1R-156

1st Semi-Annual Monitoring Report DCP Hobbs Gas Plant

DATE August 11, 2014

370 17th Street, Suite 2500
Denver, Colorado 80202
303-605-1893 – main
303-605-1957 – fax

August 11, 2014

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

RE: First 2014 Semi Annual Groundwater Monitoring Report
DCP Monument Booster Station (1RP-156-0)
Unit B Section 33, Township 19 South, Range 37 East

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review one copy of the First 2014 Semi Annual Groundwater Monitoring Report for the DCP Monument Booster Station located in Lea County, New Mexico (Unit B Section 33, Township 19 South, Range 37 East).

If you have any questions regarding the report, please call at 303-605-1695 or e-mail me CECole@dcpmidstream.com .

Sincerely,

DCP Midstream, LP

Chandler E Cole
Senior Environmental Specialist

Enclosure

cc: Goeffrey Leking – OCD District Office, Hobbs
Environmental Files

From:	Cole, Chandler E
To:	Lowe, Leonard, EMNRD
Cc:	GRLeking@state.nm.us
Subject:	DCP Monument Booster Station (1RP-156-0) First 2014 Semi Annual Groundwater Monitoring Report
Date:	Monday, August 11, 2014 2:25:42 PM
Attachments:	Monument_1H 2014 Report.pdf Monument_1H 2014 Report_Cover.pdf

---

Dear Mr. Lowe:

DCP Midstream, LP is pleased to submit for your review the First 2014 Semi Annual Groundwater Monitoring Report for the DCP Monument Booster Station located in Lea County, New Mexico (Unit B Section 33, Township 19 South, Range 37 East).

If you have any questions regarding the report, please feel free to give me a call at 303-605-1695.

Sincerely,

Chandler Cole
Senior Environmental Specialist
DCP Midstream
370 17th Street, Suite 2300
Denver, Colorado 80202
Tel: (303) 605-1695
Cell: (720) 810-2591
Fax: (303) 605-1957

First Half 2014 Semi-Annual Groundwater Monitoring Summary Report

Monument Booster Station
Lea County, New Mexico
1RP-156-0

Prepared for:

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

Prepared by:

6899 Pecos Street, Unit C
Denver, CO 80221

July 31, 2014

Table of Contents

Tables

Figures

Appendices

1. Introduction

This report summarizes groundwater monitoring and remediation activities conducted during the first half 2014 at the Monument Booster Station (Site) in Lea County, New Mexico (Figure 1). Tasman Geosciences, LLC (Tasman) performed these activities on behalf of DCP Midstream (DCP). The field activities described herein 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 on February 26, 2014. The data collected were used to develop the groundwater elevation map and analytical results figure presented herein.

2. Site Location and Background

The Site is located in New Mexico Oil Conservation Division (OCD) designated Unit B, Section 33, Township 19 South, Range 37 East (Figure 1). The facility coordinates are 32.6240 degrees north and -103.2555 degrees west. This facility is an active natural gas compression plant and consists of a main compressor building and other process-related facilities. DCP also owns the property to the south and east that is contiguous to the fenced facility Site boundary (Figure 2).

In 1992, three underground storage tanks (USTs) that formerly contained used oil and pipeline liquids (oil and/or natural gas liquid condensate) near the main compressor building were removed. At that time and again in 1994, hydrocarbon-impacted soils (approximately 1,000 cubic yards in total) were excavated and removed from the Site. Also in 1994, subsurface soil and groundwater investigation activities were initiated to define the horizontal and vertical extent of residual hydrocarbon impacts. Two groundwater monitoring wells were installed and six soil borings were advanced as part of this investigation. In 1995, six additional monitoring wells were installed and one soil boring was advanced.

Hand bailing of LNAPL was initiated in monitoring wells MW-1 and MW-5 in 1995 or 1996. In 1997, an automated pneumatic LNAPL recovery pumping system (Xitech System) was installed in these wells. In 1999 or 2000, the Xitech System was taken out of service at both wells and replaced by product absorbent socks and hand bailing. In mid-2000, product removal activities were ceased while groundwater monitoring continued.

The Site currently has eight groundwater monitoring wells (MW-1, MW-1D, MW-2, MW-3, MW-4, MW-5, MW-6 and MW-7). Seven of the wells are located on the gas compressor facility, with MW-3 located in the southeast corner of the adjacent DCP-owned property. Well MW-2 is located in the northwest corner of the Site and is up-gradient of Site impacts.

Based on previously-collected data, it appears that a release of hydrocarbons occurred near the former pipeline liquids aboveground storage tank (AST) located near wells MW-1 and MW-1D in the center of the gas compressor facility along the eastern property boundary (Figure 2). Since 1994 or 1995, monitoring wells MW-1 and MW-5 have continued to exhibit measurable LNAPL.

3. Groundwater Monitoring

This section describes the groundwater field and laboratory activities performed during the first half 2014 semi-annual monitoring event on February 26, 2014. 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 were measured in order to evaluate hydraulic characteristics and provide information regarding seasonal and annual fluctuations in groundwater and LNAPL elevations at the Site. During the reporting period, groundwater levels were measured at the eight Site monitoring well locations. LNAPL was detected in the following locations, with the measured thickness indicated in parenthesis:

- MW-1 (0.13 feet)
- MW-5 (0.03 feet)

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 levels were later converted to elevations (feet above mean sea level [AMSL]). Measured groundwater levels, calculated groundwater elevations, and LNAPL level data are presented in Table 1.

A first half 2014 groundwater elevation map, included as Figure 3, indicates that groundwater flow at the Site trends to the southeast. Groundwater elevations ranges, average elevation changes from previous monitoring events, and calculated hydraulic gradients at the Site are summarized in the table below.

Summary of Measured Hydraulic Parameters

	First Half 2014 (02/26/14)
Maximum Elevation (Well ID)	3567.72 (MW-2)
Minimum Elevation (Well ID)	3559.45 (MW-3)
Average Change from Previous Monitoring Event (ft) – All Wells	0.20
Hydraulic Gradient (ft/ft) / (Well IDs)	0.0087(MW-2 to MW-3)

3.2 Groundwater Quality Monitoring

Subsequent to recording groundwater level measurements, groundwater samples were collected from six of the eight Site wells. A minimum of three well casing volumes of groundwater were purged from each monitoring well prior to 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 4 degrees Celsius (^{0}C) for transportation to the laboratory. Groundwater samples were then shipped under chain-of-custody procedures to ALS Environmental (ALS) in Houston, Texas for analysis.

Monitoring wells with detected LNAPL (MW-1 and MW-5) were not sampled. Water quality samples were submitted for analysis of benzene, toluene, ethylbenzene, and xylenes (BTEX) analyses by United States Environmental Protection Agency (USEPA) Method 8260B.

Table 2 summarizes BTEX concentrations in groundwater samples collected during the reporting period. Historic analytical results up to and including the February 2014 event are contained in Appendix A, and the laboratory analytical report for the first half 2014 event is included in Appendix B. Analytical results are also displayed on Figure 4.

Benzene was detected above the laboratory reporting limit, but below the New Mexico Water Quality Control Commission (NMWQCC) groundwater standards, in MW-7. No other constituents were detected above the laboratory reporting limits, with the exception of ethylbenzene in the MW-7 duplicate sample, at a concentration below the NMWQCC groundwater standard.

3.3 Data Quality Assurance / Quality Control

Data quality assurance / quality control (QA/QC) procedures included the collection and analysis of QA/QC samples, as well as a review of laboratory analytical data for QA/QC compliance. Specifically, the following QA/QC procedures were conducted: a trip blank was collected and submitted for analysis; a matrix spike / matrix spike duplicate (MS/MSD) pair was collected and submitted for analysis; a field duplicate sample from well MW-7 was collected and submitted for analysis, and; laboratory data were reviewed for compliance with the analytical method(s) and the associated quality assurance/quality control (QA/QC) procedures.

An evaluation of the QA/QC procedures conducted during the first half 2014 groundwater monitoring event indicated the following:

- Target analytes were not detected in the trip blank;
- The MS/MSD analysis, spike recoveries, and relative percent difference (RPD) were within acceptable control limits;
- The duplicate sample collected at MW-7 was in compliance with QA/QC standards. MW-7 and the associated duplicate sample exhibited benzene concentrations of 0.0030 mg/L and 0.0031 mg/L, respectively, yielding an RPD of 3.3, which is within acceptable control limits;
- Submitted 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; and
- Data were reported using the correct method number and reporting units.

The overall QA/QC assessment of the first half 2014 data indicates that both field precision and overall data precision and accuracy are acceptable.

4. Remediation Activities

Remediation activities conducted during the reporting period included vacuum enhanced fluid recovery (EFR) events.

4.1 Vacuum Enhanced LNAPL Recovery

EFR events were initiated on a quarterly frequency in June 2013 at monitoring wells MW-1 and MW-5 to address the persistent free phase petroleum hydrocarbon plume on-Site.

First half 2014 EFR events were conducted at the Site on March 20, 2014 and June 26, 2014 and included application of high vacuum (using a vacuum truck) to individual well points through a stinger pipe assembly. The stinger was placed slightly below the LNAPL/groundwater interface, thereby removing LNAPL, groundwater, and vapors from the subsurface.

The table below summarizes the wells, pre- and post-EFR LNAPL thickness, duration, and recovered volume for the EFR activities conducted during the first half 2014. The recovered LNAPL and groundwater was transported to and disposed of at the Cooper Disposal Facility in Hobbs, New Mexico.

Well ID	Date	LNAPL Thickness [ft] (pre-EFR)	Duration (hours)	Fluid Removal Volume (bbl*)	LNAPL Thickness [ft] (post-EFR)
MW-1	3/20/14	0.13	4.0	10	0.0
MW-5	3/20/14	0.03	4.0	10	0.0
MW-1	6/26/14	0.03	4.5	15	0.0
MW-5	6/26/14	0.02	3.5	10	0.0
		Total	16	45	

Note:

bbl = barrel (42 gallons)

5. Conclusions

Data and observation collected during the first half 2014 yield the following general conclusions:

- Based on historical groundwater elevations, the potentiometric surface has remained relatively stable with moderate seasonal fluctuations.
- LNAPL persists in monitoring well MW-1 and MW-5.
- The thickness of observed LNAPL continues to decline, potentially as a result of ongoing quarterly EFR events at the Site.
- The observed LNAPL thicknesses in MW-1 and MW-5 at the start of the second quarterly EFR event on June 26, 2014 were 0.03 ft and 0.02 ft, respectively. These measurements reflect a significant decline in LNAPL thickness following initiation of EFR.
- Dissolved phase BTEX constituents are either non-detect or below NMWQCC standards at all wells where a groundwater sample was collected during the first half 2014.

The decrease in LNAPL thickness at the Site along with the corresponding lack of dissolved phase BTEX exceedances indicates continued mitigation of Site impacts through active remediation efforts.

6. Recommendations

Based on evaluation of first half 2014 and historic Site observations and monitoring results, the following recommendations have been developed for future activities:

- Continue semi-annual groundwater monitoring and sampling at the existing monitoring locations illustrated on Figure 2.
- Continue quarterly EFR at MW-1 and MW-5.

Tables

TABLE 1
FIRST HALF 2014 SEMI-ANNUAL
SUMMARY OF GROUNDWATER ELEVATION DATA
MONUMENT BOOSTER STATION
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 [3] (feet amsl)	Change in Groundwater Elevation Since Previous Event [4] (feet)
MW-1	03/06/12	26.40	26.17	0.23		3591.15	3564.92	-1.08
MW-1	09/05/12	26.94	26.17	0.77		3591.15	3564.79	-0.14
MW-1	02/21/13	28.52	27.13	1.39		3591.15	3563.67	-1.11
MW-1	09/11/13	27.95	27.67	0.28		3591.15	3563.41	-0.26
MW-1	02/26/14	27.70	27.57	0.13	NM	3591.15	3563.55	0.14
MW-1D	03/06/12	26.67			36.36	3591.31	3564.64	-1.50
MW-1D	09/05/12	26.40			36.36	3591.31	3564.91	0.27
MW-1D	02/21/13	27.43			36.36	3591.31	3563.88	-1.03
MW-1D	09/11/13	27.81			36.36	3591.31	3563.50	-0.38
MW-1D	02/26/14	27.68			NM	3591.31	3563.63	0.13
MW-2	03/06/12	29.71			43.26	3596.30	3566.59	-0.72
MW-2	09/05/12	29.36			43.26	3596.30	3566.94	0.35
MW-2	02/21/13	30.29			43.26	3596.30	3566.01	-0.93
MW-2	09/11/13	30.50			43.26	3596.30	3565.80	-0.21
MW-2	02/26/14	28.58			NM	3596.30	3567.72	1.92
MW-3	09/05/12	23.88			35.70	3583.86	3559.98	-0.31
MW-3	02/21/13	24.21			35.70	3583.86	3559.65	-0.33
MW-3	09/11/13	24.32			35.70	3583.86	3559.54	-0.11
MW-3	02/26/14	24.41			NM	3583.86	3559.45	-0.09
MW-4	03/06/12	26.91			38.99	3588.77	3561.86	-0.26
MW-4	09/05/12	26.95			38.99	3588.77	3561.82	-0.04
MW-4	02/21/13	27.35			38.99	3588.77	3561.42	-0.40
MW-4	09/11/13	27.74			38.99	3588.77	3561.03	-0.39
MW-4	02/26/14	27.78			NM	3588.77	3560.99	-0.04
MW-5	03/06/12	29.71	28.55	1.16		3592.16	3563.32	-1.21
MW-5	09/05/12	29.40	28.19	1.21		3592.16	3563.67	0.35
MW-5	02/21/13	30.31	29.00	1.31		3592.16	3562.83	-0.83
MW-5	09/11/13	29.60	29.28	0.32		3592.16	3562.80	-0.03
MW-5	02/26/14	29.69	29.66	0.03	NM	3592.16	3562.49	-0.31
MW-6	03/06/12	25.99			39.51	3587.93	3561.94	-0.71
MW-6	09/05/12	25.81			39.51	3587.93	3562.12	0.18
MW-6	02/21/13	26.26			39.51	3587.93	3561.67	-0.45
MW-6	09/11/13	26.67			39.51	3587.93	3561.26	-0.41
MW-6	02/26/14	26.86			NM	3587.93	3561.07	-0.19
MW-7	03/06/12	26.30			35.85	3589.40	3563.10	-1.23
MW-7	09/05/12	25.97			35.85	3589.40	3563.43	0.33
MW-7	02/21/13	26.97			35.85	3589.40	3562.43	-1.00
MW-7	09/11/13	27.35			35.85	3589.40	3562.05	-0.38
MW-7	02/26/14	27.32			NM	3589.40	3562.08	0.03
							Average change in groundwater elevation (9/11/13 to 2/26/14)	0.20

Notes:

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

2- Total depths were collected and recorded during the second 2013 semi-annual monitoring event.

3- Groundwater elevation was corrected for product thickness (when present) using the following calculation:

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

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

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

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

NM - not measured

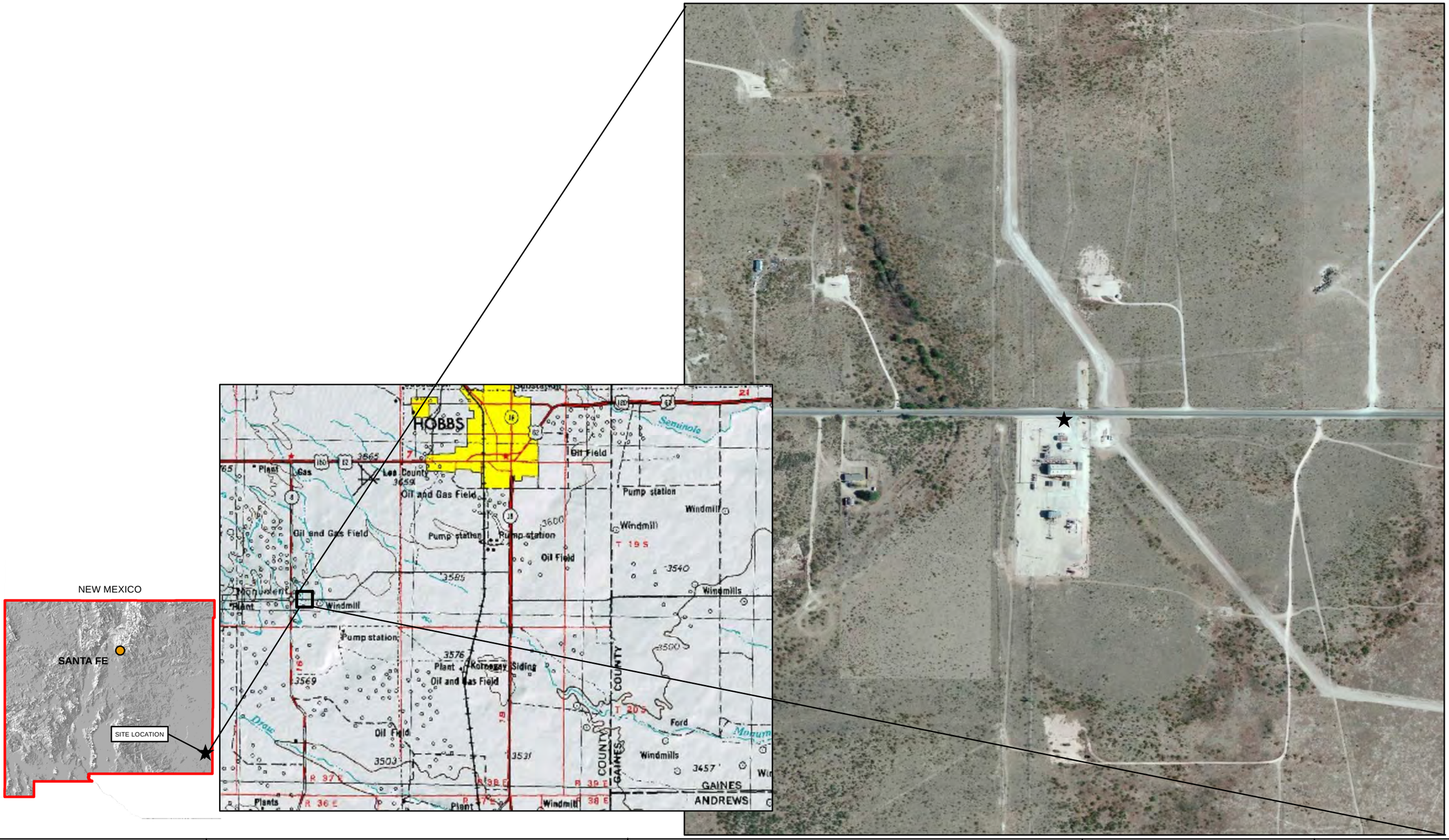
TABLE 2
FIRST HALF 2014 SEMI-ANNUAL
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	
MW-1	02/26/14	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL Present - No Sample Collected
MW-1D	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-2	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-3	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-4	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-5	02/26/14	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL Present - No Sample Collected
MW-6	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-7	02/26/14	0.003	<0.001	<0.001	<0.001	Duplicate sample collected
MW-7 (Duplicate)	02/26/14	0.0031	<0.001	0.0011	<0.001	
Trip Blank	02/26/14	<0.001	<0.001	<0.001	<0.001	

Notes:

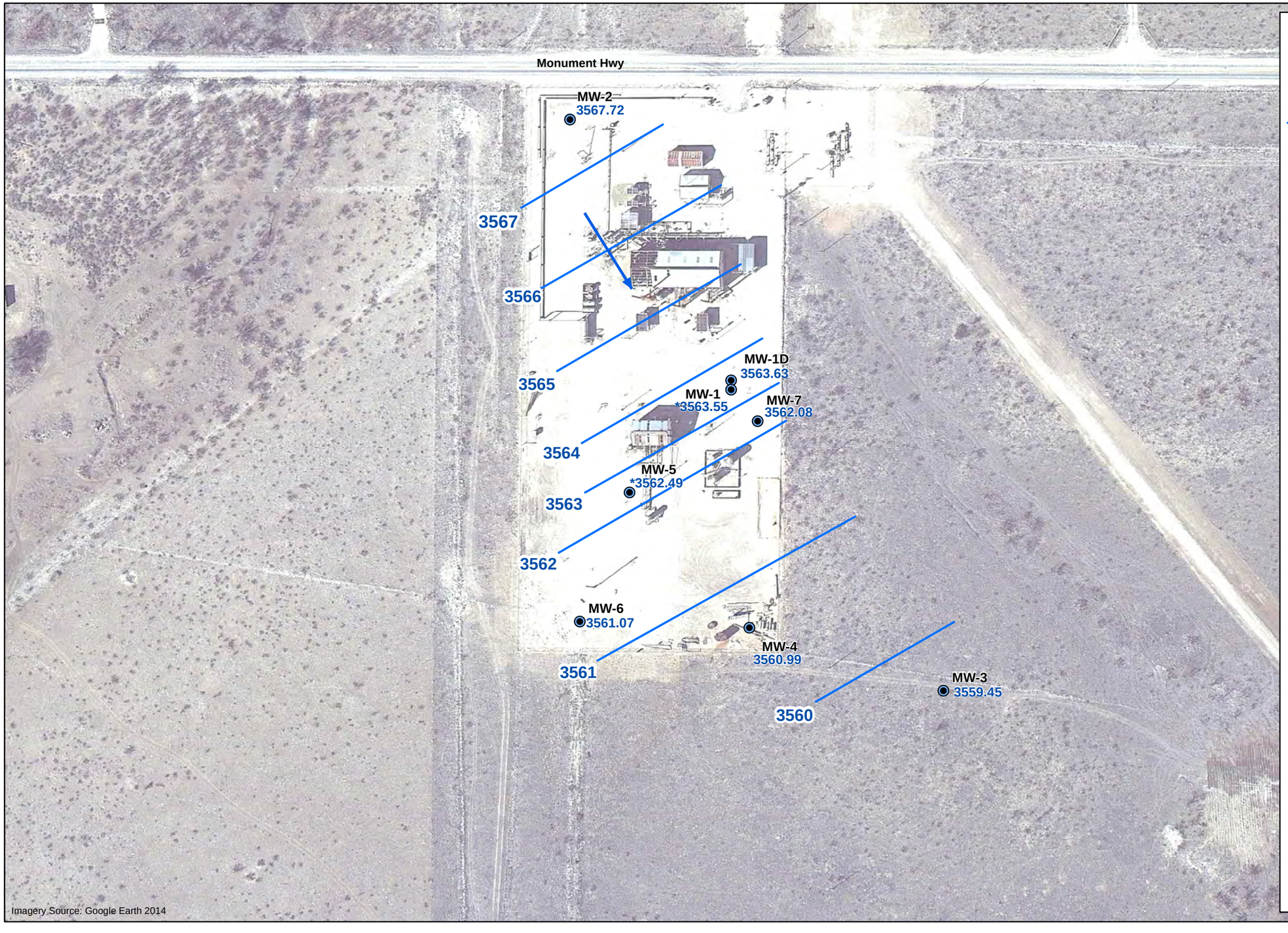
1.) The environmental cleanup standards for water that are applicable to this site are the New Mexico Water Quality Control Commission (NMWQCC) Groundwater Standards.
Monitoring well locations MW-1 and MW-5 have historically exhibited measurable LNAPL during groundwater monitoring events. Therefore, those wells have not been sampled.
Data are presented for the current reporting period. Historic groundwater analytical data are located in Appendix A.
Bold red values indicate an exceedance of the NMWQCC groundwater standards for the Site.
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4
LNAPL = Light Non-Aqueous Phase Liquid
mg/L = milligrams per liter.

Figures



DATE: June 2014 DESIGNED BY: T. Johansen DRAWN BY: D. Arnold	TASMAN GEOSCIENCES Tasman Geosciences, LLC 6899 Pecos Street - Unit C Denver, CO 80221	**DCP Midstream** **Monument Booster Station** Unit B, Section 33, Township 19 South, Range 37 East Lea County, New Mexico	Site Location Map	Figure 1

DATE: June 2014 DESIGNED BY: T. Johansen DRAWN BY: D. Arnold	TASMAN GEOSCIENCES **Tasman Geosciences, LLC** **6899 Pecos Street - Unit C** **Denver, CO 80221**	**DCP Midstream** **Monument Booster Station** First Half 2014 Semi-Annual Groundwater Monitoring Summary Report	Site Map with Monitoring Well Locations	Figure 2



Legend

- Monitoring Well
- Groundwater Elevation Contour Line (feet AMSL) (dashed where inferred)
- 5367.72 Measured Groundwater Elevation (feet AMSL)
- Groundwater Flow Direction

Notes:

AMSL - Above Mean Sea Level

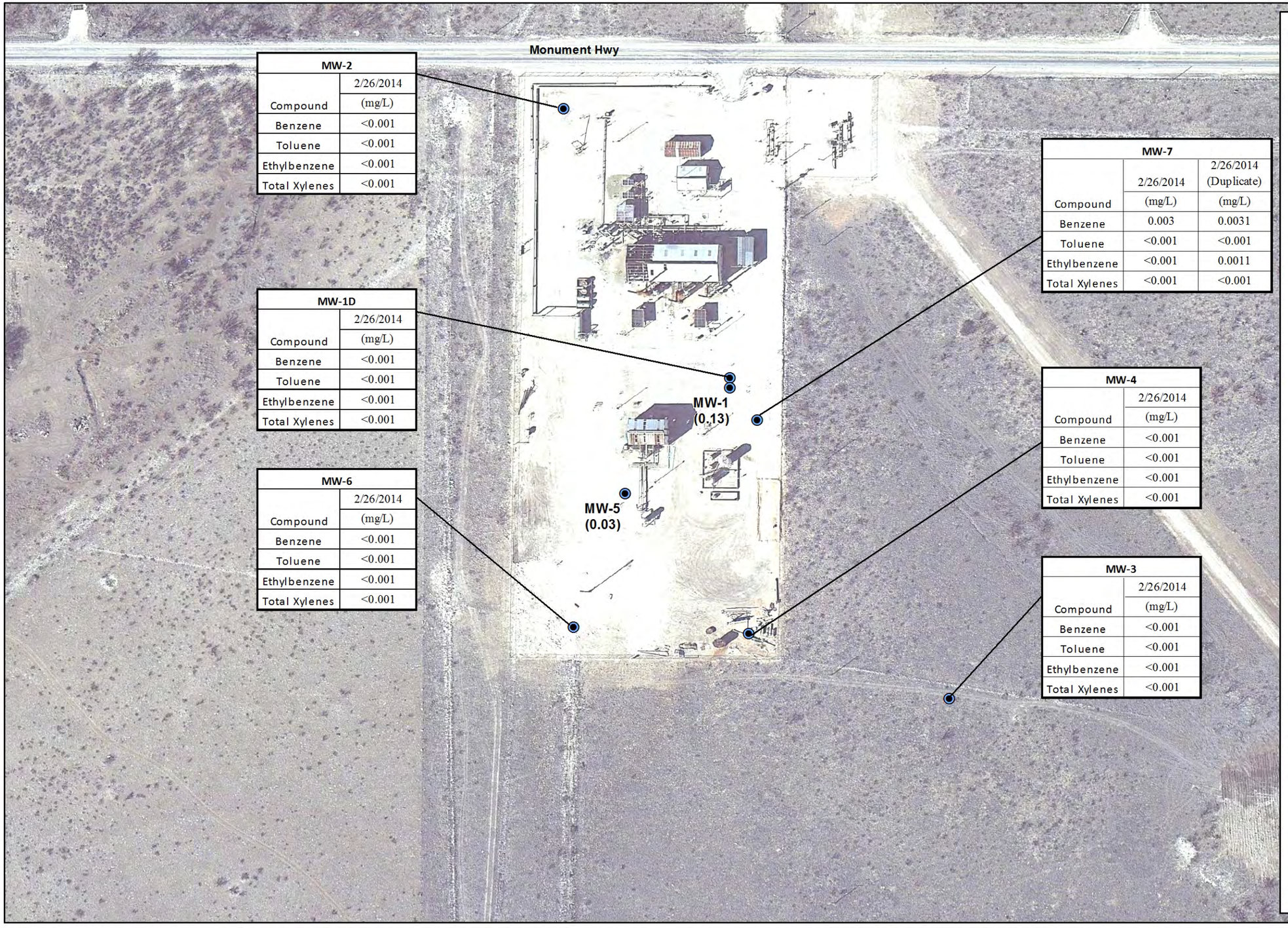
LNAPL - Light Non-Aqueous Phase Liquid

* - The groundwater elevation value was corrected due to the presence of NAPL as follows: (Measured Groundwater Elevation) + (NAPL thickness * NAPL Relative Density of 0.75)

N

0 70 140 Feet

DATE: June 2014 DESIGNED BY: T. Johansen DRAWN BY: D. Arnold	TASMAN GEOSCIENCES Tasman Geosciences, LLC 6899 Pecos Street - Unit C Denver, CO 80221	**DCP Midstream** **Monument Booster Station** First Half 2014 Semi-Annual Groundwater Monitoring Summary Report	Groundwater Elevation Contour Map (February 26, 2014)	Figure 3



MW-2	
	2/26/2014
Compound	(mg/L)
Benzene	<0.001
Toluene	<0.001
Ethylbenzene	<0.001
Total Xylenes	<0.001

MW-1D	
	2/26/2014
Compound	(mg/L)
Benzene	<0.001
Toluene	<0.001
Ethylbenzene	<0.001
Total Xylenes	<0.001

MW-6	
	2/26/2014
Compound	(mg/L)
Benzene	<0.001
Toluene	<0.001
Ethylbenzene	<0.001
Total Xylenes	<0.001

MW-7		
	2/26/2014	2/26/2014 (Duplicate)
Compound	(mg/L)	(mg/L)
Benzene	0.003	0.0031
Toluene	<0.001	<0.001
Ethylbenzene	<0.001	0.0011
Total Xylenes	<0.001	<0.001

MW-4	
	2/26/2014
Compound	(mg/L)
Benzene	<0.001
Toluene	<0.001
Ethylbenzene	<0.001
Total Xylenes	<0.001

MW-3	
	2/26/2014
Compound	(mg/L)
Benzene	<0.001
Toluene	<0.001
Ethylbenzene	<0.001
Total Xylenes	<0.001

Legend

- Monitoring Well
- (0.20) Measured Product Thickness (measured in feet)

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

Notes:

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

LNAPL - Light Non-Aqueous Phase Liquid.

N

0 65 130 Feet

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

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

DCP Midstream
Monument Booster Station
First Half 2014 Semi-Annual Groundwater Monitoring Summary Report

Analytical Results Map (February 26, 2014)

Figure 4

Appendix A

Historic Analytical Results

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	
MW-1	09/15/11	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	03/06/12	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	09/05/12	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	02/21/13	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	02/26/14	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1D	05/16/95	**0.018**	0.015	0.006	0.016	
MW-1D	11/15/95	0.003	0.002	<0.001	0.001	
MW-1D	01/18/96	0.004	0.003	<0.001	0.009	
MW-1D	04/24/96	<0.001	<0.001	<0.001	<0.001	
MW-1D	01/22/97	0.001	0.001	<0.001	<0.001	
MW-1D	08/11/97	<0.001	<0.001	<0.001	<0.001	
MW-1D	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-1D	08/03/98	<0.001	<0.001	<0.001	<0.001	
MW-1D	02/10/99	<0.001	<0.001	<0.001	<0.001	
MW-1D	08/17/99	<0.001	<0.001	<0.001	<0.001	
MW-1D	02/17/00	0.002	0.003	<0.001	0.001	
MW-1D	08/23/00	<0.005	<0.005	<0.005	<0.005	
MW-1D	02/08/01	<0.001	<0.001	<0.001	0.001	
MW-1D	07/30/01	<0.001	<0.001	<0.001	<0.001	
MW-1D	02/13/02	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/27/02	<0.001	<0.001	<0.001	<0.001	
MW-1D	04/25/03	<0.005	<0.005	<0.005	<0.005	
MW-1D	09/18/03	0.002	<0.001	<0.001	<0.001	
MW-1D	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-1D	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-1D	03/04/05	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-1D	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/20/06	<0.001	<0.001	<0.001	<0.001	
MW-1D	03/22/07	<0.001	<0.001	<0.001	<0.001	
MW-1D	09/25/07	<0.001	<0.001	<0.001	<0.001	
MW-1D	03/19/08	<0.00046	<0.00048	<0.00045	<0.0014	
MW-1D	03/20/08	<0.002	<0.002	<0.002	<0.006	
MW-1D	09/17/08	<0.002	<0.002	<0.002	<0.002	
MW-1D	03/10/09	<0.002/<0.002	<0.002/<0.002	<0.002/<0.002	<0.006/<0.006	
MW-1D	03/11/09	<0.00046	<0.00048	<0.00045	<0.0014	
MW-1D	09/23/09	<0.002	<0.002	<0.002	<0.006	
MW-1D	09/23/09	<0.00050	<0.00043	<0.00055	<0.0017	
MW-1D	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-1D	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-1D	09/16/10	<0.002	<0.002	<0.002	<0.004	
MW-1D	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-1D	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-1D	04/26/11	<0.00030	<0.0010	<0.00030	<0.00060	
MW-1D	09/15/11	<0.001	<0.002	<0.002	<0.004	
MW-1D	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-1D	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-1D	02/21/13	**0.016**	<0.001	<0.001	<0.003	
MW-1D	09/11/13	0.0029	<0.001	<0.001	<0.001	
MW-1D	02/26/14	<0.001	<0.001	<0.001	<0.001	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	
MW-2	05/16/95	<0.001	<0.001	<0.001	<0.001	
MW-2	11/15/95	NS	0.006	0.002	-	
MW-2	01/18/96	<0.001	<0.001	<0.001	<0.001	
MW-2	04/24/96	<0.001	<0.001	<0.001	<0.001	
MW-2	01/22/97	<0.001	<0.001	<0.001	<0.001	
MW-2	08/11/97	<0.001	<0.001	<0.001	<0.001	
MW-2	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-2	08/03/98	<0.001	<0.001	<0.001	<0.001	
MW-2	02/10/99	<0.001	<0.001	<0.001	<0.001	
MW-2	08/17/99	0.017	0.002	0.013	0.003	
MW-2	02/17/00	<0.001	<0.001	<0.001	<0.001	
MW-2	08/23/00	<0.001	<0.001	<0.001	<0.001	
MW-2	02/08/01	<0.001	<0.001	<0.001	<0.001	
MW-2	07/30/01	<0.001	<0.001	<0.001	<0.001	
MW-2	02/13/02	<0.001	<0.001	<0.001	<0.001	
MW-2	09/27/02	<0.001	<0.001	<0.001	<0.001	
MW-2	04/25/03	<0.001	<0.001	<0.001	<0.001	
MW-2	09/18/03	0.002	<0.001	<0.001	<0.001	
MW-2	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-2	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-2	03/04/05	<0.001	<0.001	<0.001	<0.001	
MW-2	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-2	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-2	09/20/06	<0.001	<0.001	<0.001	<0.001	
MW-2	03/22/07	<0.001	<0.001	<0.001	<0.001	
MW-2	09/25/07	<0.001	<0.001	<0.001	<0.001	
MW-2	03/19/08	<0.00046	<0.00048	<0.00045	<0.0014	
MW-2	03/20/08	<0.002	<0.002	<0.002	<0.006	
MW-2	09/17/08	<0.002	<0.002	<0.002	<0.006	
MW-2	03/10/09	<0.002	<0.002	<0.002	<0.006	
MW-2	03/11/09	<0.00046	<0.00048	<0.00045	<0.0014	
MW-2	09/23/09	<0.002	<0.002	<0.002	<0.006	
MW-2	09/23/09	<0.00050	<0.00043	<0.00055	<0.0017	
MW-2	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-2	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-2	09/16/10	<0.001	<0.002	<0.002	<0.004	
MW-2	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-2	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-2	04/26/11	<0.00030	<0.0010	<0.00030	<0.00060	
MW-2	09/15/11	<0.001	<0.002	<0.002	<0.004	
MW-2	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-2	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-2	02/21/13	<0.001	<0.001	<0.001	<0.003	
MW-2	09/11/13	<0.001	<0.001	<0.001	<0.001	
MW-2	02/26/14	<0.001	<0.001	<0.001	<0.001	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	
MW-3	05/16/95	<0.001	<0.001	<0.001	<0.001	
MW-3	11/15/95	<0.001	<0.001	<0.001	<0.001	
MW-3	01/18/96	<0.001	<0.001	<0.001	<0.001	
MW-3	04/24/96	<0.001	<0.001	<0.001	<0.001	
MW-3	01/22/97	<0.001	<0.001	<0.001	<0.001	
MW-3	08/11/97	<0.001	<0.001	<0.001	<0.001	
MW-3	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-3	08/03/98	0.007	<0.001	<0.001	<0.001	
MW-3	02/10/99	<0.005	<0.005	<0.005	<0.005	
MW-3	08/17/99	0.043	<0.005	<0.005	<0.005	
MW-3	02/17/00	0.021	<0.005	<0.005	<0.005	
MW-3	08/23/00	0.006	<0.005	<0.005	<0.005	
MW-3	02/08/01	0.004	0.001	0.002	0.005	
MW-3	07/30/01	0.002	<0.001	<0.001	<0.001	
MW-3	02/13/02	0.002	<0.001	<0.001	<0.001	
MW-3	09/27/02	<0.005	<0.005	<0.005	<0.005	
MW-3	04/25/03	<0.005	<0.005	<0.005	<0.005	
MW-3	09/18/03	0.002	<0.001	<0.001	<0.001	
MW-3	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-3	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-3	03/04/05	<0.001	<0.001	<0.001	<0.001	
MW-3	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-3	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-3	09/20/06	<0.001	<0.001	<0.001	<0.001	
MW-3	03/22/07	<0.001	<0.001	<0.001	<0.001	
MW-3	09/25/07	<0.001	<0.001	<0.001	<0.001	
MW-3	03/19/08	<0.00046	<0.00048	<0.00045	<0.0014	
MW-3	03/20/08	<0.002	<0.002	<0.002	<0.006	
MW-3	09/17/08	<0.002	<0.002	<0.002	<0.006	
MW-3	03/10/09	<0.002	<0.002	<0.002	<0.006	
MW-3	03/11/09	<0.00046	<0.00048	<0.00045	<0.0014	
MW-3	09/23/09	<0.002	<0.002	<0.002	<0.006	
MW-3	09/23/09	<0.00050	<0.00043	<0.00055	<0.0017	
MW-3	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-3	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-3	09/16/10	<0.001	<0.002	<0.002	<0.004	
MW-3	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-3	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-3	04/26/11	<0.00030	<0.0010	<0.00030	<0.00060	
MW-3	09/15/11	<0.001	<0.002	<0.002	<0.004	
MW-3	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-3	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-3	02/21/13	<0.001	<0.001	<0.001	<0.003	
MW-3	09/11/13	<0.001	<0.001	<0.001	<0.001	
MW-3	02/26/14	<0.001	<0.001	<0.001	<0.001	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	
MW-4	05/16/95	<0.001	<0.001	<0.001	<0.001	
MW-4	11/15/95	NS	0.006	0.002	0.1	
MW-4	01/18/96	0.003	<0.001	<0.001	<0.001	
MW-4	04/24/96	<0.002	<0.002	<0.002	<0.002	
MW-4	01/22/97	0.002	<0.001	<0.001	<0.001	
MW-4	08/11/97	0.001	<0.001	<0.001	<0.001	
MW-4	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-4	08/03/98	<0.001	<0.001	<0.001	<0.001	
MW-4	02/10/99	<0.001	<0.001	<0.001	<0.001	
MW-4	08/17/99	<0.001	<0.001	<0.001	0.001	
MW-4	02/17/00	<0.005	<0.005	<0.005	<0.005	
MW-4	08/23/00	<0.005	<0.005	<0.005	<0.005	
MW-4	02/08/01	0.002	<0.001	<0.001	0.002	
MW-4	07/30/01	<0.001	<0.001	<0.001	<0.001	
MW-4	02/13/02	NS	NS	NS	NS	
MW-4	09/27/02	NS	NS	NS	NS	
MW-4	04/25/03	<0.001	<0.001	<0.001	<0.001	
MW-4	09/18/03	<0.001	<0.001	<0.001	<0.001	
MW-4	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-4	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-4	03/04/05	<0.001	<0.001	<0.001	<0.001	
MW-4	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-4	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-4	09/20/06	<0.002	<0.001	<0.001	0.0043	
MW-4	03/22/07	<0.002	<0.001	<0.001	0.0036	
MW-4	09/25/07	<0.002	<0.001	<0.001	<0.001	
MW-4	03/19/08	<0.00046	<0.00048	<0.00045	<0.0014	
MW-4	03/20/08	<0.002	<0.002	<0.002	<0.006	
MW-4	09/17/08	<0.002	<0.002	<0.002	<0.006	
MW-4	03/10/09	<0.002	<0.002	<0.002	<0.006	
MW-4	03/11/09	<0.00046	<0.00048	<0.00045	<0.0014	
MW-4	09/23/09	<0.002	<0.002	<0.002	<0.006	
MW-4	09/23/09	<0.00050	<0.00043	<0.00055	<0.0017	
MW-4	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-4	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-4	09/16/10	<0.001	<0.002	<0.002	<0.004	
MW-4	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-4	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-4	06/02/11	<0.00025	<0.0010	<0.00050	<0.0020	
MW-4	09/15/11	<0.001	<0.002	<0.002	<0.004	
MW-4	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-4	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-4	02/21/13	<0.001	<0.001	<0.001	<0.003	
MW-4	09/11/13	<0.001	<0.001	<0.001	<0.001	
MW-4	02/26/14	<0.001	<0.001	<0.001	<0.001	
MW-5	09/15/11	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	03/06/12	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	09/05/12	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	02/21/13	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	09/11/13	LNAPL	LNAPL	LNAPL	LNAPL	
MW-5	02/26/14	LNAPL	LNAPL	LNAPL	LNAPL	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	
MW-6	11/15/95	0.003	0.001	<0.001	0.003	
MW-6	01/18/96	0.002	<0.001	<0.001	<0.001	
MW-6	04/24/96	<0.001	<0.001	<0.001	<0.001	
MW-6	01/22/97	0.001	<0.001	<0.001	<0.001	
MW-6	08/11/97	<0.001	<0.001	<0.001	0.001	
MW-6	01/23/98	<0.001	<0.001	<0.001	<0.001	
MW-6	08/03/98	<0.001	<0.001	<0.001	<0.001	
MW-6	02/10/99	<0.001	<0.001	<0.001	0.014	
MW-6	08/17/99	0.002	<0.001	<0.001	0.012	
MW-6	02/17/00	<0.001	0.004	<0.001	0.006	
MW-6	08/23/00	<0.001	0.004	<0.001	0.011	
MW-6	02/08/01	<0.001	<0.001	<0.001	0.011	
MW-6	07/30/01	<0.001	<0.001	<0.001	<0.001	
MW-6	02/13/02	<0.001	<0.001	<0.001	<0.001	
MW-6	09/27/02	<0.005	<0.005	<0.005	<0.005	
MW-6	04/25/03	<0.001	<0.001	<0.001	<0.001	
MW-6	09/18/03	0.002	<0.001	0.002	0.001	
MW-6	03/17/04	<0.001	<0.001	<0.001	<0.001	
MW-6	08/17/04	<0.001	<0.001	<0.001	<0.001	
MW-6	03/04/05	0.0061	<0.001	0.0032	<0.001	
MW-6	09/21/05	<0.001	<0.001	<0.001	<0.001	
MW-6	03/16/06	<0.001	<0.001	<0.001	<0.001	
MW-6	09/20/06	0.0391	<0.001	0.0287	0.0194	
MW-6	03/22/07	<0.001	<0.001	<0.001	0.0013	
MW-6	09/25/07	<0.001	<0.001	<0.001	<0.001	
MW-6	03/20/08	NS	NS	NS	NS	
MW-6	09/17/08	NS	NS	NS	NS	
MW-6	03/10/09	NS	NS	NS	NS	
MW-6	09/23/09	0.035	<0.002	0.0215	.0052J	
MW-6	09/23/09	**0.035**	<0.00043	0.0215	0.0052	
MW-6	05/17/10	<0.002	<0.002	<0.002	<0.006	
MW-6	05/17/10	<0.00050	<0.00043	<0.00055	<0.0017	
MW-6	09/16/10	<0.001	<0.002	<0.002	<0.004	
MW-6	09/16/10	<0.00030	<0.0010	<0.00030	-	
MW-6	04/26/11	<0.001	<0.002	<0.002	<0.002	
MW-6	06/02/11	<0.00025	<0.0010	<0.00050	<0.0020	
MW-6	03/06/12	<0.005	<0.005	<0.005	<0.015	
MW-6	09/05/12	<0.005	<0.005	<0.005	<0.015	
MW-6	02/21/13	<0.001	<0.001	<0.001	<0.003	
MW-6	09/11/13	<0.001	<0.001	<0.001	<0.001	
MW-6	02/26/14	<0.001	<0.001	<0.001	<0.001	

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX CONCENTRATIONS IN GROUNDWATER
MONUMENT BOOSTER STATION
LEA COUNTY, NEW MEXICO

Location Identification	Sample Date	Benzene (mg/l)	Toluene (mg/l)	Ethylbenzene (mg/l)	Total Xylenes (mg/l)	Comments
New Mexico Water Quality Control Commission Groundwater Standards (mg/L)		**0.01**	**0.75**	**0.75**	**0.62**	
MW-7	11/15/95	**0.465**	0.205	<0.001	0.163	
MW-7	01/18/96	**1.13**	0.476	0.003	0.365	
MW-7	04/24/96	**0.585**	0.251	<0.002	0.013	
MW-7	01/22/97	**0.896**	0.24	<0.005	0.33	
MW-7	08/11/97	**0.317**	0.155	0.2	0.049	
MW-7	01/23/98	**0.876**	0.486	<0.005	0.181	
MW-7	08/03/98	**0.094**	0.064	<0.005	0.007	
MW-7	02/10/99	**0.597**	0.44	<0.005	0.12	
MW-7	08/17/99	**0.705**	0.06	<0.005	0.556	
MW-7	02/17/00	**0.573**	0.49	<0.005	0.226	
MW-7	08/23/00	**0.546**	0.484	0.006	0.177	
MW-7	02/08/01	**0.355**	0.424	<0.005	0.052	
MW-7	07/30/01	**0.017**	0.058	<0.005	<0.005	
MW-7	02/13/02	**0.228**	0.094	<0.005	0.5	
MW-7	09/27/02	**0.015**	0.017	<0.005	<0.005	
MW-7	04/25/03	**0.157**	0.192	<0.005	0.02	
MW-7	09/18/03	**0.018**	0.023	<0.001	0.004	
MW-7	03/17/04	**0.125**	0.108	<0.10	0.033	
MW-7	08/17/04	**0.237**	0.081	<0.20	<0.020	
MW-7	03/04/05	**.125/.121**	<0.001	0.0467/0.0453	0.0202	
MW-7	09/21/05	**.15/0.148**	<0.001	0.079/0.0789	0.0248	
MW-7	03/16/06	**0.191**	0.0032	0.073	<0.001	
MW-7	09/20/06	**0.236**	<0.001	0.176	0.187	
MW-7	03/22/07	**0.209/0.215**	<0.05/<0.01	.149/.121	0.116/0.0532	
MW-7	09/25/07	**0.465/0.458**	<0.01/<0.01	.318/.314	.0307/0.302	
MW-7	03/19/08	**0.161**	<0.00048	0.057	0.0295	
MW-7	03/20/08	**0.161/0.169**	<0.002/<0.002	.057/.0637	0.0295/0.0325	
MW-7	09/17/08	**0.083**	<0.002	0.0475	0.0204	
MW-7	03/10/09	**0.039**	<0.002	0.0177	0.0052 J	
MW-7	03/11/09	**0.0339**	<0.00048	0.0177	0.0052	
MW-7	09/23/09	**0.0332**	<0.00043	0.0176	0.0033	
MW-7	09/23/09	**0.0332/<0.002**	<0.002/<0.002	.0176/<0.002	0.0033J/<0.006	
MW-7	05/17/10	**0.0201/0.0198**	<0.002/<0.002	.0095/.0092	0.0033J/0.0033J	
MW-7	05/17/10	**0.0201**	<0.00043	0.0095	0.0033	
MW-7	09/16/10	**0.522/0.512**	<0.01/<0.01	0.294/0.289	0.0383/0.0378	
MW-7	09/16/10	**0.522**	<0.0050	0.294	-	
MW-7	04/26/11	0.0091/**0.0104**	<0.01/<0.01	0.0042/0.0041	<0.01/<0.01	
MW-7	04/26/11	0.0091	<0.0050	0.0042	<0.0030	
MW-7	09/15/11	**0.394**	<0.01	0.149	0.0442	Duplicate sample collected
MW-7	03/06/12	0.0098	<0.0050	0.0088	<0.015	
MW-7	09/05/12	**0.014**	<0.005	0.01	<0.015	Duplicate sample collected
MW-7	02/21/13	0.0059	<0.001	0.0049	<0.003	Duplicate sample collected
MW-7	09/11/13	0.0024	<0.001	0.0013	<0.001	Duplicate sample collected
MW-7	02/26/14	0.003	<0.001	<0.001	<0.001	Duplicate sample collected
Trip Blank	02/26/14	<0.001	<0.001	<0.001	<0.001	

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.

Monitoring well locations MW-1 and MW-5 have historically exhibited measurable LNAPL during groundwater monitoring events. Therefore, those wells have not been sampled.

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.

LNAPL = Light Non-Aqueous Phase Liquid

NM = Not measured.

NS = Not sampled.

mg/L = milligrams per liter.

Appendix B

Laboratory Analytical Report (Electronic Only)

ALS Environmental Job #: 14021281

04-Mar-2014

Don Baggus
Tasman Geosciences
5690 Webster Street
Arvada, CO 80002

Tel: (303) 487-1228
Fax:

Re: Monument Booster Station Work Order: **14021281**

Dear Don,

ALS Environmental received 8 samples on 28-Feb-2014 09:20 AM for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 19.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Electronically approved by: Dayna.Fisher

Sonia West
Project Manager

Certificate No: T104704231-13-12

ALS Environmental

Date: 04-Mar-14

Client: Tasman Geosciences
Project: Monument Booster Station
Work Order: **14021281**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
14021281-01	MW-1D	Water		2/26/2014 08:15	2/28/2014 09:20	☐
14021281-02	MW-2	Water		2/26/2014 08:40	2/28/2014 09:20	☐
14021281-03	MW-3	Water		2/26/2014 10:30	2/28/2014 09:20	☐
14021281-04	MW-4	Water		2/26/2014 09:15	2/28/2014 09:20	☐
14021281-05	MW-6	Water		2/26/2014 09:30	2/28/2014 09:20	☐
14021281-06	MW-7	Water		2/26/2014 08:45	2/28/2014 09:20	☐
14021281-07	Dup	Water		2/26/2014	2/28/2014 09:20	☐
14021281-08	Trip Blank	Water		2/26/2014	2/28/2014 09:20	☐

Client:	Tasman Geosciences
Project:	Monument Booster Station
Work Order:	14021281

Case Narrative

No Exceptions

ALS Environmental

Date: *04-Mar-14*

Client: Tasman Geosciences

Project: Monument Booster Station **Work Order:** 14021281

Sample ID: MW-1D **Lab ID:** 14021281-01

Collection Date: 2/26/2014 08:15 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	ND		0.0010	mg/L	1	3/4/2014 04:51 AM
Ethylbenzene	ND		0.0010	mg/L	1	3/4/2014 04:51 AM
Toluene	ND		0.0010	mg/L	1	3/4/2014 04:51 AM
Xylenes, Total	ND		0.0010	mg/L	1	3/4/2014 04:51 AM
Surr: 1,2-Dichloroethane-d4	*90.4*		*71-125*	*%REC*	1	3/4/2014 04:51 AM
Surr: 4-Bromofluorobenzene	*94.2*		*70-125*	*%REC*	1	3/4/2014 04:51 AM
Surr: Dibromofluoromethane	*92.7*		*74-125*	*%REC*	1	3/4/2014 04:51 AM
Surr: Toluene-d8	*101*		*75-125*	*%REC*	1	3/4/2014 04:51 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *04-Mar-14*

Client: Tasman Geosciences

Project: Monument Booster Station **Work Order:** 14021281

Sample ID: MW-2 **Lab ID:** 14021281-02

Collection Date: 2/26/2014 08:40 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	ND		0.0010	mg/L	1	3/4/2014 12:35 AM
Ethylbenzene	ND		0.0010	mg/L	1	3/4/2014 12:35 AM
Toluene	ND		0.0010	mg/L	1	3/4/2014 12:35 AM
Xylenes, Total	ND		0.0010	mg/L	1	3/4/2014 12:35 AM
Surr: 1,2-Dichloroethane-d4	*94.0*		*71-125*	*%REC*	1	3/4/2014 12:35 AM
Surr: 4-Bromofluorobenzene	*93.6*		*70-125*	*%REC*	1	3/4/2014 12:35 AM
Surr: Dibromofluoromethane	*94.4*		*74-125*	*%REC*	1	3/4/2014 12:35 AM
Surr: Toluene-d8	*100*		*75-125*	*%REC*	1	3/4/2014 12:35 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *04-Mar-14*

Client: Tasman Geosciences

Project: Monument Booster Station **Work Order:** 14021281

Sample ID: MW-3 **Lab ID:** 14021281-03

Collection Date: 2/26/2014 10:30 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	ND		0.0010	mg/L	1	3/4/2014 05:14 AM
Ethylbenzene	ND		0.0010	mg/L	1	3/4/2014 05:14 AM
Toluene	ND		0.0010	mg/L	1	3/4/2014 05:14 AM
Xylenes, Total	ND		0.0010	mg/L	1	3/4/2014 05:14 AM
Surr: 1,2-Dichloroethane-d4	*94.8*		*71-125*	*%REC*	1	3/4/2014 05:14 AM
Surr: 4-Bromofluorobenzene	*92.1*		*70-125*	*%REC*	1	3/4/2014 05:14 AM
Surr: Dibromofluoromethane	*95.5*		*74-125*	*%REC*	1	3/4/2014 05:14 AM
Surr: Toluene-d8	*98.4*		*75-125*	*%REC*	1	3/4/2014 05:14 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *04-Mar-14*

Client: Tasman Geosciences

Project: Monument Booster Station **Work Order:** 14021281

Sample ID: MW-4 **Lab ID:** 14021281-04

Collection Date: 2/26/2014 09:15 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	ND		0.0010	mg/L	1	3/4/2014 05:37 AM
Ethylbenzene	ND		0.0010	mg/L	1	3/4/2014 05:37 AM
Toluene	ND		0.0010	mg/L	1	3/4/2014 05:37 AM
Xylenes, Total	ND		0.0010	mg/L	1	3/4/2014 05:37 AM
Surr: 1,2-Dichloroethane-d4	*95.7*		*71-125*	*%REC*	1	3/4/2014 05:37 AM
Surr: 4-Bromofluorobenzene	*92.1*		*70-125*	*%REC*	1	3/4/2014 05:37 AM
Surr: Dibromofluoromethane	*96.8*		*74-125*	*%REC*	1	3/4/2014 05:37 AM
Surr: Toluene-d8	*98.4*		*75-125*	*%REC*	1	3/4/2014 05:37 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *04-Mar-14*

Client: Tasman Geosciences
Project: Monument Booster Station
Work Order: 14021281
Sample ID: MW-6
Lab ID: 14021281-05
Collection Date: 2/26/2014 09:30 AM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	ND		0.0010	mg/L	1	3/4/2014 06:01 AM
Ethylbenzene	ND		0.0010	mg/L	1	3/4/2014 06:01 AM
Toluene	ND		0.0010	mg/L	1	3/4/2014 06:01 AM
Xylenes, Total	ND		0.0010	mg/L	1	3/4/2014 06:01 AM
Surr: 1,2-Dichloroethane-d4	*92.8*		*71-125*	*%REC*	1	3/4/2014 06:01 AM
Surr: 4-Bromofluorobenzene	*96.1*		*70-125*	*%REC*	1	3/4/2014 06:01 AM
Surr: Dibromofluoromethane	*95.8*		*74-125*	*%REC*	1	3/4/2014 06:01 AM
Surr: Toluene-d8	*98.7*		*75-125*	*%REC*	1	3/4/2014 06:01 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *04-Mar-14*

Client: Tasman Geosciences

Project: Monument Booster Station **Work Order:** 14021281

Sample ID: MW-7 **Lab ID:** 14021281-06

Collection Date: 2/26/2014 08:45 AM **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	**0.0030**		**0.0010**	**mg/L**	1	3/4/2014 06:24 AM
Ethylbenzene	ND		0.0010	mg/L	1	3/4/2014 06:24 AM
Toluene	ND		0.0010	mg/L	1	3/4/2014 06:24 AM
Xylenes, Total	ND		0.0010	mg/L	1	3/4/2014 06:24 AM
Surr: 1,2-Dichloroethane-d4	*92.0*		*71-125*	*%REC*	1	3/4/2014 06:24 AM
Surr: 4-Bromofluorobenzene	*98.1*		*70-125*	*%REC*	1	3/4/2014 06:24 AM
Surr: Dibromofluoromethane	*96.5*		*74-125*	*%REC*	1	3/4/2014 06:24 AM
Surr: Toluene-d8	*100*		*75-125*	*%REC*	1	3/4/2014 06:24 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *04-Mar-14*

Client: Tasman Geosciences
Project: Monument Booster Station
Work Order: 14021281
Sample ID: Dup
Lab ID: 14021281-07
Collection Date: 2/26/2014
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	**0.0031**		**0.0010**	**mg/L**	1	3/4/2014 06:47 AM
Ethylbenzene	**0.0011**		**0.0010**	**mg/L**	1	3/4/2014 06:47 AM
Toluene	ND		0.0010	mg/L	1	3/4/2014 06:47 AM
Xylenes, Total	ND		0.0010	mg/L	1	3/4/2014 06:47 AM
Surr: 1,2-Dichloroethane-d4	*89.3*		*71-125*	*%REC*	1	3/4/2014 06:47 AM
Surr: 4-Bromofluorobenzene	*93.2*		*70-125*	*%REC*	1	3/4/2014 06:47 AM
Surr: Dibromofluoromethane	*96.6*		*74-125*	*%REC*	1	3/4/2014 06:47 AM
Surr: Toluene-d8	*96.0*		*75-125*	*%REC*	1	3/4/2014 06:47 AM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Environmental

Date: *04-Mar-14*

Client: Tasman Geosciences

Project: Monument Booster Station **Work Order:** 14021281

Sample ID: Trip Blank **Lab ID:** 14021281-08

Collection Date: 2/26/2014 **Matrix:** WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	ND		0.0010	mg/L	1	3/3/2014 11:49 PM
Ethylbenzene	ND		0.0010	mg/L	1	3/3/2014 11:49 PM
Toluene	ND		0.0010	mg/L	1	3/3/2014 11:49 PM
Xylenes, Total	ND		0.0010	mg/L	1	3/3/2014 11:49 PM
Surr: 1,2-Dichloroethane-d4	*91.9*		*71-125*	*%REC*	1	3/3/2014 11:49 PM
Surr: 4-Bromofluorobenzene	*97.7*		*70-125*	*%REC*	1	3/3/2014 11:49 PM
Surr: Dibromofluoromethane	*96.0*		*74-125*	*%REC*	1	3/3/2014 11:49 PM
Surr: Toluene-d8	*99.4*		*75-125*	*%REC*	1	3/3/2014 11:49 PM

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Work Order: 14021281
Client: Tasman Geosciences
Project: Monument Booster Station

DATES REPORT

Sample ID	Client Sample ID	Matrix	Collection Date	TCLP Date	Prep Date	Analysis Date
Batch ID: R162255	**Test Name:** Low Level Volatiles - SW8260C					
14021281-01A	MW-1D	Water	2/26/2014 8:15:00 AM			3/4/2014 04:51 AM
14021281-02A	MW-2		2/26/2014 8:40:00 AM			3/4/2014 12:35 AM
14021281-03A	MW-3		2/26/2014 10:30:00 AM			3/4/2014 05:14 AM
14021281-04A	MW-4		2/26/2014 9:15:00 AM			3/4/2014 05:37 AM
14021281-05A	MW-6		2/26/2014 9:30:00 AM			3/4/2014 06:01 AM
14021281-06A	MW-7		2/26/2014 8:45:00 AM			3/4/2014 06:24 AM
14021281-07A	Dup		2/26/2014			3/4/2014 06:47 AM
14021281-08A	Trip Blank					3/3/2014 11:49 PM

Batch ID: **R162255** Instrument ID **VOA2** Method: **SW8260**

MBLK Sample ID: **VBLKW-140303-R162255** Units: **µg/L** Analysis Date: **3/3/2014 11:02 PM**

Client ID: Run ID: **VOA2_140303B** SeqNo: **3551316** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	ND	1.0								
Ethylbenzene	ND	1.0								
Toluene	ND	1.0								
Xylenes, Total	ND	3.0								
Surr: 1,2-Dichloroethane-d4	46.45	1.0	*50*	*0*	*92.9*	*71-125*	*0*			
Surr: 4-Bromofluorobenzene	45.47	1.0	*50*	*0*	*90.9*	*70-125*	*0*			
Surr: Dibromofluoromethane	47.83	1.0	*50*	*0*	*95.7*	*74-125*	*0*			
Surr: Toluene-d8	48.91	1.0	*50*	*0*	*97.8*	*75-125*	*0*			

LCS Sample ID: **VLCSW-140303-R162255** Units: **µg/L** Analysis Date: **3/3/2014 10:16 PM**

Client ID: Run ID: **VOA2_140303B** SeqNo: **3551315** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	45.37	1.0	50	0	90.7	80-120				
Ethylbenzene	45.94	1.0	50	0	91.9	80-120				
Toluene	45.06	1.0	50	0	90.1	80-121				
Xylenes, Total	141.4	3.0	150	0	94.3	80-124				
Surr: 1,2-Dichloroethane-d4	44.72	1.0	*50*	*0*	*89.4*	*71-125*	*0*			
Surr: 4-Bromofluorobenzene	51.32	1.0	*50*	*0*	*103*	*70-125*	*0*			
Surr: Dibromofluoromethane	47.66	1.0	*50*	*0*	*95.3*	*74-125*	*0*			
Surr: Toluene-d8	49.36	1.0	*50*	*0*	*98.7*	*75-125*	*0*			

MS Sample ID: **14021238-01AMS** Units: **µg/L** Analysis Date: **3/4/2014 12:58 AM**

Client ID: Run ID: **VOA2_140303B** SeqNo: **3551321** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	48.54	1.0	50	0	97.1	80-120				
Ethylbenzene	48.21	1.0	50	0	96.4	80-120				
Toluene	47.63	1.0	50	0	95.3	80-121				
Xylenes, Total	145.9	3.0	150	0	97.3	80-124				
Surr: 1,2-Dichloroethane-d4	45.29	1.0	*50*	*0*	*90.6*	*71-125*	*0*			
Surr: 4-Bromofluorobenzene	50.75	1.0	*50*	*0*	*101*	*70-125*	*0*			
Surr: Dibromofluoromethane	47.67	1.0	*50*	*0*	*95.3*	*74-125*	*0*			
Surr: Toluene-d8	49.61	1.0	*50*	*0*	*99.2*	*75-125*	*0*			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Client: Tasman Geosciences
Work Order: 14021281
Project: Monument Booster Station

QC BATCH REPORT

Batch ID: **R162255** Instrument ID **VOA2** Method: **SW8260**

MS Sample ID: **14021281-02AMS** Units: **µg/L** Analysis Date: **3/4/2014 01:45 AM**
Client ID: **MW-2** Run ID: **VOA2_140303B** SeqNo: **3551323** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	47.2	1.0	50	0	94.4	80-120				
Ethylbenzene	47.18	1.0	50	0	94.4	80-120				
Toluene	46.81	1.0	50	0	93.6	80-121				
Xylenes, Total	144.8	3.0	150	0	96.5	80-124				
Surr: 1,2-Dichloroethane-d4	43.22	1.0	*50*	*0*	*86.4*	*71-125*	*0*			
Surr: 4-Bromofluorobenzene	50.3	1.0	*50*	*0*	*101*	*70-125*	*0*			
Surr: Dibromofluoromethane	47.5	1.0	*50*	*0*	*95*	*74-125*	*0*			
Surr: Toluene-d8	48.66	1.0	*50*	*0*	*97.3*	*75-125*	*0*			

MSD Sample ID: **14021238-01AMSD** Units: **µg/L** Analysis Date: **3/4/2014 01:22 AM**
Client ID: Run ID: **VOA2_140303B** SeqNo: **3551322** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	47.69	1.0	50	0	95.4	80-120	48.54	1.76	20	
Ethylbenzene	47.22	1.0	50	0	94.4	80-120	48.21	2.08	20	
Toluene	47.14	1.0	50	0	94.3	80-121	47.63	1.03	20	
Xylenes, Total	143	3.0	150	0	95.4	80-124	145.9	1.96	20	
Surr: 1,2-Dichloroethane-d4	44.27	1.0	*50*	*0*	*88.5*	*71-125*	*45.29*	*2.26*	*20*	
Surr: 4-Bromofluorobenzene	49.22	1.0	*50*	*0*	*98.4*	*70-125*	*50.75*	*3.06*	*20*	
Surr: Dibromofluoromethane	47.39	1.0	*50*	*0*	*94.8*	*74-125*	*47.67*	*0.583*	*20*	
Surr: Toluene-d8	48.48	1.0	*50*	*0*	*97*	*75-125*	*49.61*	*2.3*	*20*	

MSD Sample ID: **14021281-02AMSD** Units: **µg/L** Analysis Date: **3/4/2014 02:08 AM**
Client ID: **MW-2** Run ID: **VOA2_140303B** SeqNo: **3551324** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	49.82	1.0	50	0	99.6	80-120	47.2	5.39	20	
Ethylbenzene	50.02	1.0	50	0	100	80-120	47.18	5.84	20	
Toluene	48.91	1.0	50	0	97.8	80-121	46.81	4.4	20	
Xylenes, Total	152.3	3.0	150	0	102	80-124	144.8	5.06	20	
Surr: 1,2-Dichloroethane-d4	43.23	1.0	*50*	*0*	*86.5*	*71-125*	*43.22*	*0.0325*	*20*	
Surr: 4-Bromofluorobenzene	49.83	1.0	*50*	*0*	*99.7*	*70-125*	*50.3*	*0.94*	*20*	
Surr: Dibromofluoromethane	46.57	1.0	*50*	*0*	*93.1*	*74-125*	*47.5*	*1.98*	*20*	
Surr: Toluene-d8	48.69	1.0	*50*	*0*	*97.4*	*75-125*	*48.66*	*0.0489*	*20*	

The following samples were analyzed in this batch:

14021281-01A	14021281-02A	14021281-03A	14021281-04A
14021281-05A	14021281-06A	14021281-07A	14021281-08A

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

ALS Environmental

Date: 04-Mar-14

Client: Tasman Geosciences
Project: Monument Booster Station
WorkOrder: **14021281**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitation Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Units Reported	Description
mg/L	Milligrams per Liter

ALS Environmental

Sample Receipt Checklist

Client Name: **TASMAN GEOSCIENCES** Date/Time Received: **28-Feb-14 09:20**

Work Order: **14021281** Received by: **BA11**

Checklist completed by Salvador A. Yanez (eSignature) 28-Feb-14 (Date) Reviewed by: Sonia West (eSignature) 03-Mar-14 (Date)

Matrices: Water
Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	3.1c/3.1c c/u		
Cooler(s)/Kit(s):	5809		
Date/Time sample(s) sent to storage:	2/28/2014 13:45		
Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☐	N/A ☑
pH adjusted?	Yes ☐	No ☐	N/A ☑
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

CorrectiveAction:

ALS Environmental
Cincinnati, OH +1 513 733 5336
Everett, WA +1 425 356 2600
Fort Collins, CO +1 970 490 1511
Holland, MI +1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 101639

14021281

TASMAN GEOSCIENCES: Tasman Geosciences

Project: Monument Booster Station

ALS Project Manager:

Customer Information		Project Information			
Purchase Order		Project Name	Monument Booster Station	A	BTEX (8260B)
Work Order		Project Number	4000128008 F218	B	
Company Name	Tasman Geosciences	Bill To Company	DCP Midstream, LP	C	
Send Report To	Don Baggus	Invoice Attn	Chandler Cole	D	
Address	5690 Webster Street	Address	370 17th Street, Suite 2500	E	
				F	
City/State/Zip	Arvada, CO 80002	City/State/Zip	Denver, Colorado 80102	G	
Phone	(720) 998-2024	Phone		H	
Fax		Fax		I	
e-Mail Address		e-Mail Address		J	

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	MW-1D	2/26/14	0815	Water	HCL	3	X										☐
2	MW-2		0840	Water	HCL	3	X										☐
3	MW-2 MS		0840	Water	HCL	3	X										☐
4	MW-2 MSD		0840	Water	HCL	3	X										☐
5	MW-3		1030	Water	HCL	3	X										☐
6	MW-4		0915	Water	HCL	3	X										☐
7	MW-6		0930	Water	HCL	3	X										☐
8	~~MW-8~~ MW-7 DUP		0845	Water	HCL	3	X										☐
9	DUPLICATE			Water	HCL	3	X										☐
10	Trip Blank			Water	HCL	3	X										☐

17 of 19

Sampler(s) Please Print & Sign: Andrew Tabor

Shipment Method: Fedex

Required Turnaround Time: (Check Box) ☑ Std 10 WK Days ☐ 5 WK Days ☐ 2 WK Days ☐ 24 Hour ☐ Other

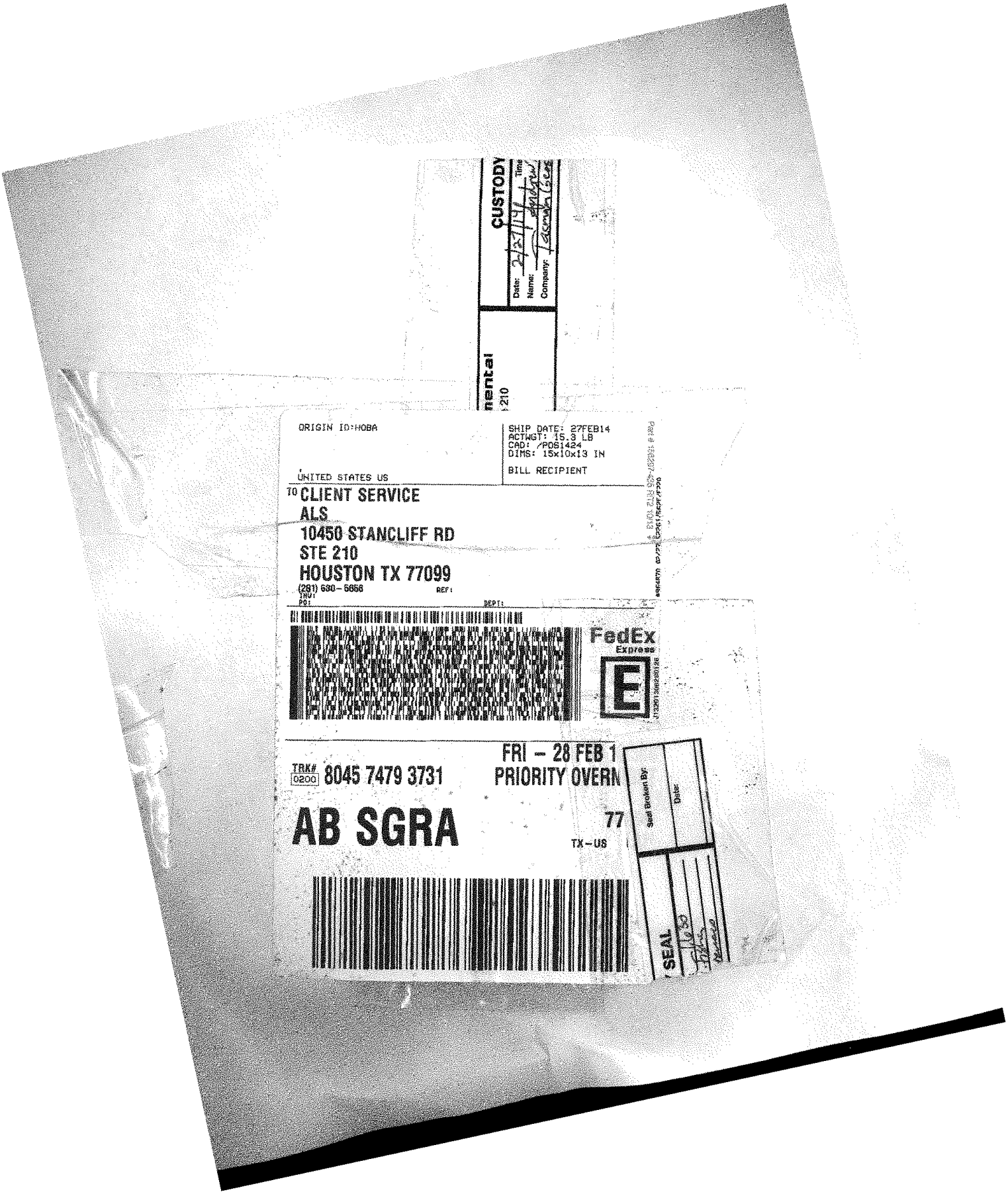
Results Due Date:

Relinquished by:	Date:	Time:	Received by:	Notes: 10 Day TAT
Andrew Tabor	3/24/14	17:00		
Relinquished by:	Date:	Time:	Received by/Laboratory:	Cooler ID / Cooler Temp.
	4/25/14	09:20		
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):	

QC Package: (Check One Box Below)
☑ Level II Std QC
☐ Level III Std QC/Raw Data
☐ Level IV SW846/CLP
☐ Other / EDD
☐ TRRP CheckList
☐ TRRP Level IV

Preservative Key: 1-HCl 2-HNO_3 3-H_2SO_4 4-NaOH 5-$Na_2S_2O_3$ 6-$NaHSO_4$ 7-Other 8-4°C 9-5035

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.


CUSTODY
Date:
Time:
Name:
Company:
ORIGIN ID:HOBA
SHIP DATE: 27FEB14
ACTWGT: 15.3 LB
CAD: /POS1424
DIMS: 15x10x13 IN
BILL RECIPIENT
UNITED STATES US
TO CLIENT SERVICE
ALS
10450 STANCLIFF RD
STE 210
HOUSTON TX 77099
(281) 530-5656
REF:
DEPT:
FedEx
Express
TRK# 0200 8045 7479 3731
FRI - 28 FEB 1
PRIORITY OVERN
AB SGRA
77
TX-US
Seal Broken By:
Date:
SEAL

fedex.com 1.800.GoFedEx 1.800.463.3339

FedEx Express US [illegible]

Tracking Number 8045 7479 3731

Form ID No. 0200

1 From

Date 2/27/14 [redacted]

Sender's Name D W Baggus Phone 720 635 9675

Company Tasman Geosciences

Address 6899 Pecos St Unit C

Dept./Floor/Suite/Room

City Denver State CO ZIP 80221

2 Your Internal Billing Reference

3 To

Recipient's Name Client Services Phone 281 530-5656

Company ALS Laboratory Group

Address 10450 Stancliff Rd Ste 210 Dept./Floor/Suite/Room

We cannot deliver to P.O. boxes or P.O. ZIP codes.

☐ HOLD Weekday
FedEx location address REQUIRED. NOT available for FedEx First Overnight.

☐ HOLD Saturday
FedEx location address REQUIRED. Available ONLY for FedEx Priority Overnight and FedEx 2Day to select locations.

Address

Use this line for the HOLD location address or for continuation of your shipping address.

City Houston State TX ZIP 77099-4338

8045 7479 3731

4 Express Package Service *To most locations.

NOTE: Service order has changed. Please select carefully.

Next Business Day

☐ FedEx First Overnight
Earliest next business morning delivery to select locations. Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☒ FedEx Priority Overnight
Next business morning.* Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

☐ FedEx Standard Overnight
Next business afternoon.* Saturday Delivery NOT available.

5 Packaging * Declared value limit $500.

☐ FedEx Envelope* ☐ FedEx Pak* ☐

6 Special Handling and Delivery Signature Op

☐ SATURDAY Delivery
NOT available for FedEx Standard Overnight, FedEx 2Day A.M., or FedEx Express

☐ No Signature Required
Package may be left without obtaining a signature for delivery.

☐ Direct Signature
Someone at recipient's address may sign for delivery. Fee applies.

Does this shipment contain dangerous goods?

One box must be checked.

☐ No ☐ Yes As per attached Shipper's Declaration. ☐ Yes Shipper's Declaration not required. ☐ Dry Ice

Dangerous goods (including dry ice) cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

7 Payment *Bill to:*

Enter FedEx Acct. No. or Credit Card No. below

☐ Sender Acct. No. in Section 1 will be billed. ☒ Recipient ☐ Third Party ☐ C

[redacted] 7 [redacted]

Total Packages 1 Total Weight 15 lbs. Credit C

†Our liability is limited to US$100 unless you declare a higher value. S

Rev. Date 1/12 • Part #167002 • ©2012 FedEx • PRINT