW-2	9/2010	17	0.329	0.257	<0.8	263	
MW-2	12/2010	16.9	0.458	0.399	0.0926	278	
MW-2	3/30/2011	16.6	0.165	0.403	0.116	320	
MW-2	6/22/2011	9.21	0.0231	0.377	<0.4	370	
MW-2	9/17/2011	4.07	0.415	0.329	0.203	375	
MW-2	12/8/2011	1.5	0.0436	0.33	0.0254	392	
MW-2	3/10/2012	1.04	<0.04	0.134	<0.08	444	
MW-2	6/5/2012	1.25	0.106	0.158	0.0885	346	
MW-2	9/9/2012	1.53	0.203	0.138	0.14	393	
MW-2	12/4/2012	1.26	0.115	0.0854	0.116	385	
MW-2	2/22/2013	4.53	0.474	0.298	0.482	386	
MW-2	6/2/2013	1.25	0.0582	0.0644	0.103	406	
MW-2	9/10/2013	4.47	0.374	0.226	0.375	339	
MW-2	12/3/2013	0.9	0.0569	0.0442	0.0671	414	

**APPENDIX A
HISTORICAL DATA
SUMMARY OF BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
RR-EXTENSION 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	3/2008	0.759	0.0355	0.849	0.0786		
MW-3	6/2008	6.18	0.287	9.46	1.23		
MW-3	9/2008	2.45	0.145	3.62	114	363	
MW-3	12/2008	0.761	0.0492	0.938	0.158	301	
MW-3	3/2009	4.03	0.18	2.83	0.61	273	
MW-3	5/2009	14.7	0.808	12.6	1.64	313	
MW-3	9/2009	5.5	0.271	1.09	<0.006	363	
MW-3	12/2009	13.1	1.2	9.08	2.87	398	
MW-3	3/2010	8.43	1.01	9.14	2.71	440	
MW-3	6/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	9/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	12/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	3/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	6/22/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	9/17/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	12/8/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	3/10/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	6/5/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	9/9/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-3	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	3/2008	0.0102	<0.002	0.0093	0.0023		
MW-4	6/2008	0.0439	0.0068	0.0256	0.0147		
MW-4	9/2008	0.514	0.0203	0.443	0.125	318	
MW-4	12/2008	1.32	0.0812	1.35	0.239	281	
MW-4	3/2009	3.61	0.164	3.4	0.831	229	
MW-4	5/2009	4.7	0.428	2.94	1.03	226	
MW-4	9/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	3/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	9/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	3/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/22/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	9/17/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/8/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	3/10/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/5/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	9/9/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	

**APPENDIX A
HISTORICAL DATA
SUMMARY OF BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
RR-EXTENSION 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-5	3/2008	0.0019	<0.002	0.0012	<0.006		
MW-5	6/2008	0.0037	<0.002	0.0037	<0.006		
MW-5	9/2008	0.0038	<0.002	0.0037	<0.006	373	
MW-5	12/2008	0.0031	<0.002	0.004	<0.006	318	
MW-5	3/2009	0.0067	<0.002	0.0074	<0.006	288	
MW-5	5/2009	0.0064	<0.002	0.0089	<0.006	363	
MW-5	9/2009	0.0082	0.00066	0.0132	<0.006	358	
MW-5	12/2009	0.0096	0.0013	0.0155	0.0021	313	
MW-5	3/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	6/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	9/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	12/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	3/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	6/22/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	9/17/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	12/8/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	3/10/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	6/5/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	9/9/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-6	6/2008	<0.002	<0.002	<0.002	<0.006		
MW-6	9/2008	<0.002	<0.002	<0.002	<0.006	363	
MW-6	12/2008	<0.002	<0.002	<0.002	<0.006	325	
MW-6	3/2009	<0.002	<0.002	<0.002	<0.006	298	
MW-6	5/2009	<0.002	<0.002	<0.002	<0.006	308	
MW-6	9/2009	<0.002	<0.002	<0.002	<0.006	296	
MW-6	12/2009	<0.002	<0.002	<0.002	<0.006	393	
MW-6	3/2010	<0.002	<0.002	<0.002	<0.006	700	
MW-6	6/2010	<0.001	<0.002	<0.002	<0.002	402	
MW-6	9/2010	<0.001	<0.002	<0.002	<0.004	337	
MW-6	12/2010	<0.001	<0.002	<0.002	<0.004	359	
MW-6	3/30/2011	<0.001	<0.002	<0.002	<0.002	386	
MW-6	6/22/2011	<0.001	<0.002	<0.002	<0.004	376	
MW-6	9/17/2011	<0.001	<0.002	<0.002	<0.004	383	
MW-6	12/8/2011	<0.0005	<0.001	<0.001	<0.001	372	
MW-6	3/10/2012	<0.001	<0.002	<0.002	<0.004	406	
MW-6	6/5/2012	<0.001	<0.002	<0.002	<0.003	381	
MW-6	9/9/2012	<0.001	<0.002	<0.002	<0.003	377	
MW-6	12/4/2012	<0.001	<0.002	<0.002	<0.003	358	
MW-6	2/22/2013	<0.001	<0.002	<0.002	<0.003	385	
MW-6	6/2/2013	<0.001	<0.002	<0.002	<0.003	372	
MW-6	9/10/2013	<0.001	<0.002	<0.002	<0.003	367	
MW-6	12/3/2013	<0.001	<0.002	<0.002	<0.003	373	

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HISTORICAL DATA
SUMMARY OF BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
RR-EXTENSION 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	6/2008	<0.002	<0.002	<0.002	<0.006		
MW-7	9/2008	<0.002	<0.002	<0.002	<0.006	378	
MW-7	12/2008	<0.002	<0.002	<0.002	<0.006	348	
MW-7	3/2009	<0.002	<0.002	<0.002	<0.006	283	
MW-7	5/2009	<0.002	<0.002	<0.002	<0.006	298	
MW-7	9/2009	<0.002	<0.002	<0.002	<0.006	273	
MW-7	12/2009	<0.002	<0.002	<0.002	<0.006	328	
MW-7	3/2010	<0.002	<0.002	<0.002	<0.006	750	
MW-7	6/2010	0.0005	<0.002	<0.002	<0.006	385	
MW-7	9/2010	0.00042	<0.002	<0.002	<0.004	326	
MW-7	12/2010	<0.002	<0.002	<0.002	<0.006	345	
MW-7	3/30/2011	<0.001	<0.002	<0.002	<0.002	382	
MW-7	6/22/2011	<0.001	<0.002	<0.002	<0.004	390	
MW-7	9/17/2011	<0.001	<0.002	<0.002	<0.004	374	
MW-7	12/8/2011	<0.0005	<0.001	<0.001	<0.001	376	
MW-7	3/10/2012	<0.001	<0.002	<0.002	<0.004	392	
MW-7	6/5/2012	<0.001	<0.002	<0.002	<0.003	381	
MW-7	9/9/2012	<0.001	<0.002	<0.002	<0.003	362	
MW-7	12/4/2012	<0.001	<0.002	<0.002	<0.003	334	
MW-7	2/22/2013	0.00059	<0.002	<0.002	<0.003	363	
MW-7	6/2/2013	<0.001	<0.002	<0.002	<0.003	361	
MW-7	9/10/2013	<0.001	<0.002	<0.002	<0.003	332	
MW-7	12/3/2013	<0.001	<0.002	<0.002	<0.003	350	
MW-8	6/2008	0.0384	0.00049	0.0255	0.0016		
MW-8	9/2008	0.0301	<0.002	0.0161	0.002	512	
MW-8	12/2008	0.00233	<0.002	0.011	<0.006	393	
MW-8	3/2009	0.0218	<0.002	0.0066	<0.006	472	
MW-8	5/2009	0.0098	<0.002	0.0049	<0.006	450	
MW-8	9/2009	<0.002	<0.002	<0.002	<0.006	477	
MW-8	12/2009	<0.002	<0.002	<0.002	<0.006	472	
MW-8	3/2010	<0.002	<0.002	<0.002	<0.006	800	
MW-8	6/2010	<0.001	<0.002	<0.002	<0.002	553	
MW-8	9/2010	<0.001	<0.002	<0.002	<0.004	486	
MW-8	12/2010	<0.001	<0.002	<0.002	<0.004	533	
MW-8	3/30/2011	<0.001	<0.002	<0.002	<0.002	529	
MW-8	6/22/2011	<0.001	<0.002	<0.002	<0.004	524	
MW-8	9/17/2011	<0.001	<0.002	<0.002	<0.004	507	
MW-8	12/8/2011	<0.0005	<0.001	<0.001	<0.001	521	
MW-8	3/10/2012	<0.001	<0.002	<0.002	<0.004	528	
MW-8	6/5/2012	<0.001	<0.002	<0.002	<0.003	527	
MW-8	9/9/2012	<0.001	<0.002	<0.002	<0.003	509	
MW-8	12/4/2012	<0.001	<0.002	<0.002	<0.003	500	
MW-8	2/22/2013	0.00048	<0.002	<0.002	<0.003	530	
MW-8	6/2/2013	<0.001	<0.002	<0.002	<0.003	524	
MW-8	9/10/2013	<0.001	<0.002	<0.002	<0.003	489	
MW-8	12/3/2013	<0.001	<0.002	<0.002	<0.003	508	

APPENDIX A
HISTORICAL DATA
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RR-EXTENSION 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-9	6/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	9/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	12/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	3/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	6/22/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	9/17/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	12/8/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	3/10/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	6/5/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	9/9/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-9	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	6-2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	9-2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	12-2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	3/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	6/22/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	9/17/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	12/8/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	3/10/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	6/5/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	9/9/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	12/4/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	2/22/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	6/2/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	9/10/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-10	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-11	6-2010	<0.001	<0.002	<0.002	<0.004	407	
MW-11	9-2010	<0.001	<0.002	<0.002	<0.004	365	
MW-11	12-2010	<0.001	<0.002	<0.002	<0.004	383	
MW-11	3/30/2011	<0.001	<0.002	<0.002	<0.002	406	
MW-11	6/22/2011	<0.001	<0.002	<0.002	<0.004	405	
MW-11	9/17/2011	<0.001	<0.002	<0.002	<0.004	390	
MW-11	12/8/2011	<0.0005	<0.001	<0.001	<0.001	399	
MW-11	3/10/2012	<0.001	<0.002	<0.002	<0.004	403	
MW-11	6/5/2012	<0.001	<0.002	<0.002	<0.003	417	
MW-11	9/9/2012	<0.001	<0.002	<0.002	<0.003	399	
MW-11	12/4/2012	<0.001	<0.002	<0.002	<0.003	382	
MW-11	2/22/2013	0.0004	<0.002	<0.002	<0.003	419	
MW-11	6/2/2013	<0.001	<0.002	<0.002	<0.003	424	
MW-11	9/10/2013	<0.001	<0.002	<0.002	<0.003	394	
MW-11	12/3/2013	<0.001	<0.002	<0.002	<0.003	416	

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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-12	6-2010	<0.001	<0.002	<0.002	<0.004	514	
MW-12	9-2010	<0.001	<0.002	<0.002	<0.004	464	
MW-12	12-2010	<0.001	<0.002	<0.002	<0.004	501	
MW-12	3/30/2011	<0.001	<0.002	<0.002	<0.002	498	
MW-12	6/22/2011	<0.001	<0.002	<0.002	<0.004	497	
MW-12	9/17/2011	<0.001	<0.002	<0.002	<0.004	493	
MW-12	12/8/2011	<0.0005	<0.001	<0.001	<0.001	493	
MW-12	3/10/2012	<0.001	<0.002	<0.002	<0.004	513	
MW-12	6/5/2012	<0.001	<0.002	<0.002	<0.003	507	
MW-12	9/9/2012	<0.001	<0.002	<0.002	<0.003	487	
MW-12	12/4/2012	<0.001	<0.002	<0.002	<0.003	469	
MW-12	2/22/2013	0.00041	<0.002	<0.002	<0.003	484	
MW-12	6/2/2013	<0.001	<0.002	<0.002	<0.003	461	
MW-12	9/10/2013	<0.001	<0.002	<0.002	<0.003	428	
MW-12	12/3/2013	<0.001	<0.002	<0.002	0.0031	412	
MW-13	3/30/2011	<0.001	<0.002	<0.002	<0.002	326	
MW-13	6/22/2011	<0.001	<0.002	<0.002	<0.004	340	
MW-13	9/17/2011	<0.001	<0.002	<0.002	<0.004	317	
MW-13	12/8/2011	<0.0005	<0.001	<0.001	<0.001	328	
MW-13	3/10/2012	<0.001	<0.002	<0.002	<0.004	331	
MW-13	6/5/2012	<0.001	<0.002	<0.002	<0.003	335	
MW-13	9/9/2012	<0.001	<0.002	<0.002	<0.003	321	
MW-13	12/4/2012	<0.001	<0.002	<0.002	<0.003	317	
MW-13	2/22/2013	0.00073	<0.002	<0.002	<0.003	337	
MW-13	6/2/2013	<0.001	<0.002	<0.002	<0.003	333	
MW-13	9/10/2013	<0.001	<0.002	<0.002	<0.003	311	
MW-13	12/3/2013	<0.001	<0.002	<0.002	<0.003	330	
MW-14	3/30/2011	<0.001	<0.002	<0.002	<0.002	520	
MW-14	6/22/2011	<0.001	<0.002	<0.002	<0.004	494	
MW-14	9/17/2011	<0.001	<0.002	<0.002	<0.004	478	
MW-14	12/8/2011	<0.0005	<0.001	<0.001	<0.001	521	
MW-14	3/10/2012	<0.001	<0.002	<0.002	<0.004	528	
MW-14	6/5/2012	<0.001	<0.002	<0.002	<0.003	513	
MW-14	9/9/2012	<0.001	<0.002	<0.002	<0.003	536	
MW-14	12/4/2012	<0.001	<0.002	<0.002	<0.003	544	
MW-14	2/22/2013	0.00034	<0.002	<0.002	<0.003	553	
MW-14	6/2/2013	<0.001	<0.002	<0.002	<0.003	538	
MW-14	9/10/2013	<0.001	<0.002	<0.002	<0.003	486	
MW-14	12/3/2013	<0.001	<0.002	<0.002	<0.003	519	

**APPENDIX A
HISTORICAL DATA
SUMMARY OF BTEX AND CHLORIDE CONCENTRATIONS IN GROUNDWATER
RR-EXTENSION 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-15	3/30/2011	<0.001	<0.002	<0.002	<0.002	303	
MW-15	6/22/2011	<0.001	<0.002	<0.002	<0.004	297	
MW-15	9/17/2011	<0.001	<0.002	<0.002	<0.004	294	
MW-15	12/8/2011	<0.0005	<0.001	<0.001	<0.001	288	
MW-15	3/10/2012	<0.001	<0.002	<0.002	<0.004	308	
MW-15	6/5/2012	<0.001	<0.002	<0.002	<0.003	276	
MW-15	9/9/2012	<0.001	<0.002	<0.002	<0.003	318	
MW-15	12/4/2012	<0.001	<0.002	<0.002	<0.003	313	
MW-15	2/22/2013	0.00034	<0.002	<0.002	<0.003	333	
MW-15	6/2/2013	<0.001	<0.002	<0.002	<0.003	324	
MW-15	9/10/2013	<0.001	<0.002	<0.002	<0.003	331	
MW-15	12/3/2013	<0.001	<0.002	<0.002	<0.003	365	
MW-16	3/30/2011	<0.001	<0.002	<0.002	<0.002	295	
MW-16	6/22/2011	<0.001	<0.002	<0.002	<0.004	292	
MW-16	9/17/2011	<0.001	<0.002	<0.002	<0.004	295	
MW-16	12/8/2011	<0.0005	<0.001	<0.001	<0.001	313	
MW-16	3/10/2012	<0.001	<0.002	<0.002	<0.004	322	
MW-16	6/5/2012	<0.001	<0.002	<0.002	<0.003	334	
MW-16	9/9/2012	<0.001	<0.002	<0.002	<0.003	334	
MW-16	12/4/2012	<0.001	<0.002	<0.002	<0.003	339	
MW-16	2/22/2013	<0.001	<0.002	<0.002	<0.003	358	
MW-16	6/2/2013	<0.001	<0.002	<0.002	<0.003	364	
MW-16	9/10/2013	<0.001	<0.002	<0.002	<0.003	359	
MW-16	12/3/2013	<0.001	<0.002	<0.002	<0.003	394	

Notes:

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

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 enforceably 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

NM = Not measured.

mg/L = milligrams per liter.

Appendix B
Laboratory Analytical Reports



12/19/13

Technical Report for

DCP Midstream, LP

TASMCOA:DCP RR EXT

RC-GN00 Project-390761103

Accutest Job Number: D53310

Sampling Date: 12/03/13

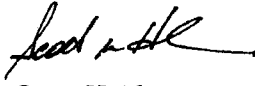
Report to:

Tasman Geoscienceec LLC
6899 Pecos Street Unit C
Denver, CO 80221
swweathers@dcpmidstream.com; cwasko@tasman-geo.com
ATTN: Christine Wasko

Total number of pages in report: 48



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: Shea Greiner 303-425-6021

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

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Test results relate only to samples analyzed.

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Sample Summary

DCP Midstream, LP

Job No: D53310

TASMCOA:DCP RR EXT

Project No: RC-GN00 Project-390761103

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
D53310-1	12/03/13	10:30 CW	12/11/13	AQ Ground Water	MW-1
D53310-2	12/03/13	10:45 CW	12/11/13	AQ Ground Water	MW-2
D53310-3	12/03/13	09:30 CW	12/11/13	AQ Ground Water	MW-6
D53310-4	12/03/13	09:50 CW	12/11/13	AQ Ground Water	MW-7
D53310-5	12/03/13	10:20 CW	12/11/13	AQ Ground Water	MW-8
D53310-6	12/03/13	09:20 CW	12/11/13	AQ Ground Water	MW-11
D53310-7	12/03/13	09:05 CW	12/11/13	AQ Ground Water	MW-12
D53310-8	12/03/13	10:05 CW	12/11/13	AQ Ground Water	MW-13
D53310-8D	12/03/13	10:05 CW	12/11/13	AQ Water Dup/MSD	MW-13
D53310-8M	12/03/13	10:05 CW	12/11/13	AQ Water Matrix Spike	MW-13
D53310-9	12/03/13	09:00 CW	12/11/13	AQ Ground Water	MW-14
D53310-10	12/03/13	08:50 CW	12/11/13	AQ Ground Water	MW-15
D53310-11	12/03/13	08:35 CW	12/11/13	AQ Ground Water	MW-16



Sample Summary

(continued)

DCP Midstream, LP

Job No: D53310

TASMCOA:DCP RR EXT

Project No: RC-GN00 Project-390761103

Sample Number	Collected Date	Time By	Received	Matrix Code Type	Client Sample ID
D53310-12	12/03/13	08:30 CW	12/11/13	AQ Trip Blank Water	TRIP BLANK
D53310-13	12/03/13	00:00 CW	12/11/13	AQ Water	DUP

CASE NARRATIVE / CONFORMANCE SUMMARY**Client:** DCP Midstream, LP**Job No** D53310**Site:** TASMCOA:DCP RR EXT**Report Date** 12/19/2013 2:04:05 P

On 12/11/2013, 12 sample(s), 1 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 1 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D53310 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:** V6V1249

- ✓ All samples were analyzed within the recommended method holding time.
- ✓ All method blanks for this batch meet method specific criteria.
- ✓ Sample(s) D53310-8MS, D53310-8MSD were used as the QC samples indicated.

Matrix: AQ**Batch ID:** V6V1250

- ✓ All samples were analyzed within the recommended method holding time.
- ✓ All method blanks for this batch meet method specific criteria.
- ✓ Sample(s) D53348-4MS, D53348-4MSD were used as the QC samples indicated.
- ✓ D53348-4MS, -4MSD: 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:** GP11606

- ✓ All samples were prepared and analyzed within the recommended method holding time.
- ✓ All method blanks for this batch meet method specific criteria.
- ✓ Sample(s) D53310-1MS were used as the QC samples for the Chloride analysis.

Matrix: AQ**Batch ID:** GP11616

- ✓ Sample(s) D53523-1MS, D53523-1MSD were used as the QC samples for the Chloride analysis.

Matrix: AQ**Batch ID:** GP11625

- ✓ All samples were prepared and analyzed within the recommended method holding time.
- ✓ All method blanks for this batch meet method specific criteria.
- ✓ Sample(s) D53310-10MS, D53310-10MSD 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

Page 1 of 2

Job Number: D53310
Account: DCP Midstream, LP
Project: TASMCOA:DCP RR EXT
Collected: 12/03/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
D53310-1	MW-1					
Benzene		0.0067	0.0010	0.00025	mg/l	SW846 8260B
Ethylbenzene		0.00075 J	0.0020	0.00025	mg/l	SW846 8260B
Chloride		458	10		mg/l	EPA 300.0/SW846 9056
D53310-2	MW-2					
Benzene		0.900	0.0050	0.0013	mg/l	SW846 8260B
Toluene		0.0569	0.010	0.0050	mg/l	SW846 8260B
Ethylbenzene		0.0442	0.010	0.0013	mg/l	SW846 8260B
Xylene (total)		0.0671	0.015	0.010	mg/l	SW846 8260B
Chloride		414	10		mg/l	EPA 300.0/SW846 9056
D53310-3	MW-6					
Chloride		373	10		mg/l	EPA 300.0/SW846 9056
D53310-4	MW-7					
Chloride		350	10		mg/l	EPA 300.0/SW846 9056
D53310-5	MW-8					
Chloride		508	10		mg/l	EPA 300.0/SW846 9056
D53310-6	MW-11					
Chloride		416	10		mg/l	EPA 300.0/SW846 9056
D53310-7	MW-12					
Xylene (total)		0.0031	0.0030	0.0020	mg/l	SW846 8260B
Chloride		412	10		mg/l	EPA 300.0/SW846 9056
D53310-8	MW-13					
Chloride		330	10		mg/l	EPA 300.0/SW846 9056
D53310-9	MW-14					
Chloride		519	13		mg/l	EPA 300.0/SW846 9056

Summary of Hits

Page 2 of 2

Job Number: D53310
Account: DCP Midstream, LP
Project: TASMCOA:DCP RR EXT
Collected: 12/03/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
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D53310-10 **MW-15**

Chloride	365	10		mg/l	EPA 300.0/SW846 9056
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D53310-11 **MW-16**

Chloride	394	10		mg/l	EPA 300.0/SW846 9056
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D53310-12 **TRIP BLANK**

No hits reported in this sample.

D53310-13 **DUP**

Benzene	0.0155	0.0010	0.00025	mg/l	SW846 8260B
Ethylbenzene	0.0016 J	0.0020	0.00025	mg/l	SW846 8260B
Chloride	467	10		mg/l	EPA 300.0/SW846 9056



4

Sample Results

Report of Analysis

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-1	Date Sampled:	12/03/13
Lab Sample ID:	D53310-1	Date Received:	12/11/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22479.D	1	12/11/13	BR	n/a	n/a	V6V1249
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	0.0067	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.00075	0.0020	0.00025	mg/l	J
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		62-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	101%		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

Page 1 of 1

Client Sample ID: MW-1
Lab Sample ID: D53310-1
Matrix: AQ - Ground Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.1
4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	458	10	mg/l	20	12/16/13 18:48	GH	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: MW-2	Date Sampled: 12/03/13
Lab Sample ID: D53310-2	Date Received: 12/11/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: TASMCOA:DCP RR EXT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22515.D	5	12/12/13	BR	n/a	n/a	V6V1250
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.900	0.0050	0.0013	mg/l	
108-88-3	Toluene	0.0569	0.010	0.0050	mg/l	
100-41-4	Ethylbenzene	0.0442	0.010	0.0013	mg/l	
1330-20-7	Xylene (total)	0.0671	0.015	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		62-130%
2037-26-5	Toluene-D8	107%		70-130%
460-00-4	4-Bromofluorobenzene	102%		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

Page 1 of 1

Client Sample ID: MW-2	Date Sampled: 12/03/13
Lab Sample ID: D53310-2	Date Received: 12/11/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: TASMCOA:DCP RR EXT	

4.2
4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	414	10	mg/l	20	12/16/13 19:12	GH	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-6	Date Sampled:	12/03/13
Lab Sample ID:	D53310-3	Date Received:	12/11/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22481.D	1	12/11/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%		62-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	101%		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

Page 1 of 1

Client Sample ID: MW-6
Lab Sample ID: D53310-3
Matrix: AQ - Ground Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.3

4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	373	10	mg/l	20	12/16/13 17:23	GH	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: MW-7
Lab Sample ID: D53310-4
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22482.D	1	12/11/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		62-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	99%		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

Page 1 of 1

Client Sample ID: MW-7
Lab Sample ID: D53310-4
Matrix: AQ - Ground Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.4

4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	350	10	mg/l	20	12/16/13 17:35	GH	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: MW-8
Lab Sample ID: D53310-5
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22483.D	1	12/11/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		62-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	100%		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

Page 1 of 1

Client Sample ID: MW-8
Lab Sample ID: D53310-5
Matrix: AQ - Ground Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.5
4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	508	10	mg/l	20	12/16/13 17:47	GH	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-11	Date Sampled:	12/03/13
Lab Sample ID:	D53310-6	Date Received:	12/11/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22484.D	1	12/11/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	103%		62-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	100%		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

Page 1 of 1

Client Sample ID: MW-11
Lab Sample ID: D53310-6
Matrix: AQ - Ground Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.6
4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	416	10	mg/l	20	12/16/13 18:00	GH	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-12	Date Sampled:	12/03/13
Lab Sample ID:	D53310-7	Date Received:	12/11/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP RR EXT		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22485.D	1	12/11/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	0.0031	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	109%		62-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	100%		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

Page 1 of 1

Client Sample ID: MW-12
Lab Sample ID: D53310-7
Matrix: AQ - Ground Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.7
4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	412	10	mg/l	20	12/17/13 18:56	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: MW-13
Lab Sample ID: D53310-8
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22486.D	1	12/11/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%		62-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	101%		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

Page 1 of 1

Client Sample ID: MW-13
Lab Sample ID: D53310-8
Matrix: AQ - Ground Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.8
4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	330	10	mg/l	20	12/17/13 20:21	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: MW-14
Lab Sample ID: D53310-9
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22489.D	1	12/12/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	106%		62-130%
2037-26-5	Toluene-D8	106%		70-130%
460-00-4	4-Bromofluorobenzene	101%		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

Page 1 of 1

Client Sample ID:	MW-14	Date Sampled:	12/03/13
Lab Sample ID:	D53310-9	Date Received:	12/11/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP RR EXT		

4.9

4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	519	13	mg/l	25	12/17/13 20:33	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: MW-15	Date Sampled: 12/03/13
Lab Sample ID: D53310-10	Date Received: 12/11/13
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: TASMCOA:DCP RR EXT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22490.D	1	12/12/13	BR	n/a	n/a	V6V1249
Run #2							

Run #	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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	105%		62-130%
2037-26-5	Toluene-D8	103%		70-130%
460-00-4	4-Bromofluorobenzene	98%		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

Page 1 of 1

Client Sample ID:	MW-15	Date Sampled:	12/03/13
Lab Sample ID:	D53310-10	Date Received:	12/11/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP RR EXT		

4.10
4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	365	10	mg/l	20	12/18/13 17:17	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: MW-16
Lab Sample ID: D53310-11
Matrix: AQ - Ground Water
Method: SW846 8260B
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22491.D	1	12/12/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	104%		62-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	98%		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

Page 1 of 1

Client Sample ID: MW-16
Lab Sample ID: D53310-11
Matrix: AQ - Ground Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.11

4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	394	10	mg/l	20	12/18/13 17:54	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID: TRIP BLANK
Lab Sample ID: D53310-12
Matrix: AQ - Trip Blank Water
Method: SW846 8260B
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22492.D	1	12/12/13	BR	n/a	n/a	V6V1249
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	0.00025	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	111%		62-130%
2037-26-5	Toluene-D8	104%		70-130%
460-00-4	4-Bromofluorobenzene	99%		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

Page 1 of 1

Client Sample ID: DUP	Date Sampled: 12/03/13
Lab Sample ID: D53310-13	Date Received: 12/11/13
Matrix: AQ - Water	Percent Solids: n/a
Method: SW846 8260B	
Project: TASMCOA:DCP RR EXT	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V22493.D	1	12/12/13	BR	n/a	n/a	V6V1249
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	0.0155	0.0010	0.00025	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	0.0016	0.0020	0.00025	mg/l	J
1330-20-7	Xylene (total)	ND	0.0030	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
17060-07-0	1,2-Dichloroethane-D4	110%		62-130%
2037-26-5	Toluene-D8	105%		70-130%
460-00-4	4-Bromofluorobenzene	100%		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

Page 1 of 1

Client Sample ID: DUP
Lab Sample ID: D53310-13
Matrix: AQ - Water
Project: TASMCOA:DCP RR EXT

Date Sampled: 12/03/13
Date Received: 12/11/13
Percent Solids: n/a

4.13

4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	467	10	mg/l	20	12/18/13 18:30	SK	EPA 300.0/SW846 9056

RL = Reporting Limit

Misc. Forms



Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

PAGE 2 OF 2

4036 Youngfield Street, Wheat Ridge, CO 80033
TEL: 303-415-6021 FAX: 303-415-6854
www.acctest.com

FSD-EX Tracking #		Bottle Order Control #	
Account Quote #		Account Job # D53310	
Client / Reporting Information		Project Information	
Company Name Tasman Geosciences		Project Name: DCP RR EXT	
Street Address 8890 Pecos Street Unit C		Billing Information (if different from Report to)	
City Denver CO 80221		Company Name DCP Midstream	
Project Contact Christine Wasko cwasko@tasman-geo.com		Street Address PO Box 4870	
Phone # 720-408-8791		City Portland OR 97208-4870	
Sample(s) Name(s) Christine Wasko, Don Bagdas		Attention: Steve Weathers SWWeathers@dcpmidstream.com	
Field ID / Point of Collection		Collection	
MECHON Vial #		Date	
Time		Sampled by	
Matrix		# of bottles	
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905</			



Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D53310 Client: TASMAN Immediate Client Services Action Required: No
Date / Time Received: 12/11/2013 10:30:00 A No. Coolers: 1 Client Service Action Required at Login: No
Project: DCP Airbill #'s: HD

Cooler Security

Y or N

1. Custody Seals Present: ☒ ☐ 3. COC Present: ☒ ☐
2. Custody Seals Intact: ☒ ☐ 4. Smpl Dates/Time OK: ☒ ☐

Cooler Temperature

Y or N

1. Temp criteria achieved: ☒ ☐
2. Cooler temp verification: Infrared gun
3. Cooler media: Ice (bag)

Quality Control Preservation

Y or N N/A

1. Trip Blank present / cooler: ☒ ☐
2. Trip Blank listed on COC: ☒ ☐
3. Samples preserved properly: ☒ ☐
4. VOCs headspace free: ☒ ☐ ☐

Sample Integrity - Documentation

Y or N

1. Sample labels present on bottles: ☒ ☐
2. Container labeling complete: ☒ ☐
3. Sample container label / COC agree: ☒ ☐

Sample Integrity - Condition

Y or N

1. Sample recvd within HT: ☒ ☐
2. All containers accounted for: ☒ ☐
3. Condition of sample: Intact

Sample Integrity - Instructions

Y or N N/A

1. Analysis requested is clear: ☒ ☐
2. Bottles received for unspecified tests: ☐ ☒
3. Sufficient volume rec'd for analysis: ☒ ☐
4. Compositing instructions clear: ☐ ☐ ☒
5. Filtering instructions clear: ☐ ☐ ☒

Comments

Accutest Laboratories
V: (303) 425-6021

4036 Youngfield Street
F: (303) 425-6854

Wheat Ridge, CO
www.accutest.com

D53310: Chain of Custody
Page 3 of 3

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

Page 1 of 1

Job Number: D53310
Account: DCPM CODN DCP Midstream, LP
Project: TASMCOA:DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1249-MB	6V22477.D	1	12/11/13	BR	n/a	n/a	V6V1249

The QC reported here applies to the following samples:

Method: SW846 8260B

D53310-1, D53310-3, D53310-4, D53310-5, D53310-6, D53310-7, D53310-8, D53310-9, D53310-10, D53310-11, D53310-12, D53310-13

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	0.25	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	104%	62-130%
2037-26-5	Toluene-D8	107%	70-130%
460-00-4	4-Bromofluorobenzene	100%	69-130%

Method Blank Summary

Page 1 of 1

Job Number: D53310
Account: DCPM CODN DCP Midstream, LP
Project: TASMCOA:DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1250-MB	6V22500.D	1	12/12/13	BR	n/a	n/a	V6V1250

The QC reported here applies to the following samples:

Method: SW846 8260B

D53310-2

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	0.25	ug/l	
108-88-3	Toluene	ND	2.0	1.0	ug/l	
1330-20-7	Xylene (total)	ND	3.0	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
17060-07-0	1,2-Dichloroethane-D4	105%	62-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	101%	69-130%

Blank Spike Summary

Page 1 of 1

Job Number: D53310
Account: DCPMCO DN DCP Midstream, LP
Project: TASMCOA:DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1249-BS	6V22478.D	1	12/11/13	BR	n/a	n/a	V6V1249

The QC reported here applies to the following samples:

Method: SW846 8260B

D53310-1, D53310-3, D53310-4, D53310-5, D53310-6, D53310-7, D53310-8, D53310-9, D53310-10, D53310-11, D53310-12, D53310-13

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	51.3	103	70-130
100-41-4	Ethylbenzene	50	51.4	103	70-130
108-88-3	Toluene	50	52.5	105	70-130
1330-20-7	Xylene (total)	150	151	101	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	109%	62-130%
2037-26-5	Toluene-D8	104%	70-130%
460-00-4	4-Bromofluorobenzene	103%	69-130%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: D53310
Account: DCPM CODN DCP Midstream, LP
Project: TASMCOA:DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V1250-BS	6V22501.D	1	12/12/13	BR	n/a	n/a	V6V1250

The QC reported here applies to the following samples:

Method: SW846 8260B

D53310-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	50.7	101	70-130
100-41-4	Ethylbenzene	50	49.3	99	70-130
108-88-3	Toluene	50	49.9	100	70-130
1330-20-7	Xylene (total)	150	147	98	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	107%	62-130%
2037-26-5	Toluene-D8	103%	70-130%
460-00-4	4-Bromofluorobenzene	103%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D53310
Account: DCPMCDN DCP Midstream, LP
Project: TASMCOA:DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D53310-8MS	6V22487.D	1	12/11/13	BR	n/a	n/a	V6V1249
D53310-8MSD	6V22488.D	1	12/11/13	BR	n/a	n/a	V6V1249
D53310-8	6V22486.D	1	12/11/13	BR	n/a	n/a	V6V1249

The QC reported here applies to the following samples:

Method: SW846 8260B

D53310-1, D53310-3, D53310-4, D53310-5, D53310-6, D53310-7, D53310-8, D53310-9, D53310-10, D53310-11, D53310-12, D53310-13

CAS No.	Compound	D53310-8 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	50	51.1	102	50.9	102	0	62-130/30
100-41-4	Ethylbenzene	ND	50	49.9	100	49.4	99	1	63-130/30
108-88-3	Toluene	ND	50	50.2	100	49.9	100	1	60-130/30
1330-20-7	Xylene (total)	ND	150	148	99	148	99	0	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D53310-8	Limits
17060-07-0	1,2-Dichloroethane-D4	111%	110%	105%	62-130%
2037-26-5	Toluene-D8	102%	103%	105%	70-130%
460-00-4	4-Bromofluorobenzene	102%	103%	101%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D53310
Account: DCPMCDN DCP Midstream, LP
Project: TASMCOA:DCP RR EXT

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D53348-4MS ^a	6V22511.D	50	12/12/13	BR	n/a	n/a	V6V1250
D53348-4MSD ^a	6V22512.D	50	12/12/13	BR	n/a	n/a	V6V1250
D53348-4 ^a	6V22510.D	50	12/12/13	BR	n/a	n/a	V6V1250

The QC reported here applies to the following samples:

Method: SW846 8260B

D53310-2

CAS No.	Compound	D53348-4 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	4740		2500	7780	122	7740	120	1	62-130/30
100-41-4	Ethylbenzene	1390		2500	4130	110	4080	108	1	63-130/30
108-88-3	Toluene	ND		2500	2440	98	2420	97	1	60-130/30
1330-20-7	Xylene (total)	399		7500	7680	97	7580	96	1	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D53348-4	Limits
17060-07-0	1,2-Dichloroethane-D4	108%	106%	106%	62-130%
2037-26-5	Toluene-D8	101%	104%	105%	70-130%
460-00-4	4-Bromofluorobenzene	104%	103%	102%	69-130%

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

* = Outside of Control Limits.

General Chemistry

QC Data Summaries

7

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: D53310
Account: DCPMCOA - DCP Midstream, LP
Project: TASMCOA:DCP RR EXT

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP11625/GN23083	0.050	0.0	mg/l	0.5	0.498	99.6	90-110%
Chloride	GP11606/GN23051	0.50	0.31	mg/l	5	4.77	95.4	90-110%
Chloride	GP11625/GN23083	0.50	0.31	mg/l	5	4.81	96.2	90-110%
Nitrogen, Nitrate	GP11625/GN23083	0.010	0.0	mg/l	0.1	0.108	108.0	90-110%
Nitrogen, Nitrite	GP11625/GN23083	0.0040	0.0	mg/l	0.05	0.0519	103.8	90-110%
Phosphate, Ortho	GP11625/GN23083	0.065	0.0	mg/l	0.5	0.513	102.6	90-110%
Sulfate	GP11606/GN23051	0.50	0.0	mg/l	5	4.92	98.4	90-110%
Sulfate	GP11625/GN23083	0.50	0.0	mg/l	5	4.92	98.4	90-110%

Associated Samples:

Batch GP11606: D53310-1, D53310-2, D53310-3, D53310-4, D53310-5, D53310-6

Batch GP11625: D53310-10, D53310-11, D53310-13

(*) Outside of QC limits

7.1

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MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D53310
Account: DCPMCOA - DCP Midstream, LP
Project: TASMOA:DCP RR EXT

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP11625/GN23083	D53310-10	mg/l	2.3	10	12.4	101.0	80-120%
Chloride	GP11606/GN23051	D53310-1	mg/l	458	100	559	101.0	80-120%
Chloride	GP11616/GN23055	D53523-1	mg/l	157	100	258	101.0	80-120%
Chloride	GP11625/GN23083	D53310-10	mg/l	365	100	466	101.0	80-120%
Nitrogen, Nitrate	GP11616/GN23055	D53523-1	mg/l	5.8	2	7.7	95.0	80-120%
Nitrogen, Nitrate	GP11625/GN23083	D53310-10	mg/l	0.22	2	2.3	104.0	80-120%
Nitrogen, Nitrite	GP11616/GN23055	D53523-1	mg/l	0.0	1	1.0	100.0	80-120%
Nitrogen, Nitrite	GP11625/GN23083	D53310-10	mg/l	0.0	1	1.2	120.0	80-120%
Phosphate, Ortho	GP11625/GN23083	D53310-10	mg/l	0.0	10	12.4	124.0(a)	80-120%
Sulfate	GP11606/GN23051	D53310-1	mg/l	285	100	391	106.0	80-120%
Sulfate	GP11616/GN23055	D53523-1	mg/l	233	100	333	100.0	80-120%
Sulfate	GP11625/GN23083	D53310-10	mg/l	207	100	310	103.0	80-120%

Associated Samples:

Batch GP11606: D53310-1, D53310-2, D53310-3, D53310-4, D53310-5, D53310-6

Batch GP11616: D53310-7, D53310-8, D53310-9

Batch GP11625: D53310-10, D53310-11, D53310-13

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

7.2
7

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D53310
Account: DCPMCOA - DCP Midstream, LP
Project: TASMCOA:DCP RR EXT

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP11625/GN23083	D53310-10	mg/l	2.3	10	12.5	0.8	20%
Chloride	GP11616/GN23055	D53523-1	mg/l	157	100	257	0.4	20%
Chloride	GP11625/GN23083	D53310-10	mg/l	365	100	464	0.4	20%
Nitrogen, Nitrate	GP11616/GN23055	D53523-1	mg/l	5.8	2	7.7	0.0	20%
Nitrogen, Nitrate	GP11625/GN23083	D53310-10	mg/l	0.22	2	2.2	4.4	20%
Nitrogen, Nitrite	GP11616/GN23055	D53523-1	mg/l	0.0	1	0.96	4.1	20%
Nitrogen, Nitrite	GP11625/GN23083	D53310-10	mg/l	0.0	1	1.2	0.0	20%
Phosphate, Ortho	GP11625/GN23083	D53310-10	mg/l	0.0	10	12.2	1.6	20%
Sulfate	GP11616/GN23055	D53523-1	mg/l	233	100	333	0.0	20%
Sulfate	GP11625/GN23083	D53310-10	mg/l	207	100	310	0.0	20%

Associated Samples:

Batch GP11616: D53310-7, D53310-8, D53310-9

Batch GP11625: D53310-10, D53310-11, D53310-13

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

7.3

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