

1RP-1728

1st Quarter 2013 Annual Groundwater Monitoring Results

DATE:
06.12.13



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

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2013 JUN 13 A 11: 15

June 12, 2013

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

**RE: 1st Quarter 2013 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 1st Quarter 2013 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

A handwritten signature in black ink, appearing to read "Stephen Weathers", followed by a horizontal line.

Stephen Weathers, PG
Principal Environmental Specialist

cc: Geoffrey Leking, Hobbs District (Copy on CD)
Environmental Files

First Quarter 2013 Groundwater Monitoring and Activities 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

April 30, 2013

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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 first quarter 2013, 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 were later converted to elevation (feet above mean sea level [AMSL]). LNAPL levels, where indicated by the IP, were also recorded.

Groundwater elevation measurements collected during the reporting period as well as historical elevations are presented in Table 1, and a first quarter 2013 groundwater elevation contour map is illustrated on Figure 3. Groundwater elevations ranged from 3,704.29 feet AMSL at monitoring well MW-8 to 3,708.29 feet AMSL at monitoring well MW-4. As illustrated on Figure 3, groundwater flow at the Site generally trends to the southeast with a gradient of approximately 0.0053 foot per foot between monitoring wells MW-4 and MW-8.

LNAPL was not detected at any monitoring well location during the first quarter 2013 monitoring event.

3.2 Groundwater Quality Monitoring

Groundwater levels and total well depth were measured at each of the Site monitoring wells prior to collecting groundwater samples. 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 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 (4) degrees Celsius ($^{\circ}\text{C}$) for transportation. Groundwater samples were then 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 xylene (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 in addition to concentrations from the previous 4 quarters. Laboratory analytical reports for the event are included in Appendix A and historical analytical results up to and including the February 2013 event are contained in Appendix B. Analytical results are summarized on Figure 4. During the first quarter 2013, BTEX concentrations were below New Mexico Water Quality Control Commission Groundwater Standards at the seven Site monitoring well locations. Chloride was detected in all seven of the monitoring wells with concentrations ranging from 290 milligrams per liter (mg/L) in MW-8 to 2,390 mg/L in MW-2.

3.3 Data Quality Assurance / Quality Control

A trip blank, matrix spike or matrix spike duplicate (MS/MSD) and field duplicate (MW-2) 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. The trip blank was fully in control, having no detections of targets.

The duplicate sample collected at MW-2 was in compliance with the QA/QC standard. MW-2 and duplicate samples both returned BTEX concentrations below laboratory detection limits.

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

4.1 Vacuum Enhanced LNAPL Recovery

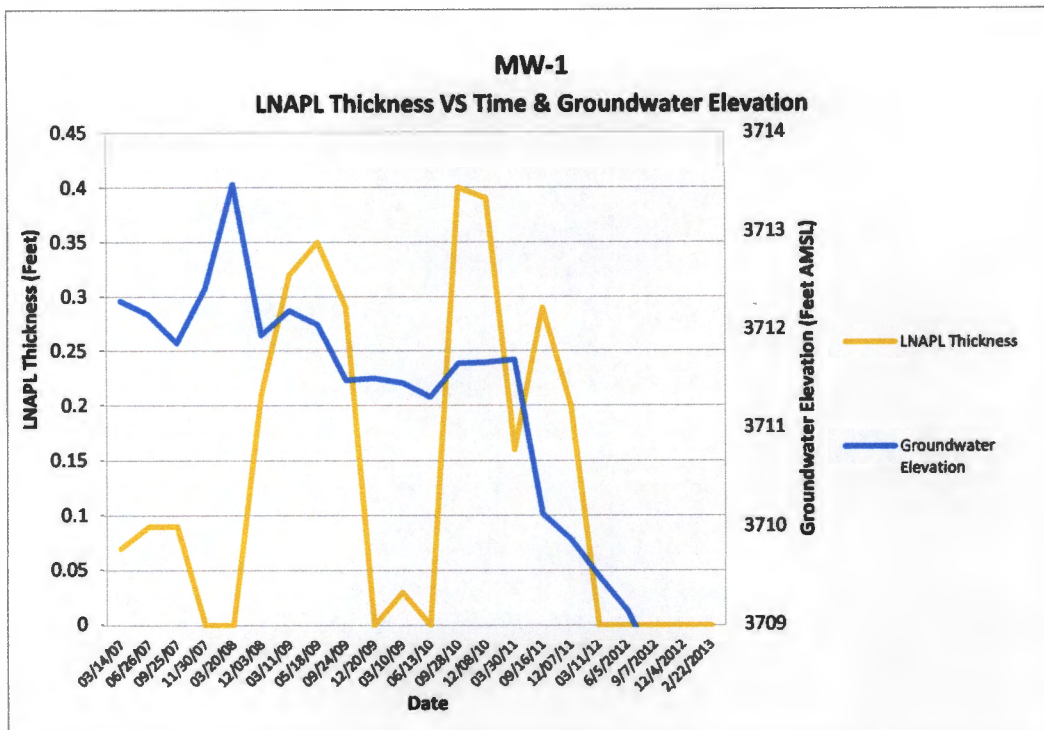
Due to the absence of LNAPL at the monitoring well locations during the first quarter 2013, vacuum enhanced LNAPL recovery was not performed.

4.2 LNAPL Collection Bailer

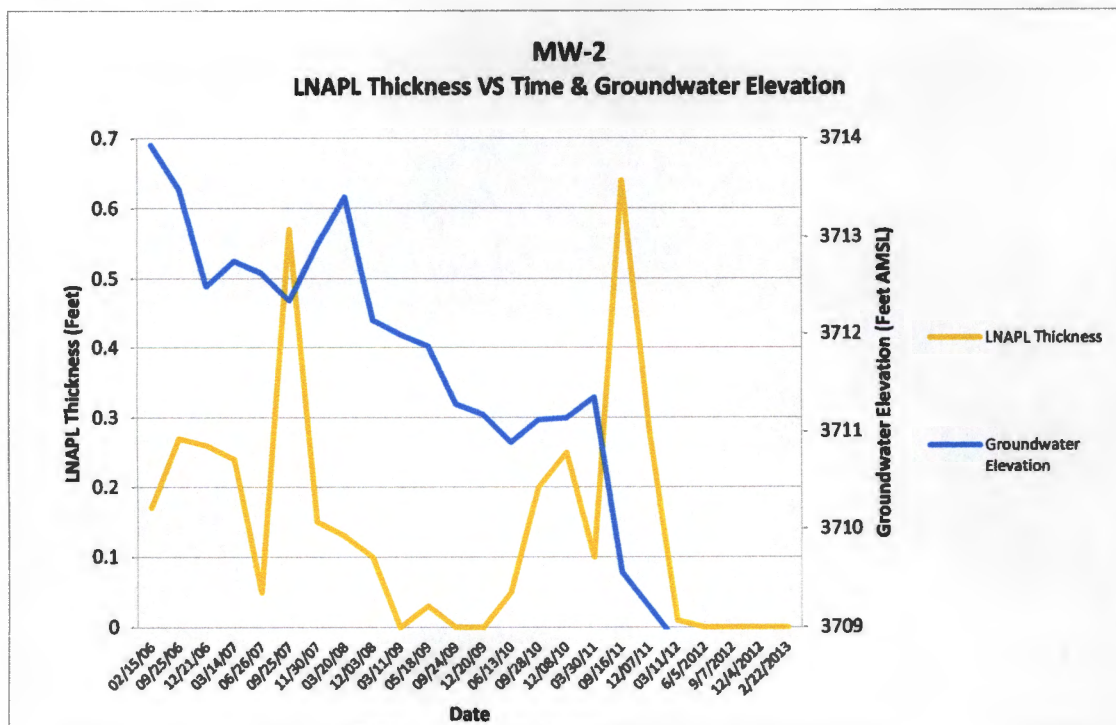
A passive LNAPL collection bailer is installed at monitoring well MW-2. During the first quarter 2013 groundwater monitoring event, less than 0.01 ft of measurable LNAPL was recorded in the passive collection bailer. A groundwater sample was collected after removal of the passive collection bailer and the LNAPL collection bailer was reset in the monitoring well at the level of groundwater elevation.

4.3 LNAPL Trends

As illustrated in the graphs below, the LNAPL thickness in MW-1 and MW-2 does not appear to exhibit any seasonal fluctuation trends or a relationship to groundwater levels.



Groundwater elevations have exhibited a steady decrease in elevation over time, whereas product thickness has fluctuated sporadically over time with no apparent correlation to groundwater elevation.



5. Conclusions

Although dissolved phase hydrocarbon concentrations did not exceed the regulatory limits in any of the sampled monitoring wells during the first quarter 2013, a sheen persists in MW-2. The dedicated LNAPL recovery bailer and the three vacuum recovery events conducted during 2012 have been successful in removing LNAPL thickness at MW-2, consequently permitting sample collection for the previous four quarters.

BTEX concentrations observed in MW-1 and MW-2 remain below regulatory standards indicating that quarterly vacuum enhanced LNAPL recovery events were successful in removing residual dissolved phase petroleum hydrocarbon impacts in groundwater.

Additional recovery events at MW-1 and MW-2 may no longer be warranted as the vacuum recovery events have been successful in decreasing benzene concentrations.

Ongoing quarterly groundwater sampling will provide for continued monitoring of Site conditions, BTEX, and LNAPL trends.

6. Recommendations

Based on evaluation of first quarter 2013 and historical Site observations and monitoring results, recommendations for future activities include:

- Continue groundwater sampling at the monitoring locations illustrated on Figure 2;
- Continue to monitor the effects of vacuum enhanced recovery of LNAPL at monitoring well MW-2, and;
- Evaluate the continued use of the LNAPL recovery bailer at MW-2.

Tables

TABLE 1
FIRST QUARTER 2013
SUMMARY OF GROUNDWATER ELEVATION DATA
J-4-2 PIPELINE RELEASE
LEA COUNTY, NEW MEXICO

Location	Date	Depth to Ground	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	3/11/2012	30.95			43.05	3740.45	3709.50	-0.37
MW-1	6/5/2012	31.30			43.05	3740.45	3709.15	-0.35
MW-1	9/7/2012	31.87			43.05	3740.45	3708.58	-0.57
MW-1	12/4/2012	32.15			43.05	3740.45	3708.30	-0.28
MW-1	2/22/2013	32.26			43.05	3740.45	3708.19	-0.11
MW-2*	3/11/2012	31.79	31.78	0.01	43.30	3740.62	3708.84	-0.36
MW-2	6/5/2012	32.05			43.30	3740.62	3708.57	-0.27
MW-2	9/7/2012	32.70			43.30	3740.62	3707.92	-0.65
MW-2	12/4/2012	33.11			43.30	3740.62	3707.51	-0.41
MW-2	2/22/2013	33.30			43.30	3740.62	3707.32	-0.19
MW-3	3/11/2012	30.25			35.20	3739.39	3709.14	-0.15
MW-3	6/5/2012	30.54			35.20	3739.39	3708.85	-0.29
MW-3	9/7/2012	31.16			35.20	3739.39	3708.23	-0.62
MW-3	12/4/2012	31.44			35.20	3739.39	3707.95	-0.28
MW-3	2/22/2013	31.54			35.20	3739.39	3707.85	-0.10
MW-4	3/11/2012	30.57			37.95	3740.24	3709.67	-0.11
MW-4	6/5/2012	30.92			37.95	3740.24	3709.32	-0.35
MW-4	9/7/2012	31.56			37.95	3740.24	3708.68	-0.64
MW-4	12/4/2012	31.83			37.95	3740.24	3708.41	-0.27
MW-4	2/22/2013	31.95			37.95	3740.24	3708.29	-0.12
MW-6	3/11/2012	31.03			34.31	3739.96	3708.93	-0.94
MW-6	6/5/2012	31.41			34.31	3739.96	3708.55	-0.38
MW-6	9/7/2012	NM ⁽⁵⁾			34.31	3739.96	NM	NM
MW-6	12/7/2012	32.16			34.31	3739.96	3707.80	-0.75
MW-6	2/22/2013	32.28			34.31	3739.96	3707.68	-0.12
MW-7	3/11/2012	34.15			40.41	3740.73	3706.58	-0.11
MW-7	6/5/2012	34.51			40.41	3740.73	3706.22	-0.36
MW-7	9/7/2012	34.95			40.41	3740.73	3705.78	-0.44
MW-7	12/4/2012	35.20			40.41	3740.73	3705.53	-0.25
MW-7	2/22/2013	35.35			40.41	3740.73	3705.38	-0.15
MW-8	3/11/2012	32.00			38.58	3737.32	3705.32	-0.17
MW-8	6/5/2012	32.30			38.58	3737.32	3705.02	-0.30
MW-8	9/7/2012	32.61			38.58	3737.32	3704.71	-0.31
MW-8	12/4/2012	32.89			38.58	3737.32	3704.43	-0.28
MW-8	2/22/2013	33.03			38.58	3737.32	3704.29	-0.14
Average change in groundwater elevation since the previous monitoring event								-0.13

Notes:

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

2- Total depths were collected and recorded during the first quarter 2013 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 calculated by subtracting the measurement collected during the previous monitoring even from the measurement collected during the most recent monitoring event.

5- MW-6 was not measured due to an obstruction of sediment fines at 31.15 feet bgs.

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

Data presented for all other 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

* 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
FIRST QUARTER 2013
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	3/11/2012	<0.001	<0.002	<0.002	<0.004	2970	
MW-1	6/5/2012	<0.001	<0.002	<0.002	<0.003	2480	
MW-1	9/7/2012	<0.001	<0.002	<0.002	<0.003	2060	
MW-1	12/4/2012	<0.001	<0.002	<0.002	<0.003	2240	Duplicate sample collected
MW-1	2/22/2103	0.00027	<0.002	<0.002	<0.003	2110	
MW-2	3/11/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	6/5/2012	0.00043	<0.002	0.0024	0.0069	2450	
MW-2	9/7/2012	<0.001	<0.002	<0.002	<0.003	2280	
MW-2	12/4/2012	<0.001	<0.002	0.0008	0.0028	2440	
MW-2	2/22/2103	<0.001	<0.002	<0.002	<0.003	2390	Duplicate sample collected
MW-3	3/11/2012	<0.001	<0.002	<0.002	<0.004	2210	
MW-3	6/5/2012	<0.001	<0.002	<0.002	<0.003	2080	
MW-3	9/7/2012	<0.001	<0.002	<0.002	<0.003	2180	
MW-3	12/4/2012	<0.001	<0.002	<0.002	<0.003	2170	
MW-3	2/22/2103	<0.001	<0.002	<0.002	<0.003	2050	
MW-4	3/11/2012	<0.001	<0.002	<0.002	<0.004	1960	Duplicate sample collected
MW-4	6/5/2012	<0.001	<0.002	<0.002	<0.003	1790	Duplicate sample collected
MW-4	9/7/2012	<0.001	<0.002	<0.002	<0.003	1910	Duplicate sample collected
MW-4	12/4/2012	<0.001	<0.002	<0.002	<0.003	1940	
MW-4	2/22/2103	<0.001	<0.002	<0.002	<0.003	1900	
MW-6	3/11/2012	<0.001	<0.002	<0.002	<0.004	522	
MW-6	6/5/2012	<0.001	<0.002	<0.002	<0.003	532	
MW-6 ⁽⁴⁾	9/7/2012	NS	NS	NS	NS	NS	
MW-6	12/7/2012	<0.001	<0.002	<0.002	<0.003	578	
MW-6	2/22/2103	<0.001	<0.002	<0.002	<0.003	536	
MW-7	3/11/2012	<0.001	<0.002	<0.002	<0.004	1220	
MW-7	6/5/2012	<0.001	<0.002	<0.002	<0.003	1120	
MW-7	9/7/2012	<0.001	<0.002	<0.002	<0.003	1140	
MW-7	12/4/2012	<0.001	<0.002	<0.002	<0.003	1120	
MW-7	2/22/2103	<0.001	<0.002	<0.002	<0.003	1090	
MW-8	3/11/2012	<0.001	<0.002	<0.002	<0.004	345	
MW-8	6/5/2012	<0.001	<0.002	<0.002	<0.003	316	
MW-8	9/7/2012	<0.001	<0.002	<0.002	<0.003	308	
MW-8	12/4/2012	<0.001	<0.002	<0.002	<0.003	304	
MW-8	2/22/2013	<0.001	<0.002	<0.002	<0.003	290	

Notes:

- 1.) The environmental cleanup standards for water that are applicable to this site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.
- 2.) Monitoring well location MW-5 was not installed due geologic refusal that was encountered during drilling activities.
- 3.) Data presented for all other well locations includes previous four sampling events, when available. Historic groundwater analytical results for these locations may be found in Appendix B.
- 4.) MW-6 was not sampled during the third quarter 2012 due to an obstruction in the well.

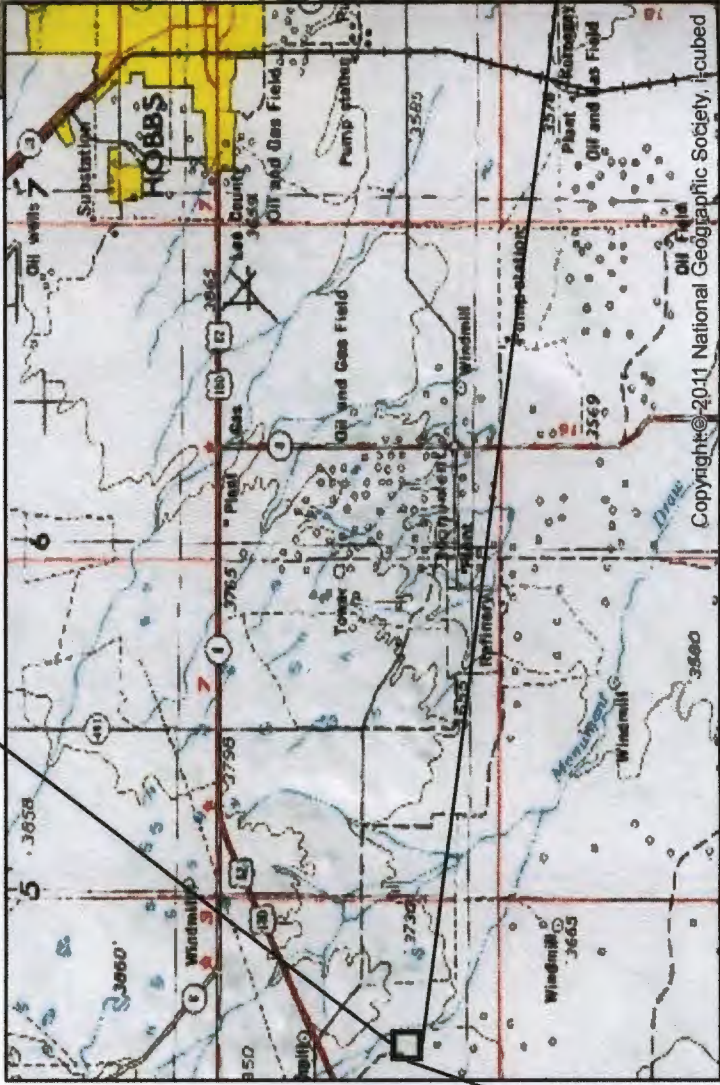
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

* 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.

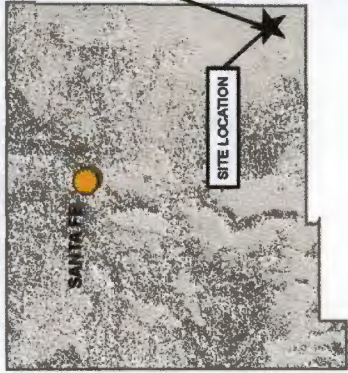
LNAPL = Light Non-Aqueous Phase Liquid

mg/L = milligrams per liter.

Figures



NEW MEXICO



DESIGNED BY: C. Wasko

DRAWN BY: J. Clonts

SHEET CHK'D BY: _____

CROSS CHK'D BY: _____

APPROVED BY: _____

APPROVED BY: _____

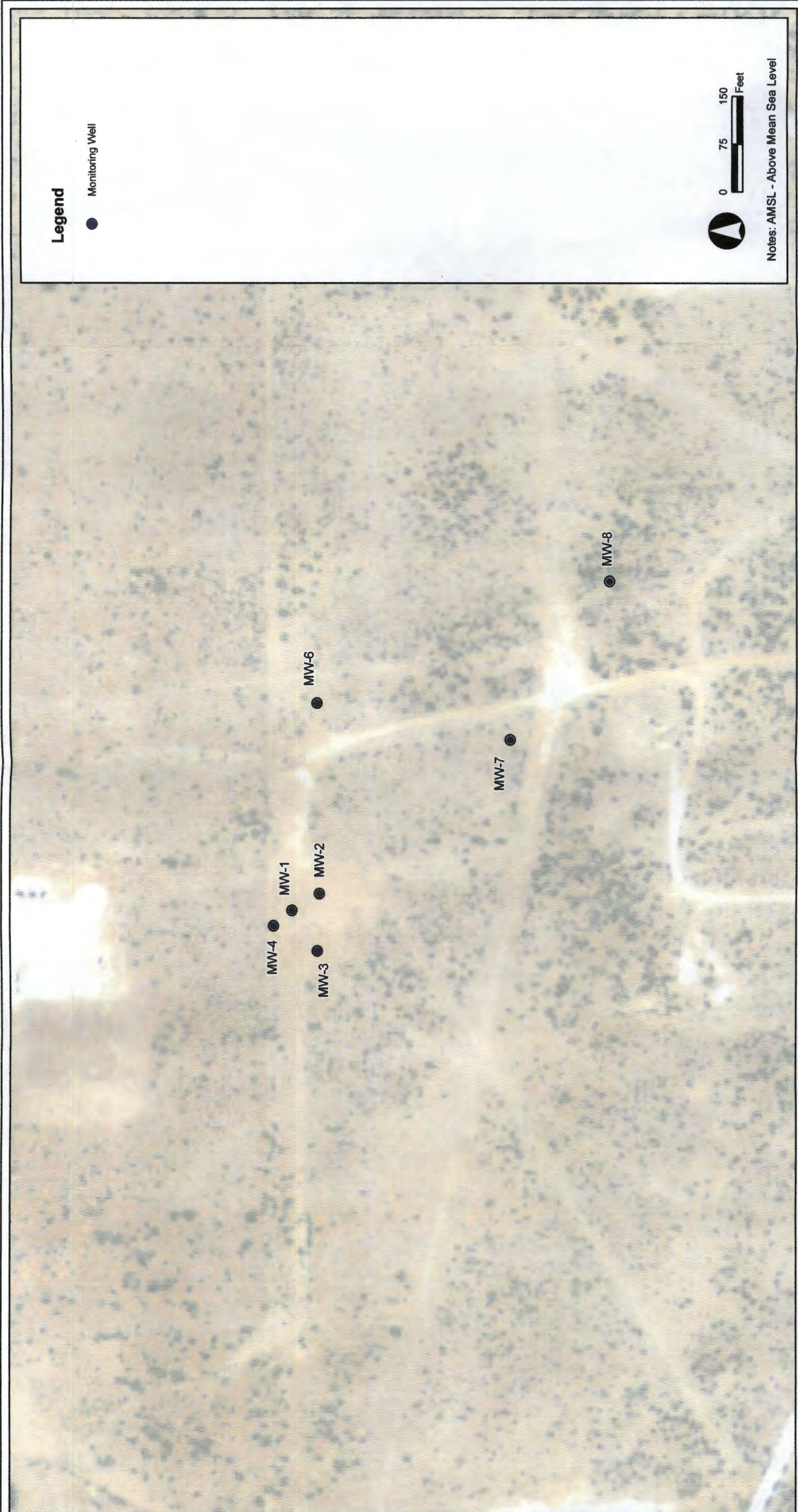
Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221
303 487 1228



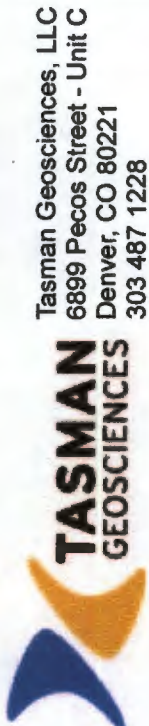
J-4-2 PIPELINE RELEASE

FIGURE
1

SITE LOCATION

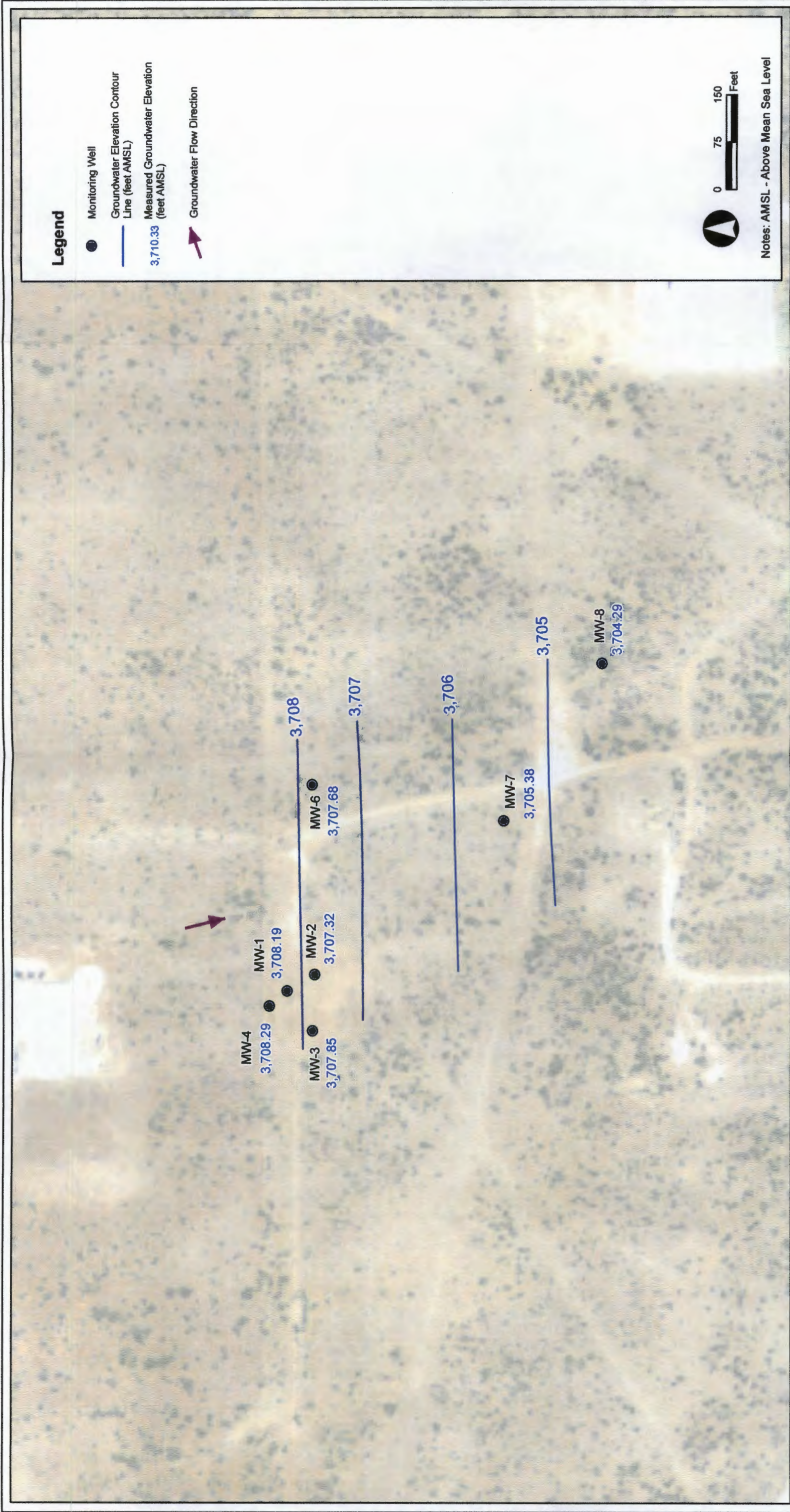


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J-4-2 PIPELINE RELEASE

SITE MAP



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**TASMAN**
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Denver, CO 80221
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J-4-2 PIPELINE RELEASE
*First Quarter 2013 Groundwater Monitoring
Summary Report*

**GROUNDWATER ELEVATION
CONTOUR MAP
(FEBRUARY 22, 2013)**

**FIGURE
3**

MW-4			
Compound	12/4/2012 (mg/L)	2/22/2013 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.003	<0.003	
Chlorides	1940		1900

MW-3			
Compound	12/4/2012 (mg/L)	2/22/2013 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.003	<0.003	
Chlorides	2170		2050

MW-2			
Compound	12/4/2012 (mg/L)	2/22/2013 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	0.0008	0.0008	
Total Xylenes	0.0028	0.0028	
Chlorides	2440		2390

MW-8			
Compound	12/4/2012 (mg/L)	2/22/2013 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.003	<0.003	
Chlorides	304		290

MW-1			
Compound	12/4/2012 (mg/L)	2/22/2013 (mg/L)	
Benzene	<0.001	0.00027	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.003	<0.003	
Chlorides	2210		2110

MW-6			
Compound	12/7/2012 (mg/L)	2/22/2013 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.003	<0.003	
Chlorides	578		536

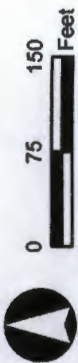
MW-7			
Compound	12/4/2012 (mg/L)	2/22/2013 (mg/L)	
Benzene	<0.001	<0.001	
Toluene	<0.002	<0.002	
Ethylbenzene	<0.002	<0.002	
Total Xylenes	<0.003	<0.003	
Chlorides	1120		1090

Legend

- Monitoring Well

Notes:

All aqueous analytical results are presented in milligrams per liter (mg/L)
LNAPL - Light Non Aqueous Phase Liquid



DESIGNED BY: C. Wasko

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SHEET CHK'D BY:

CROSS CHK'D BY:

APPROVED BY:

APPROVED BY:



TASMAN

GEOSCIENCES

Tasman Geosciences, LLC
 6899 Pecos Street - Unit C
 Denver, CO 80221
 303.487.1228

J-4-2 PIPELINE RELEASE

First Quarter 2013 Groundwater Monitoring Summary Report

ANALYTICAL RESULTS MAP

Appendix A
Laboratory Analytical Report



03/04/13

Technical Report for

DCP Midstream, LP

TASMCOA:DCP J-4-2

RC-GN00 Project-390660601

Accutest Job Number: D43745

Sampling Date: 02/22/13

Report to:

Tasman Geoscience LLC
6899 Pecos Street Unit C
Denver, CO 80221
jimdawe@tasman-geo.com; swweathers@dcpmidstream.com;
cwasko@tasman-geo.com
ATTN: Jim Dawe

Total number of pages in report: **38**



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

A handwritten signature in black ink, appearing to read 'Brad Madadian'.

Brad Madadian
Laboratory Director

Client Service contact: Shea Greiner 303-425-6021

Certifications: CO, ID, NE, NM, ND (R-027) (PW), UT (NELAP CO00049), TX (T104704511-12-1)

This report shall not be reproduced, except in its entirety, without the written approval of Accutest Laboratories.
Test results relate only to samples analyzed.

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Sample Summary

DCP Midstream, LP

Job No: D43745

TASMCOA:DCP J-4-2

Project No: RC-GN00 Project-390660601

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
D43745-1	02/22/13	09:20 CW	02/23/13	AQ	Ground Water	MW-1
D43745-2	02/22/13	09:45 CW	02/23/13	AQ	Ground Water	MW-2
D43745-3	02/22/13	08:55 CW	02/23/13	AQ	Ground Water	MW-3
D43745-4	02/22/13	09:10 CW	02/23/13	AQ	Ground Water	MW-4
D43745-5	02/22/13	08:30 CW	02/23/13	AQ	Ground Water	MW-6
D43745-6	02/22/13	08:20 CW	02/23/13	AQ	Ground Water	MW-7
D43745-7	02/22/13	08:00 CW	02/23/13	AQ	Ground Water	MW-8
D43745-7D	02/22/13	08:00 CW	02/23/13	AQ	Water Dup/MSD	MW-8
D43745-7M	02/22/13	08:00 CW	02/23/13	AQ	Water Matrix Spike	MW-8
D43745-8	02/22/13	00:00 CW	02/23/13	AQ	Ground Water	DUP
D43745-9	02/22/13	00:00 CW	02/23/13	AQ	Trip Blank Water	TRIP BLANK



CASE NARRATIVE / CONFORMANCE SUMMARY

Client: DCP Midstream, LP

Job No D43745

Site: TASMCOA:DCP J-4-2

Report Date 3/4/2013 4:52:35 PM

On 02/23/2013, 8 sample(s), 1 Trip Blank(s), and 0 Field Blank(s) were received at Accutest Mountain States (AMS) at a temperature of 3 °C. The samples were intact and properly preserved, unless noted below. An AMS Job Number of D43745 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: V6V995

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D43745-7MS, D43745-7MSD were used as the QC samples indicated.
- D43745-5, D43745-6: The pH of the sample aliquot for VOA analysis was >2 at time of analysis.

Matrix AQ

Batch ID: V7V1020

- All samples were analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D43744-8MS, D43744-8MSD were used as the QC samples indicated.

Wet Chemistry By Method EPA 300.0/SW846 9056

Matrix AQ

Batch ID: GP9471

- All samples were prepared and analyzed within the recommended method holding time.
- All method blanks for this batch meet method specific criteria.
- Sample(s) D43745-7MS, D43745-7MSD, D43912-1DUP 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 1

Job Number: D43745
Account: DCP Midstream, LP
Project: TASMCOA:DCP J-4-2
Collected: 02/22/13



Lab Sample ID	Client Sample ID	Result/ Analyte Qual	RL	MDL	Units	Method
D43745-1	MW-1					
Benzene		0.00027 J	0.0010	0.00027	mg/l	SW846 8260B
Chloride		2110	50		mg/l	EPA 300.0/SW846 9056
D43745-2	MW-2					
Chloride		2390	50		mg/l	EPA 300.0/SW846 9056
D43745-3	MW-3					
Chloride		2050	50		mg/l	EPA 300.0/SW846 9056
D43745-4	MW-4					
Chloride		1900	50		mg/l	EPA 300.0/SW846 9056
D43745-5	MW-6					
Chloride		536	25		mg/l	EPA 300.0/SW846 9056
D43745-6	MW-7					
Chloride		1090	25		mg/l	EPA 300.0/SW846 9056
D43745-7	MW-8					
Chloride		290	5.0		mg/l	EPA 300.0/SW846 9056
D43745-8	DUP					
Chloride		2340	50		mg/l	EPA 300.0/SW846 9056
D43745-9	TRIP BLANK					

No hits reported in this sample.

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-1	Date Sampled:	02/22/13
Lab Sample ID:	D43745-1	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18660.D	1	02/27/13	JL	n/a	n/a	V7V1020
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	0.00027	0.0010	0.00027	mg/l	J
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	93%		62-130%
2037-26-5	Toluene-D8	99%		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-1	Date Sampled:	02/22/13
Lab Sample ID:	D43745-1	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2110	50	mg/l	100	03/01/13 09:55	JML	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	02/22/13
Lab Sample ID:	D43745-2	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	7V18661.D	1	02/27/13	JL	n/a	n/a	V7V1020
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	92%		62-130%
2037-26-5	Toluene-D8	99%		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

Report of Analysis

Client Sample ID:	MW-2	Date Sampled:	02/22/13
Lab Sample ID:	D43745-2	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2390	50	mg/l	100	03/01/13 13:16	JML	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-3	Date Sampled:	02/22/13
Lab Sample ID:	D43745-3	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V17931.D	1	02/27/13	BR	n/a	n/a	V6V995
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	114%		62-130%
2037-26-5	Toluene-D8	98%		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-3
Lab Sample ID: D43745-3
Matrix: AQ - Ground Water
Project: TASMCOA:DCP J-4-2

Date Sampled: 02/22/13
Date Received: 02/23/13
Percent Solids: n/a

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2050	50	mg/l	100	03/01/13 09:40	JML	EPA 300.0/SW846 9056

RL = Reporting Limit

4.3
4

Report of Analysis

Page 1 of 1

Client Sample ID:	MW-4	Date Sampled:	02/22/13
Lab Sample ID:	D43745-4	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V17932.D	1	02/27/13	BR	n/a	n/a	V6V995
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	113%		62-130%
2037-26-5	Toluene-D8	97%		70-130%
460-00-4	4-Bromofluorobenzene	92%		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	Date Sampled:	02/22/13
Lab Sample ID:	D43745-4	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1900	50	mg/l	100	03/01/13 10:09	JML	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-6	Date Sampled:	02/22/13
Lab Sample ID:	D43745-5	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	6V17933.D	1	02/27/13	BR	n/a	n/a	V6V995
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	113%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	90%		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	Date Sampled:	02/22/13
Lab Sample ID:	D43745-5	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	536	25	mg/l	50	03/01/13 10:24	JML	EPA 300.0/SW846 9056

RL = Reporting Limit

4.5
4

Report of Analysis

Client Sample ID:	MW-7	Date Sampled:	02/22/13
Lab Sample ID:	D43745-6	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	6V17934.D	1	02/27/13	BR	n/a	n/a	V6V995
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	119%		62-130%
2037-26-5	Toluene-D8	99%		70-130%
460-00-4	4-Bromofluorobenzene	93%		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	Date Sampled:	02/22/13
Lab Sample ID:	D43745-6	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1090	25	mg/l	50	03/01/13 10:38	JML	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW-8	Date Sampled:	02/22/13
Lab Sample ID:	D43745-7	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V17935.D	1	02/27/13	BR	n/a	n/a	V6V995
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	118%		62-130%
2037-26-5	Toluene-D8	96%		70-130%
460-00-4	4-Bromofluorobenzene	92%		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	Date Sampled:	02/22/13
Lab Sample ID:	D43745-7	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	290	5.0	mg/l	10	03/01/13 10:52	JML	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	DUP	Date Sampled:	02/22/13
Lab Sample ID:	D43745-8	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMCOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V17938.D	1	02/27/13	BR	n/a	n/a	V6V995
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	113%		62-130%
2037-26-5	Toluene-D8	97%		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	Date Sampled:	02/22/13
Lab Sample ID:	D43745-8	Date Received:	02/23/13
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	TASMCOA:DCP J-4-2		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	2340	50	mg/l	100	03/01/13 13:38	JML	EPA 300.0/SW846 9056

RL = Reporting Limit

Report of Analysis

Page 1 of 1

Client Sample ID:	TRIP BLANK	Date Sampled:	02/22/13
Lab Sample ID:	D43745-9	Date Received:	02/23/13
Matrix:	AQ - Trip Blank Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	TASMSOA:DCP J-4-2		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	6V17939.D	1	02/27/13	BR	n/a	n/a	V6V995
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	0.00027	mg/l	
108-88-3	Toluene	ND	0.0020	0.0010	mg/l	
100-41-4	Ethylbenzene	ND	0.0020	0.00033	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	108%		62-130%
2037-26-5	Toluene-D8	100%		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

Misc. Forms

5

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody



CHAIN OF CUSTODY

PAGE 1 OF 1

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

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # D43745
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	
LAB USE ONLY	

Client / Reporting Information	Project Information	Requested Analysis (see TEST CODE sheet)	Matrix Codes
Company Name Tasman Geosciences	Project Name: DCP-XLINE DCP JH2	V8260BTX CHL MS/MSD V8260BTX	01 02 03 04 05 06 07 08 07 MS/SD 09
Street Address 6899 Pecos Street Unit C	Street DCP JH2		
City Denver CO 80221	City Portland OR 97208-4870		
Project Contact Jim Dawe jimdawe@tasman-geo.com	Project # 390600601		
Phone # 720-409-8791 cwasko@tasman-geo.com	Client Purchase Order # 400220020		
Sampler(s) Name(s) Christine Wasko	Project Manager Steve Weathers SWWeathers@dcpmidstream.com		
Field ID / Point of Collection	Collection		
MEOH/DI Vial #	Date		
Time	Sampled By		
Matrix	# of bottles		
HCl	NIOSH		
HNO3	H2SO4		
None	DI Water		
MEOH	ENDURE		
Turnaround Time (Business days)		Data Deliverable Information	Comments / Special Instructions
☐ Std. 15 Business Days ☐ Std. 10 Business Days ☐ 5 Day RUSH ☐ 3 Day Emergency ☐ 2 Day Emergency ☐ 1 Day Emergency ☒ STD 5 business Days per contract Emergency & Rush T/A data available VIA Lablink	Approved By (Accutest PM): / Date: _____ _____ _____ _____ _____	☐ Commercial "A" (Level 1) ☐ Commercial "B" (Level 2) ☒ COMMBN ☐ COMMBN+ Commercial "A" = Results Only Commercial "B" = Results + QC Summary Commercial BN = Results/QC/Narrative (+ = chromatograms)	☐ State Forms Required ☐ Send Forms to State ☐ Report by Fax ☒ Report by PDF ☐ EDD Format Email results to Steve Weathers _____ _____ _____ _____
Sample Custody must be documented below each time samples change possession, including courier delivery.			
Relinquished by Sampler: 1	Date Time: 2/22/13 11:00	Received By: 1	Relinquished By: 2
Relinquished by Sampler: 3	Date Time:	Received By: 3	Relinquished By: 4
Relinquished by: 5	Date Time:	Received By: 5	Custody Seal # ☐ Intact ☐ Not Intact Preserved where applicable ☐ On Ice Cooler Temp. 3.9

D43745: Chain of Custody

Page 1 of 2

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: D43745

Client: TASMAN

Immediate Client Services Action Required: No

Date / Time Received: 2/23/2013 11:45:00 AM

No. Coolers: 1

Client Service Action Required at Login: No

Project: DCP J42

Airbill #'s: FX

Cooler Security

Y or N

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
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4036 Youngfield Street
F: (303) 425-6854

Wheat Ridge, CO
www.accutest.com

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: D43745

Account: DCPMCOA DCP Midstream, LP

Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V995-MB	6V17922.D	1	02/26/13	BR	n/a	n/a	V6V995

The QC reported here applies to the following samples:

Method: SW846 8260B

D43745-3, D43745-4, D43745-5, D43745-6, D43745-7, D43745-8, D43745-9

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.33	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	97% 70-130%
460-00-4	4-Bromofluorobenzene	94% 69-130%

Method Blank Summary

Page 1 of 1

Job Number: D43745

Account: DCPMCOA DCP Midstream, LP

Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V1020-MB	7V18643.D	1	02/27/13	JL	n/a	n/a	V7V1020

The QC reported here applies to the following samples:

Method: SW846 8260B

D43745-1, D43745-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.27	ug/l	
100-41-4	Ethylbenzene	ND	2.0	0.33	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	94% 62-130%
2037-26-5	Toluene-D8	99% 70-130%
460-00-4	4-Bromofluorobenzene	93% 69-130%

Blank Spike Summary

Page 1 of 1

Job Number: D43745

Account: DCPMCOA DCP Midstream, LP

Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V6V995-BS	6V17923.D	1	02/26/13	BR	n/a	n/a	V6V995

The QC reported here applies to the following samples:

Method: SW846 8260B

D43745-3, D43745-4, D43745-5, D43745-6, D43745-7, D43745-8, D43745-9

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	49.6	99	70-130
100-41-4	Ethylbenzene	50	51.4	103	70-130
108-88-3	Toluene	50	48.6	97	70-130
1330-20-7	Xylene (total)	150	156	104	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	101%	62-130%
2037-26-5	Toluene-D8	99%	70-130%
460-00-4	4-Bromofluorobenzene	101%	69-130%

* = Outside of Control Limits.

Blank Spike Summary

Page 1 of 1

Job Number: D43745

Account: DCPMCOA DCP Midstream, LP

Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
V7V1020-BS	7V18644.D	1	02/27/13	JL	n/a	n/a	V7V1020

The QC reported here applies to the following samples:

Method: SW846 8260B

D43745-1, D43745-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	50	49.0	98	70-130
100-41-4	Ethylbenzene	50	49.5	99	70-130
108-88-3	Toluene	50	48.3	97	70-130
1330-20-7	Xylene (total)	150	152	101	70-130

CAS No.	Surrogate Recoveries	BSP	Limits
17060-07-0	1,2-Dichloroethane-D4	95%	62-130%
2037-26-5	Toluene-D8	98%	70-130%
460-00-4	4-Bromofluorobenzene	102%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D43745
Account: DCPMCOA DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D43744-8MS	7V18645.D	1	02/27/13	JL	n/a	n/a	V7V1020
D43744-8MSD	7V18646.D	1	02/27/13	JL	n/a	n/a	V7V1020
D43744-8	7V18647.D	1	02/27/13	JL	n/a	n/a	V7V1020

The QC reported here applies to the following samples:

Method: SW846 8260B

D43745-1, D43745-2

CAS No.	Compound	D43744-8 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	0.73	J	50	47.2	93	47.0	93	0	62-130/30
100-41-4	Ethylbenzene	ND		50	46.7	93	48.3	97	3	63-130/30
108-88-3	Toluene	ND		50	46.2	92	47.2	94	2	60-130/30
1330-20-7	Xylene (total)	ND		150	144	96	149	99	3	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D43744-8	Limits
17060-07-0	1,2-Dichloroethane-D4	94%	96%	94%	62-130%
2037-26-5	Toluene-D8	98%	99%	98%	70-130%
460-00-4	4-Bromofluorobenzene	102%	102%	94%	69-130%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Page 1 of 1

Job Number: D43745
Account: DCPMCOA DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
D43745-7MS	6V17936.D	1	02/27/13	BR	n/a	n/a	V6V995
D43745-7MSD	6V17937.D	1	02/27/13	BR	n/a	n/a	V6V995
D43745-7	6V17935.D	1	02/27/13	BR	n/a	n/a	V6V995

The QC reported here applies to the following samples:

Method: SW846 8260B

D43745-3, D43745-4, D43745-5, D43745-6, D43745-7, D43745-8, D43745-9

CAS No.	Compound	D43745-7 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	50	50.9	102	49.1	98	4	62-130/30
100-41-4	Ethylbenzene	ND	50	51.7	103	51.5	103	0	63-130/30
108-88-3	Toluene	ND	50	49.1	98	49.4	99	1	60-130/30
1330-20-7	Xylene (total)	ND	150	161	107	160	107	1	67-130/30

CAS No.	Surrogate Recoveries	MS	MSD	D43745-7	Limits
17060-07-0	1,2-Dichloroethane-D4	105%	106%	118%	62-130%
2037-26-5	Toluene-D8	100%	103%	96%	70-130%
460-00-4	4-Bromofluorobenzene	103%	104%	92%	69-130%

* = Outside of Control Limits.

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: D43745
Account: DCPMCO DN - DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Bromide	GP9471/GN19116	0.050	0.0	mg/l	20	20.5	102.5	90-110%
Chloride	GP9471/GN19116	0.50	0.23	mg/l	20	19.8	99.0	90-110%
Fluoride	GP9471/GN19116	0.10	0.0	mg/l	10	9.58	95.8	90-110%
Nitrogen, Nitrate	GP9471/GN19116	0.010	0.0	mg/l	4.52	4.36	96.5	90-110%
Nitrogen, Nitrite	GP9471/GN19116	0.0040	0.0	mg/l	6.09	6.19	101.6	90-110%
Sulfate	GP9471/GN19116	0.50	0.0	mg/l	30	29.7	99.0	90-110%

Associated Samples:

Batch GP9471: D43745-1, D43745-2, D43745-3, D43745-4, D43745-5, D43745-6, D43745-7, D43745-8

(*) Outside of QC limits

7.1
7

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D43745
Account: DCPMCOA - DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Bromide	GP9471/GN19116	D43912-1	mg/l	0.14	0.14	0.0	0-20%
Chloride	GP9471/GN19116	D43912-1	mg/l	10.5	10.5	0.0	0-20%
Fluoride	GP9471/GN19116	D43912-1	mg/l	0.24	0.23	4.3	0-20%
Nitrogen, Nitrate	GP9471/GN19116	D43912-1	mg/l	4.7	4.7	0.0	0-20%
Nitrogen, Nitrite	GP9471/GN19116	D43912-1	mg/l	0.0	0.0	0.0	0-20%
Sulfate	GP9471/GN19116	D43912-1	mg/l	23.8	23.8	0.0	0-20%

Associated Samples:

Batch GP9471: D43745-1, D43745-2, D43745-3, D43745-4, D43745-5, D43745-6, D43745-7, D43745-8

(*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D43745
Account: DCPMCOA - DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Bromide	GP9471/GN19116	D43745-7	mg/l	1.4	50	54.8	106.8	80-120%
Chloride	GP9471/GN19116	D43745-7	mg/l	290	200	502	106.0	80-120%
Fluoride	GP9471/GN19116	D43745-7	mg/l	1.1	50	51.1	100.0	80-120%
Nitrogen, Nitrate	GP9471/GN19116	D43745-7	mg/l	1.6	11.3	13.0	100.9	80-120%
Nitrogen, Nitrite	GP9471/GN19116	D43745-7	mg/l	0.0	6.09	6.1	100.2	80-120%
Sulfate	GP9471/GN19116	D43745-7	mg/l	77.5	200	285	103.8	80-120%

Associated Samples:

Batch GP9471: D43745-1, D43745-2, D43745-3, D43745-4, D43745-5, D43745-6, D43745-7, D43745-8

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

7.3
7

MATRIX SPIKE DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: D43745
Account: DCPMCOA - DCP Midstream, LP
Project: TASMCOA:DCP J-4-2

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MSD Result	RPD	QC Limit
Bromide	GP9471/GN19116	D43745-7	mg/l	1.4	50	53.5	2.4	20%
Chloride	GP9471/GN19116	D43745-7	mg/l	290	200	496	1.2	20%
Fluoride	GP9471/GN19116	D43745-7	mg/l	1.1	50	49.9	2.4	20%
Nitrogen, Nitrate	GP9471/GN19116	D43745-7	mg/l	1.6	11.3	12.8	1.6	20%
Nitrogen, Nitrite	GP9471/GN19116	D43745-7	mg/l	0.0	6.09	6.1	0.0	20%
Sulfate	GP9471/GN19116	D43745-7	mg/l	77.5	200	280	1.8	20%

Associated Samples:
Batch GP9471: D43745-1, D43745-2, D43745-3, D43745-4, D43745-5, D43745-6, D43745-7, D43745-8
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

7.4
7

Appendix B

Historical Groundwater Analytical Results

**APPENDIX B
HISTORICAL DATA
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	2/1/2006	0.139	0.326	0.34	0.31	NA	
MW-1	9/1/2006	0.0487	0.0058	0.0284	0.0694	NA	
MW-1	9/25/2006	0.042	0.025	0.0048	0.061		
MW-1	9/25/2006	0.056	0.032	0.0068	0.078		
MW-1	12/1/2006	LNAPL	LNAPL	LNAPL	LNAPL	NA	
MW-1	3/1/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	6/1/2007	LNAPL	LNAPL	0.004	LNAPL	LNAPL	
MW-1	9/1/2007	0.011	0.003	0.04	0.098	NA	
MW-1	1/1/2007	0.107	0.024	0.014	0.39	NA	
MW-1	11/30/2007	0.107	0.0243	0.0401	0.39		
MW-1	3/1/2008	0.037	0.0155	LNAPL	0.215	NA	
MW-1	3/20/2008	0.0416	0.0186	0.0177	0.26		
MW-1	6/1/2008	LNAPL	LNAPL	LNAPL	LNAPL	NA	
MW-1	9/1/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/1/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	3/11/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-1	5/18/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	9/24/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/20/2009	<0.002	<0.002	.0014J	0.0418	2680	
MW-1	12/20/2009	<0.00050	<0.00043	0.0014	0.0418		
MW-1	3/10/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	6/13/2010	0.0016	<0.001	<0.0003	0.0095	1800	
MW-1	6/14/2010	0.0016	<1.0	<0.30	-		
MW-1	9/29/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/8/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	3/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	9/16/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/7/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	3/11/2012	<0.001	<0.002	<0.002	<0.004	2970	
MW-1	6/5/2012	<0.001	<0.002	<0.002	<0.003	2480	
MW-1	9/7/2012	<0.001	<0.002	<0.002	<0.003	2060	
MW-1	12/4/2012	<0.001	<0.002	<0.002	<0.003	2240	Duplicate sample collected
MW-1	2/22/2103	0.00027	<0.002	<0.002	<0.003	2110	

**APPENDIX B
HISTORICAL DATA
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-2	2/1/2006	0.026	0.038	0.04	0.335		
MW-2	9/1/2006	0.0045	<0.001	0.0027	0.0471		
MW-2	12/1/2006	0.006	0.003	0.003	0.0613		
MW-2	3/1/2007	0.188	0.006	0.026	0.125		
MW-2	6/1/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	9/1/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	11/1/2007	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	11/30/2007	0.006	0.0033	0.0025	0.0613		
MW-2	3/1/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	3/20/2008	0.188	0.0062	0.0262	0.125		
MW-2	6/1/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	9/1/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/1/2008	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	3/11/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	5/18/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	9/24/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/20/2009	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	3/10/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	6/13/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	9/29/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/8/2010	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	3/30/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	9/16/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	12/7/2011	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	3/11/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	6/5/2012	0.00043	<0.002	0.0024	0.0069	2450	
MW-2	9/7/2012	<0.001	<0.002	<0.002	<0.003	2280	
MW-2	12/4/2012	<0.001	<0.002	0.0008	0.0028	2440	
MW-2	2/22/2103	<0.001	<0.002	<0.002	<0.003	2390	Duplicate sample collected

APPENDIX B
HISTORICAL DATA
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-3	2/1/2006	<0.001	<0.001	<0.001	<0.002	NA	
MW-3	9/1/2006	<0.002	<0.002	<0.002	<0.006	NA	
MW-3	9/25/2006	<0.23	<0.54	<0.48	<1.1		
MW-3	3/14/2007	<0.00023	<0.00054	<0.00048	<0.0011		
MW-3	11/30/2007	0.0011	<0.00048	<0.00045	<0.0060		
MW-3	12/1/2006	<0.002	<0.002	<0.002	<0.006	NA	
MW-3	3/1/2007	<0.002	<0.002	<0.002	<0.006	7800	
MW-3	6/1/2007	0.003	0.005	0.002	0.01	10800	
MW-3	9/1/2007	<0.001	<0.001	<0.001	<0.001	NA	
MW-3	11/1/2007	0.0011J	<0.002	<0.002	<0.006	NA	
MW-3	3/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-3	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-3	6/1/2008	<0.002	<0.002	<0.002	0.007	NA	
MW-3	9/1/2008	<0.002	<0.002	<0.002	<0.006	4070	
MW-3	12/1/2008	<0.002	<0.002	<0.002	<0.006	2625	
MW-3	12/3/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-3	3/11/2009	<0.002	<0.002	<0.002	<0.002	2860	
MW-3	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-3	5/18/2009	<0.002	<0.002	<0.002	<0.002	3270	
MW-3	5/18/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-3	9/24/2009	<0.002	<0.002	<0.002	<0.006	3195	
MW-3	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-3	12/20/2009	<0.002	<0.002	<0.002	<0.006	3605	
MW-3	12/20/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-3	3/10/2010	<0.001	<0.002	<0.002	<0.004	3030	
MW-3	3/10/2010	<0.40	<1.0	<1.0	-		
MW-3	6/13/2010	<0.0003	<0.001	<0.0003	<0.0006	2130	
MW-3	6/13/2010	<0.30	<1.0	<0.30	-		
MW-3	9/29/2010	<0.001	<0.002	<0.002	<0.004	2220	
MW-3	9/29/2010	<0.00030	<0.0010	<0.00030	-		
MW-3	12/8/2010	<0.001	<0.002	<0.002	<0.004	2530	
MW-3	12/8/2010	<0.00030	<0.0010	<0.00030	-		
MW-3	3/30/2011	<0.001	<0.002	<0.002	<0.002	2230	
MW-3	3/30/2011	<0.00030	<0.0010	<0.00030	<0.00060		
MW-3	6/11/2011	<0.001	<0.002	<0.002	<0.004	2210	
MW-3	6/20/2011	<0.00025	<0.0010	<0.00050	<0.0020		
MW-3	9/16/2011	<0.001	<0.002	<0.002	<0.004	2190	Duplicate sample collected
MW-3	12/7/2011	<0.001	<0.002	<0.002	<0.004	2230	Duplicate sample collected
MW-3	3/11/2012	<0.001	<0.002	<0.002	<0.004	2210	
MW-3	6/5/2012	<0.001	<0.002	<0.002	<0.003	2080	
MW-3	9/7/2012	<0.001	<0.002	<0.002	<0.003	2180	
MW-3	12/4/2012	<0.001	<0.002	<0.002	<0.003	2170	
MW-3	2/22/2103	<0.001	<0.002	<0.002	<0.003	2050	

**APPENDIX B
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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-4	2/1/2006	NI	NI	NI	NI	NA	
MW-4	6/1/2006	0.0086	.00093J	0.0092	0.0061	NA	
MW-4	9/27/2006	0.0086	0.0092	0.00093	0.0061		
MW-4	12/1/2006	0.025	0.005	<0.002	0.0065	NA	
MW-4	3/1/2007	0.004	6E-04	<0.002	0.003	1300	
MW-4	3/14/2007	0.0044	0.0006	<0.00048	0.0032		
MW-4	6/1/2007	<0.001	<0.001	<0.001	<0.001	1380	
MW-4	9/1/2007	<0.001	<0.001	<0.001	<0.001	NA	
MW-4	11/1/2007	<0.002	<0.002	<0.002	<0.006	NA	
MW-4	11/30/2007	<0.00046	<0.00048	<0.00045	<0.0060		
MW-4	3/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-4	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-4	6/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-4	9/1/2008	<0.002	<0.002	<0.002	.0041J	1440	
MW-4	12/1/2008	<0.002	<0.002	<0.002	<0.006	70	
MW-4	12/3/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-4	3/11/2009	<0.002	<0.002	<0.002	<0.002	1390	
MW-4	5/18/2009	<0.002	<0.002	<0.002	<0.002	1440	
MW-4	5/18/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-4	9/24/2009	<0.002	<0.002	<0.002	<0.006	1490	
MW-4	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-4	12/20/2009	<0.002	<0.002	<0.002	<0.006	1740	
MW-4	12/20/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-4	3/10/2010	<0.001	<0.002	<0.002	<0.004	1950	
MW-4	3/10/2010	<0.40	<1.0	<1.0	-		
MW-4	6/13/2010	<0.0003	<0.001	<0.0003	<0.0006	2150	
MW-4	6/13/2010	<0.30	<1.0	<0.30	-		
MW-4	9/29/2010	<0.001	<0.002	<0.002	<0.004	2130	
MW-4	9/29/2010	<0.00030	<0.0010	<0.00030	-		
MW-4	12/8/2010	<0.001	<0.002	<0.002	<0.004	2740	
MW-4	12/8/2010	<0.00030	<0.0010	<0.00030	-		
MW-4	3/30/2011	<0.001	<0.002	<0.002	<0.002	2300	
MW-4	3/30/2011	<0.00030	<0.0010	<0.00030	<0.00060		
MW-4	6/11/2011	<0.001	<0.002	<0.002	<0.004	2230	
MW-4	6/20/2011	<0.00025	<0.0010	<0.00050	<0.0020		
MW-4	9/16/2011	<0.001	<0.002	<0.002	<0.004	1980	
MW-4	12/7/2001	<0.001	<0.002	<0.002	<0.004	2010	
MW-4	3/11/2012	<0.001	<0.002	<0.002	<0.004	1960	Duplicate sample collected
MW-4	6/5/2012	<0.001	<0.002	<0.002	<0.003	1790	Duplicate sample collected
MW-4	9/7/2012	<0.001	<0.002	<0.002	<0.003	1910	Duplicate sample collected
MW-4	12/4/2012	<0.001	<0.002	<0.002	<0.003	1940	
MW-4	2/22/2103	<0.001	<0.002	<0.002	<0.003	1900	

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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-6	2/1/2006	NI	NI	NI	NI	NA	
MW-6	9/1/2006	<0.002	<0.002	<0.002	<0.006	NA	
MW-6	9/27/2006	<0.23	<0.54	<0.48	<1.1		
MW-6	12/1/2006	<0.002	<0.002	<0.002	<0.006	NA	
MW-6	3/1/2007	<0.002	<0.002	<0.002	<0.006	669	
MW-6	3/14/2007	<0.00023	<0.00054	<0.00048	<0.0011		
MW-6	6/1/2007	<0.001	<0.001	<0.001	<0.001	544	
MW-6	9/1/2007	<0.001	<0.001	<0.001	<0.001	NA	
MW-6	11/1/2007	<0.002	<0.002	<0.002	<0.006	NA	
MW-6	11/30/2007	<0.00023	<0.00054	<0.00048	<0.0011		
MW-6	3/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-6	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-6	6/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-6	9/1/2008	<0.002	<0.002	<0.002	<0.006	537	
MW-6	12/1/2008	<0.002	<0.002	<0.002	<0.002	391	
MW-6	12/3/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-6	3/11/2009	<0.002	<0.002	<0.002	<0.002	363	
MW-6	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-6	5/18/2009	<0.002	<0.002	<0.002	<0.006	383	
MW-6	5/18/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-6	9/24/2009	<0.002	<0.002	<0.002	<0.006	373	
MW-6	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-6	12/20/2009	<0.002	<0.002	<0.002	<0.006	1090	
MW-6	12/20/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-6	3/10/2010	NA	NA	NA	NA	NA	
MW-6	6/13/2010	<0.0003	<0.001	<0.0003	<0.006	533	
MW-6	6/13/2010	<0.30	<1.0	<0.30	-		
MW-6	9/29/2010	<0.001	<0.002	<0.002	<0.004	445	
MW-6	9/29/2010	<0.00030	<0.0010	<0.00030	-		
MW-6	12/8/2010	<0.001	<0.002	<0.002	<0.004	513	
MW-6	12/8/2010	<0.00030	<0.0010	<0.00030	-		
MW-6	3/30/2011	<0.001	<0.002	<0.002	<0.002	491	
MW-6	3/30/2011	<0.00030	<0.0010	<0.00030	<0.00060		
MW-6	6/11/2011	<0.001	<0.002	<0.002	<0.004	503	
MW-6	6/20/2011	<0.00025	<0.0010	<0.00050	<0.0020		
MW-6	9/16/2011	<0.001	<0.002	<0.002	<0.004	476	
MW-6	12/7/2011	<0.001	<0.002	<0.002	<0.004	526	
MW-6	3/11/2012	<0.001	<0.002	<0.002	<0.004	522	
MW-6	6/5/2012	<0.001	<0.002	<0.002	<0.003	532	
MW-6 ⁽¹⁾	9/7/2012	NS	NS	NS	NS	NS	
MW-6	12/4/2012	<0.001	<0.002	<0.002	<0.003	578	
MW-6	2/22/2103	<0.001	<0.002	<0.002	<0.003	536	

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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-7	2/1/2006	NI	NI	NI	NI	NA	
MW-7	6/1/2006	<0.002	<0.002	<0.002	<0.006	NA	
MW-7	9/27/2006	<0.23	<0.54	<0.48	<1.1		
MW-7	12/1/2006	<0.002	<0.002	<0.002	<0.006	NA	
MW-7	3/1/2007	<0.002	<0.002	<0.002	<0.006	1230	
MW-7	3/14/2007	<0.00023	<0.00054	<0.00048	<0.0011		
MW-7	6/1/2007	<0.001	<0.001	<0.001	0.003	1150	
MW-7	9/1/2007	<0.001	<0.001	<0.001	<0.001	NA	
MW-7	11/1/2007	<0.002	<0.002	<0.002	<0.006	NA	
MW-7	11/30/2007	<0.00023	<0.00054	<0.00048	<0.0011		
MW-7	3/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-7	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-7	6/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-7	9/1/2008	<0.002	<0.002	<0.002	<0.006	1180	
MW-7	12/1/2008	<0.002	<0.002	<0.002	<0.002	1050	
MW-7	12/3/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-7	3/11/2009	<0.002	<0.002	<0.002	<0.002	944	
MW-7	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-7	5/18/2009	<0.002	<0.002	<0.002	<0.006	1090	
MW-7	5/18/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-7	9/24/2009	<0.002	<0.002	<0.002	<0.006	1140	
MW-7	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-7	12/20/2009	<0.002	<0.002	<0.002	<0.006	1440	
MW-7	12/20/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-7	3/10/2010	<0.001	<0.002	<0.002	<0.004	1230	
MW-7	3/10/2010	<0.40	<1.0	<1.0	-		
MW-7	6/13/2010	<0.0003	<0.001	<0.0003	<0.006	1280	
MW-7	6/13/2010	<0.30	<1.0	<0.30	-		
MW-7	9/29/2010	<0.001	<0.002	<0.002	<0.004	1210	
MW-7	9/29/2010	<0.00030	<0.0010	<0.00030	-		
MW-7	12/8/2010	<0.001	<0.002	<0.002	<0.004	1180	
MW-7	12/8/2010	<0.00030	<0.0010	<0.00030	-		
MW-7	3/30/2011	<0.001	<0.002	<0.002	<0.002	1210	
MW-7	3/30/2011	<0.00030	<0.0010	<0.00030	<0.00060		
MW-7	6/11/2011	<0.001	<0.002	<0.002	<0.004	1210	
MW-7	6/20/2011	<0.00025	<0.0010	<0.00050	<0.0020		
MW-7	9/16/2011	<0.001	<0.002	<0.002	<0.004	1170	
MW-7	12/7/2011	<0.001	<0.002	<0.002	<0.004	1200	
MW-7	3/11/2012	<0.001	<0.002	<0.002	<0.004	1220	
MW-7	6/5/2012	<0.001	<0.002	<0.002	<0.003	1120	
MW-7	9/7/2012	<0.001	<0.002	<0.002	<0.003	1140	
MW-7	12/4/2012	<0.001	<0.002	<0.002	<0.003	1120	
MW-7	2/22/2103	<0.001	<0.002	<0.002	<0.003	1090	

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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-8	12/1/2006	NI	NI	NI	NI	NA	
MW-8	9/1/2006	<0.002	<0.002	<0.002	<0.006	NA	
MW-8	9/27/2006	<0.23	<0.54	<0.48	<1.1		
MW-8	12/1/2006	<0.002	<0.002	<0.002	<0.006	NA	
MW-8	3/1/2007	<0.002	<0.002	<0.002	<0.006	609	
MW-8	3/14/2007	<0.00023	<0.00054	<0.00048	<0.0011		
MW-8	3/14/2007	-	-	-	-		
MW-8	6/1/2007	<0.001	<0.001	<0.001	<0.001	617	
MW-8	9/1/2007	<0.001	<0.001	<0.001	<0.001	NA	
MW-8	11/1/2007	<0.002	<0.002	<0.002	<0.006	NA	
MW-8	11/30/2007	<0.00046	<0.00048	<0.00045	<0.0060		
MW-8	3/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-8	3/20/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-8	6/1/2008	<0.002	<0.002	<0.002	<0.006	NA	
MW-8	9/1/2008	<0.002	<0.002	<0.002	<0.006	735	
MW-8	12/1/2008	<0.002	<0.002	<0.002	<0.002	480	
MW-8	12/3/2008	<0.00046	<0.00048	<0.00045	<0.0014		
MW-8	3/11/2009	<0.002	<0.002	<0.002	<0.002	417	
MW-8	3/11/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-8	5/18/2009	<0.002	<0.002	<0.002	<0.006	378	
MW-8	5/18/2009	<0.00046	<0.00048	<0.00045	<0.0014		
MW-8	9/24/2009	<0.002	<0.002	<0.002	<0.006	403	
MW-8	9/24/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-8	12/20/2009	<0.002	<0.002	<0.002	<0.006	308	
MW-8	12/20/2009	<0.00050	<0.00043	<0.00055	<0.0017		
MW-8	3/10/2010	<0.001	<0.002	<0.002	<0.004	414	
MW-8	3/10/2010	<0.40	<1.0	<1.0	-		
MW-8	6/13/2010	<0.0003	<0.001	<0.0003	<0.006	415	
MW-8	6/13/2010	<0.30	<1.0	<0.30	-		
MW-8	9/29/2010	<0.001	<0.002	<0.002	<0.004	347	
MW-8	9/29/2010	<0.00030	<0.0010	<0.00030	-		
MW-8	12/8/2010	<0.001	<0.002	<0.002	<0.004	336	
MW-8	12/8/2010	<0.00030	<0.0010	<0.00030	-		
MW-8	3/30/2011	<0.001	<0.002	<0.002	<0.002	383	
MW-8	3/30/2011	<0.00030	<0.0010	<0.00030	<0.00060		
MW-8	6/11/2011	<0.001	<0.002	<0.002	<0.004	454	
MW-8	6/20/2011	<0.00025	<0.0010	<0.00050	<0.0020		
MW-8	9/16/2011	<0.001	<0.002	<0.002	<0.004	368	
MW-8	12/7/2011	<0.001	<0.002	<0.002	<0.004	348	
MW-8	3/11/2012	<0.001	<0.002	<0.002	<0.004	345	
MW-8	6/5/2012	<0.001	<0.002	<0.002	<0.003	316	
MW-8	9/7/2012	<0.001	<0.002	<0.002	<0.003	308	
MW-8	12/4/2012	<0.001	<0.002	<0.002	<0.003	304	
MW-8	2/22/2013	<0.001	<0.002	<0.002	<0.003	290	

Notes:

- 1.) The environmental cleanup standards for water that are applicable to this site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.
- 2.) Monitoring well location MW-5 was not installed due geologic refusal that was encountered during drilling activities.
- 3.) Data presented for all other well locations includes previous four sampling events, when available.

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

LNAPL = Light Non-Aqueous Phase Liquid

mg/L = milligrams per liter.