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Q1 GWMR

05/30/2013

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

May 30, 2013

Mr. Glenn von Gonten
Oil Conservation Division
New Mexico Energy, Minerals
& Natural Resources Department
1220 South St. Francis Dr.
Santa Fe, NM 87505

RE: First Quarter 2013 Groundwater Monitoring Report
Burton Flats Compressor Station
Lots 4 and 5, Section 1, Township 21 South, Range 27 East
Eddy County, New Mexico
OCD Case No. 2R799

Dear Mr. von Gonten:

DCP Midstream, LP (DCP) is pleased to submit for your review one copy of the First Quarter 2013 Groundwater Monitoring Report for the DCP Burton Flats Booster Station located in Eddy County, New Mexico (Lots 4 and 5, Section 1, Township 21 South, Range 27 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: Mr. Mike Bratcher - EMNRD
Mr. Jim Griswold - EMNRD
Mr. Jim Amos – BLM Carlsbad
Environmental Files

First Quarter 2013 Groundwater Monitoring and Activities Summary Report

Burton Flats Booster Station
Eddy County, New Mexico
AP #2R799

Prepared for:

DCP Midstream

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

Prepared by:

TASMAN GEOSCIENCES

6899 Pecos Street, Unit C
Denver, Colorado 80221

April 29, 2013

Table of Contents

1. Introduction

This report summarizes the groundwater monitoring activities conducted during the first quarter 2013 at the Burton Flats Booster Station (Site) in Eddy County, New Mexico (Figure 1). Tasman Geosciences, LLC (Tasman) conducted these activities on behalf of DCP Midstream, LP (DCP). Previous groundwater monitoring activities up to and including Third Quarter 2012, were performed by Conestoga-Rovers and Associates (CRA) after which project responsibilities were transferred to Tasman. Field activities were conducted with the purpose of monitoring groundwater flow and quality conditions and assessing the presence of light non-aqueous phase liquid (LNAPL) hydrocarbons in the Site subsurface. Current Site conditions were evaluated from field data and analytical laboratory results collected during the reporting period.

2. Site Location and Background

The Site is located in the Fourth and Fifth Lots of Section 1, Township 21 South, Range 27 East (approximate coordinates 32.5195 degrees north and 104.1507 degrees west). It is approximately 3.4 miles northwest of the intersection of US Highway 62 and County Road 243. The area is sparsely populated and land use is primarily associated with livestock grazing and oil and gas extraction and conveyance.

Based on information included in historical Site investigation reports, a release of approximately 10 barrels (bbl) of oil and produced water occurred on October 5, 2009 of which approximately 8 bbls were recovered from within the tank secondary containment area. Subsequent to the submittal of a C-141 report on October 12, 2009, Ocotillo Environmental was contracted to delineate and remediate residual petroleum hydrocarbon impacts at the Site. Site investigation and soil sampling within the release area occurred during the 3rd quarter of 2009 and early 4th quarter of 2010 (BH-1 through BH-5). Elevated levels of petroleum hydrocarbons within the soil were encountered to depths of 20-feet below ground surface (bgs). Groundwater was noted between 16-feet and 20-feet bgs during site characterization activities. Subsequent to soil investigation activities, four groundwater monitoring wells were installed around and down-gradient from the release area during the 4th quarter of 2011 (MW-1 through MW-4). Elevated petroleum hydrocarbon concentrations in soil were observed during well installation. Consequently, two additional soil borings were completed to a depth of 20 feet bgs in the direct area of impact (SB 11-1 and SB 11-2). Monitoring well and soil boring locations are shown on Figure 2.

Boring logs for the Site monitoring wells indicate that the subsurface geology contains unconsolidated fine-grained sand, silt, and clay sediments. This general characteristic has been utilized in evaluating the historic and current LNAPL behavior. Ongoing monitoring and sampling of the four Site monitoring wells listed above has been conducted on a quarterly basis since installation.

3. Groundwater Monitoring

This section describes the groundwater field and laboratory activities performed during the first quarter 2013 monitoring event. Monitoring activities included Site-wide groundwater gauging, LNAPL measurements, and groundwater sampling. Figure 2 illustrates the groundwater monitoring network, MW-1 through MW-4, utilized to perform these activities at the Site.

3.1 Groundwater and LNAPL Elevation Monitoring

Groundwater and LNAPL levels were measured in order to evaluate hydraulic characteristics and provide information regarding seasonal fluctuations in groundwater elevations at the Site. During the first quarter 2013, groundwater levels were measured at four Site monitoring well locations.

Groundwater levels were measured on the north side of the well casing to the nearest 0.01-foot using an oil-water interface probe (IP). Groundwater level data were later converted to elevation (feet above mean sea level [AMSL]). Measured groundwater levels and calculated groundwater elevation data are presented in Table 1 and a first quarter 2013 groundwater elevation contour map is illustrated on Figure 3. LNAPL levels, where detected by the IP, are also presented in Table 1.

Groundwater elevations ranged from 3,177.29 feet AMSL at monitoring well MW-2 to 3,177.40 feet AMSL at monitoring well MW-3. As illustrated on Figure 3, groundwater flow at the Site generally trends to the northwest with a gradient of approximately 0.0007 foot per foot between monitoring wells MW-2 and MW-3.

Groundwater elevation from MW-4 was not used in calculating hydraulic gradient due to the presence of LNAPL. The selected elevations were directly measured and are representative of the general observed gradient and flow direction.

LNAPL was detected at monitoring well MW-4 during the first quarter 2013 with a measured thickness of 1.59-feet.

3.2 Groundwater Quality Monitoring

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

During sampling, a minimum of three well casing volumes of groundwater were purged from each monitoring well prior to collecting groundwater samples. Water quality parameters were collected during the first quarter 2013 monitoring event and were used to confirm groundwater stabilization prior to sample collection. Monitoring wells did not require collection of more than three (3) purge volumes to achieve parameter stabilization. As such, the analytical data are considered to be representative of Site conditions in that a minimum 3 purge volumes were evacuated from all sampled monitoring wells during the first quarter 2013 event. 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 (^{0}C) for transportation to the laboratory. Groundwater samples were then shipped under chain-of-custody procedures to ALS Environmental (ALS) laboratory in Houston, Texas, for analysis of benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B and chloride by USEPA Method 300.

Analytical results indicate that BTEX concentrations are below the New Mexico Water Quality Control Commission (NMWQCC) Standard at all sampled monitoring well locations during the first quarter 2013. LNAPL was detected at one location (MW-4) as indicated in Section 3.1 above.

Chloride was detected in MW-1, MW-2, and MW-3 with concentrations of 688 mg/L, 1,250 mg/L, and 503 mg/L, respectfully. Chloride values in all of the sampled wells exceeded the NMWQCC suggested guideline of 250 mg/L.

Figure 4 displays analytical results from the first quarter 2013 event as well as the fourth quarter 2012 analytical results. Table 2 presents first quarter 2013 monitoring data along with data collected during the previous 4 quarters. Laboratory analytical reports for the event are included as Appendix A.

3.3 Data Quality Assurance / Quality Control

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

The duplicate sample collected at MW-1 was in compliance with QA/QC standards. BTEX concentrations in MW-1 and duplicate sample were below New Mexico Water Quality Control Commission (NMWQCC) Standards.

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

Monitored natural attenuation is the current remediation strategy at the Site. Additional remediation options have been evaluated and are outlined below in the recommendations section.

5. Conclusions

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

The groundwater elevation surface beneath the Site has remained stable with minor seasonal and annual fluctuations since monitoring was initiated in December 2011. There was no significant deviation from this trend during the first quarter 2013.

Dissolved phase BTEX concentrations in down-gradient well MW-1 continue to decrease over time. Benzene concentrations have reduced by two orders of magnitude since the April 2012 monitoring event and are now below New Mexico Water Quality Control Commission (NMWQCC) Standards.

Constituent concentrations in MW-2 and MW-3 remained below laboratory detection limits during the first quarter 2013 suggesting that that the dissolved phase hydrocarbon plume has minor lateral dispersion across the Site. Both the dissolved and free phase petroleum hydrocarbon plumes appear stationary possibly due to attenuation, low permeability within the aquifer, low hydraulic gradient, and/or a combination of these factors.

6. Recommendations

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

- Installation of a passive LNAPL collection bailer at MW-4 during the second quarter 2013 to address residual free phase hydrocarbons;

- Continue quarterly groundwater monitoring and sampling at the monitoring locations illustrated on Figure 2 to assess impacts of the contaminant fate and transport.

Tables

TABLE 1
FIRST QUARTER 2013
SUMMARY OF GROUNDWATER ELEVATION DATA
BURTON FLATS BOOSTER STATION
EDDY COUNTY, NEW MEXICO

Location	Date	Depth to Groundwater (1) (feet)	Depth to Product (1) (feet)	Free Phase Hydrocarbon Thickness (feet)	Total Depth (2) (feet)	TOC Elevation (feet amsl)	Groundwater Elevation (feet amsl)	Groundwater Elevation Since Previous Event (3) (feet)
MW-1	4/26/2012	21.24				3198.88	3177.64	
MW-1	6/20/2012	21.50				3198.88	3177.38	-0.26
MW-1	9/26/2012	21.65				3198.88	3177.23	-0.15
MW-1	12/5/2012	21.51			34.25	3198.88	3177.37	0.14
MW-1	2/21/2013	21.57			34.25	3198.88	3177.31	-0.06
MW-2	4/26/2012	22.39				3200.00	3177.61	
MW-2	6/20/2012	22.66				3200.00	3177.34	-0.27
MW-2	9/26/2012	22.78				3200.00	3177.22	-0.12
MW-2	12/5/2012	22.68			32.85	3200.00	3177.32	0.10
MW-2	2/21/2013	22.71			32.85	3200.00	3177.29	-0.03
MW-3	4/26/2012	23.08				3200.85	3177.77	
MW-3	6/20/2012	23.18				3200.85	3177.67	-0.10
MW-3	9/26/2012	23.40				3200.85	3177.45	-0.22
MW-3	12/5/2012	23.35			34.23	3200.85	3177.50	0.05
MW-3	2/21/2013	23.45			34.23	3200.85	3177.40	-0.10
MW-4	4/26/2012	24.00	23.01	0.99		NM	NM	NM
MW-4	6/20/2012	24.82	23.07	1.75		NM	NM	NM
MW-4	9/26/2012	25.26	23.21	2.05		NM	NM	NM
MW-4	12/5/2012	24.34	23.22	1.12	NM	NM	NM	NM
MW-4	2/21/2013	24.85	23.26	1.59	NM	NM	NM	NM
						Average change in groundwater elevation since the previous monitoring event		-0.06

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 (with the exception of wells that contained LNAPL).

3- 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. Data presented for well locations includes previous four sampling events, when available.

TOC elevation for monitoring well MW-4 was not available at the time this report was generated. Therefore, groundwater elevation could not be calculated.

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 QUARTER 2013
SUMMARY OF BTEX CONCENTRATIONS IN GROUNDWATER
BURTON FLATS BOOSTER STATION
EDDY 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		**0.01 (mg/l)**	**0.75 (mg/l)**	**0.75 (mg/l)**	**0.62 (mg/l)**	**250***	
MW-1	4/26/2012	**0.153**	<0.001	0.229	0.0073	**584**	
MW-1	6/20/2012	**0.0967**	<0.001	0.284	0.0474	**651**	Duplicate sample collected
MW-1	9/26/2012	**0.0615**	<0.001	0.0803	0.0015	**590**	
MW-1	12/5/2012	**0.020**	<0.001	0.17	0.037	**599**	
MW-1	2/21/2013	0.0021	<0.001	0.0058	<0.003	**668**	Duplicate sample collected
MW-2	12/14/2011	<0.001	<0.001	<0.001	<0.003	**1,170**	
MW-2	4/26/2012	<0.001	<0.001	<0.001	<0.003	**1,040**	
MW-2	6/20/2012	<0.001	<0.001	<0.001	<0.003	**1,150**	
MW-2	9/26/2012	<0.001	<0.001	<0.001	<0.003	**1,130**	
MW-2	12/5/2012	<0.001	<0.001	<0.001	<0.003	**1,120**	Duplicate sample collected
MW-2	2/21/2013	<0.001	<0.001	<0.001	<0.003	**1,250**	
MW-3	4/26/2012	<0.001	<0.001	<0.001	<0.003	**406**	Duplicate sample collected
MW-3	6/20/2012	<0.001	<0.001	<0.001	<0.003	**435**	
MW-3	9/26/2012	<0.001	<0.001	0.00057	<0.003	**447**	Duplicate sample collected
MW-3	12/5/2012	<0.001	<0.001	<0.001	<0.003	**444**	
MW-3	2/21/2013	<0.001	<0.001	<0.001	<0.003	**503**	
MW-4	4/26/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/20/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	9/26/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/5/2012	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	2/21/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	

Notes:

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

Data presented for all well locations includes previous four sampling events, when available.

MW-1 was reported as MW-1D in the first quarter 2013 laboratory analytical report.

* Chlorides are subject to the National Secondary Drinking Water Regulations (NSDWR) secondary maximum contaminant levels (SMCLs) and not an enforceably regulated constituent. The **Bold** red values indicate an exceedance of the NMWQCC groundwater standards for the Site.

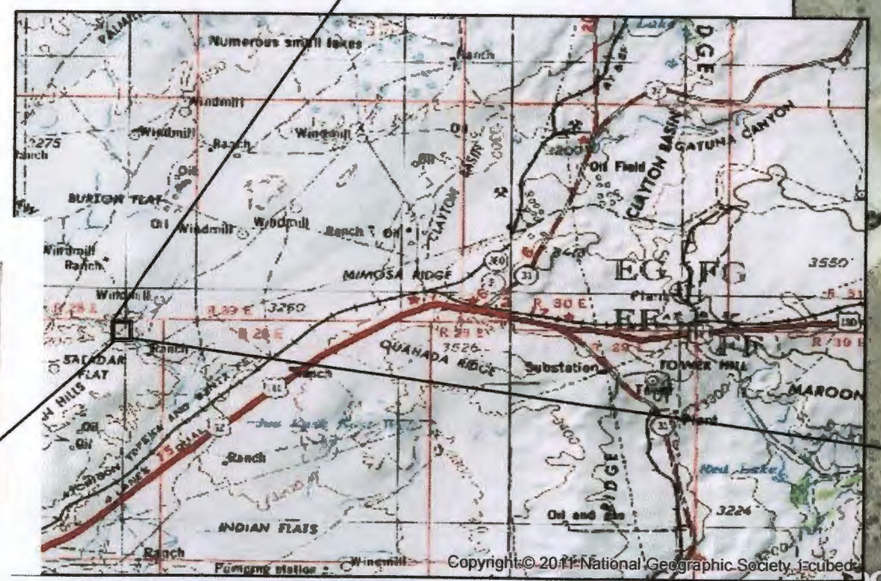
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

LNAPL = Light Non-Aqueous Phase Liquid

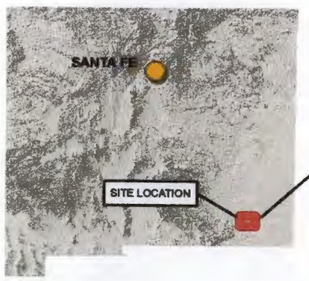
NM = Not measured.

mg/L = milligrams per liter.

Figures



NEW MEXICO



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6899 Pecos Street - Unit C
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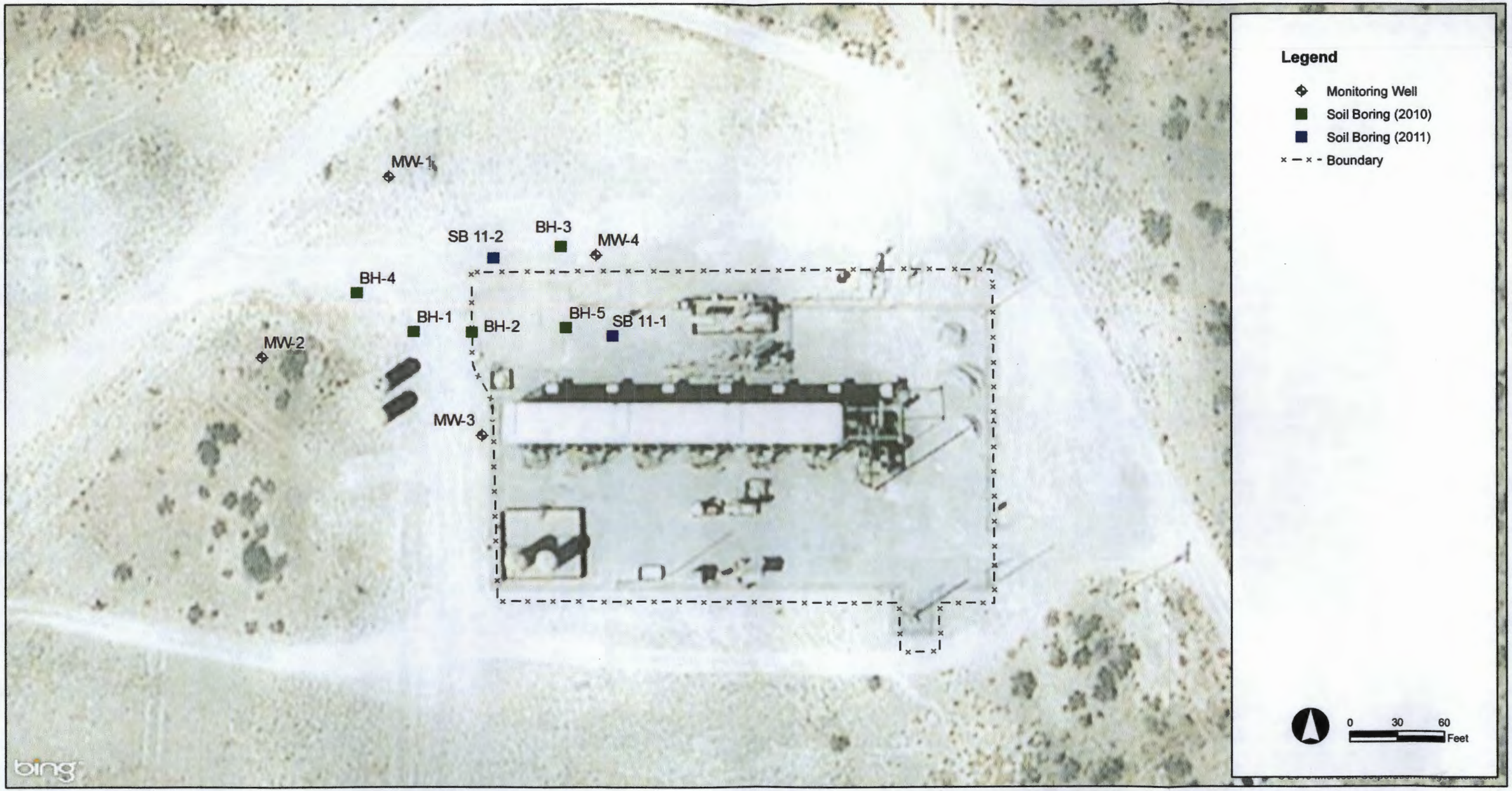
DCP Midstream
Burton Flats Booster Station

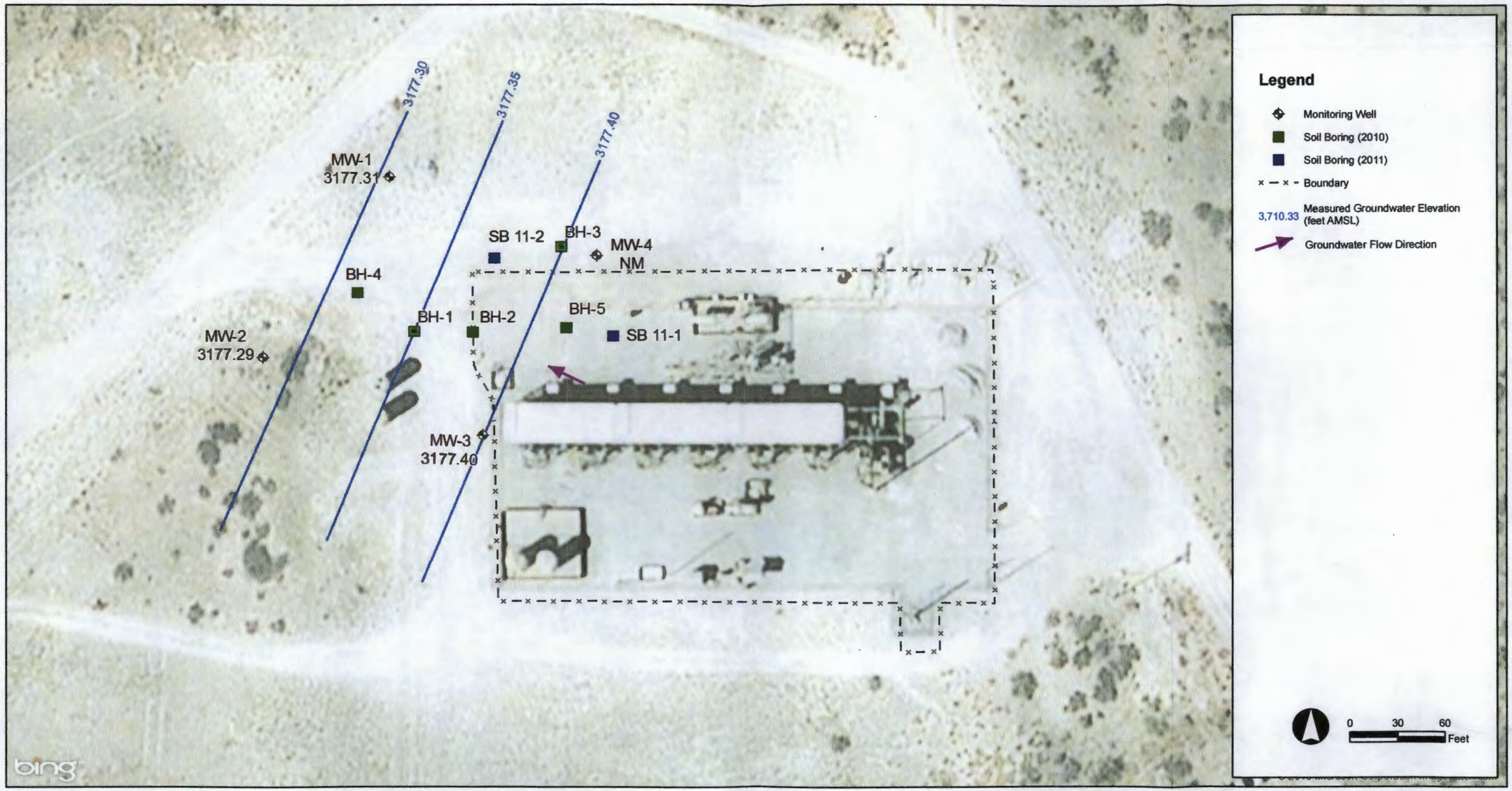
Lots 4 and 5, Section 1, Township 21 South, Range 27 East
Eddy County, New Mexico

SITE LOCATION

FIGURE
1



DESIGNED BY: C. Wasko DRAWN BY: J. Clonts 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	**DCP Midstream** **Burton Flats Booster Station** *Lots 4 and 5, Section 1, Township 21 South, Range 27 East* *Eddy County, New Mexico*	SITE MAP	FIGURE 2

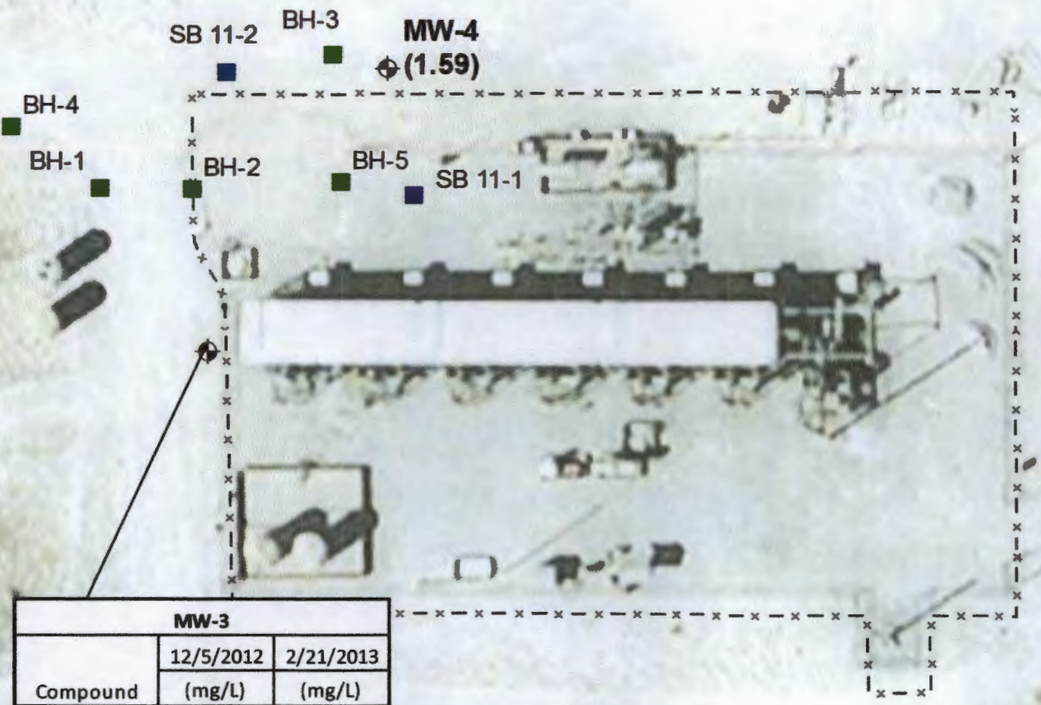


DESIGNED BY: C. Wasko DRAWN BY: J. Clonts SHEET CHK'D BY: CROSS CHK'D BY: APPROVED BY: APPROVED BY:	TASMAN GEOSCIENCES Tasman Geosciences, LLC 6899 Pecos Street - Unit C Denver, CO 80221 303 487 1228	**DCP Midstream** **Burton Flats Booster Station** *Lots 4 and 5, Section 1, Township 21 South, Range 27 East* *Eddy County, New Mexico*	POTENTIOMETRIC SURFACE MAP (FEBRUARY 21, 2013)	FIGURE 3

MW-1		
Compound	12/5/2012 (mg/L)	2/21/2013 (mg/L)
Benzene	0.020	0.0021
Toluene	<0.001	<0.001
Ethylbenzene	0.17	0.0058
Total Xylenes	0.037	<0.003
Chlorides	599	668

MW-2		
Compound	12/5/2012 (mg/L)	2/21/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.001	<0.001
Ethylbenzene	<0.001	<0.001
Total Xylenes	<0.003	<0.003
Chlorides	1,120	1,250

MW-3		
Compound	12/5/2012 (mg/L)	2/21/2013 (mg/L)
Benzene	<0.001	<0.001
Toluene	<0.001	<0.001
Ethylbenzene	<0.001	<0.001
Total Xylenes	<0.003	<0.003
Chlorides	444	503



Legend

- Monitoring Well
- Soil Boring (2010)
- Soil Boring (2011)
- Boundary
- (1.59) Measured LNAPL Thickness

0 30 60 Feet

bing

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DCP Midstream
Burton Flats Booster Station

Lots 4 and 5, Section 1, Township 21 South, Range 27 East
Eddy County, New Mexico

ANALYTICAL RESULTS MAP
(FEBRUARY 21, 2013)

FIGURE
4