2R - 799

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

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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.

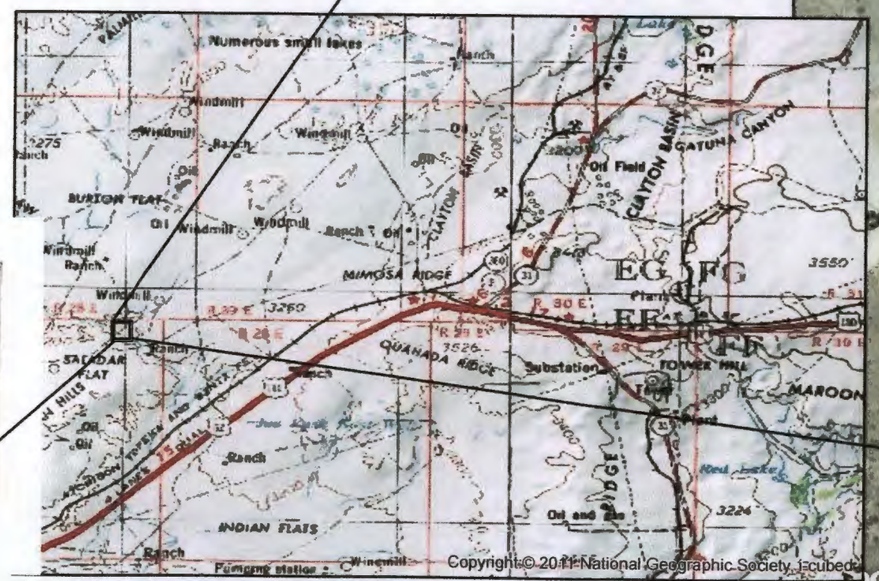
Sample locations are shown on Figure 2 and analytical results are illustrated on Figure 4.

LNAPL = Light Non-Aqueous Phase Liquid

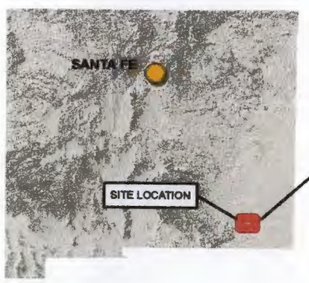
NM = Not measured.

mg/L = milligrams per liter.

Figures



NEW MEXICO



DESIGNED BY: C. Wasko
DRAWN BY: J. Clonts
SHEET CHK'D BY:
CROSS CHK'D BY:
APPROVED BY:
APPROVED BY:

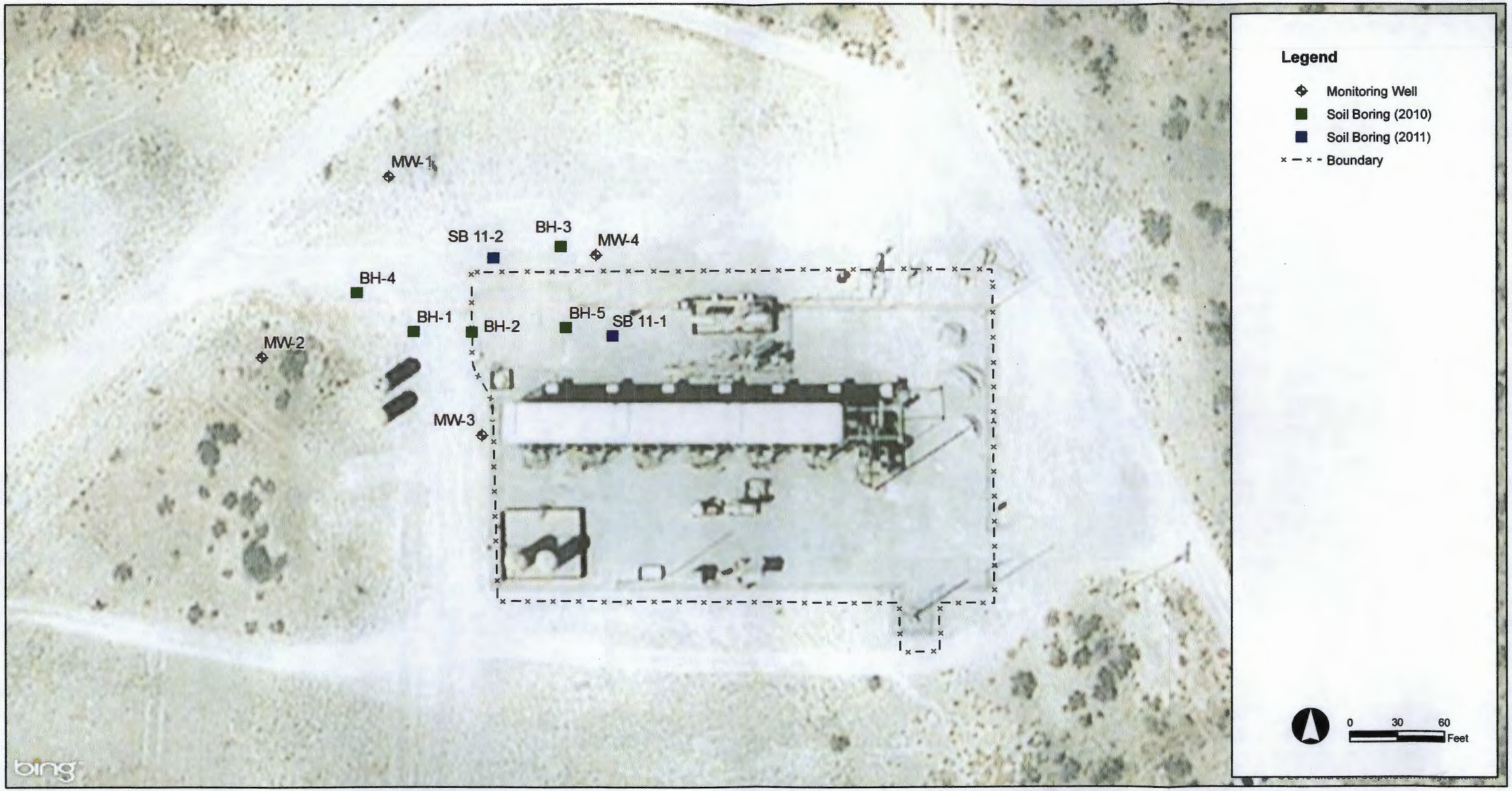
TASMAN GEOSCIENCES
Tasman Geosciences, LLC
6899 Pecos Street - Unit C
Denver, CO 80221
303 487 1228

DCP Midstream
Burton Flats Booster Station

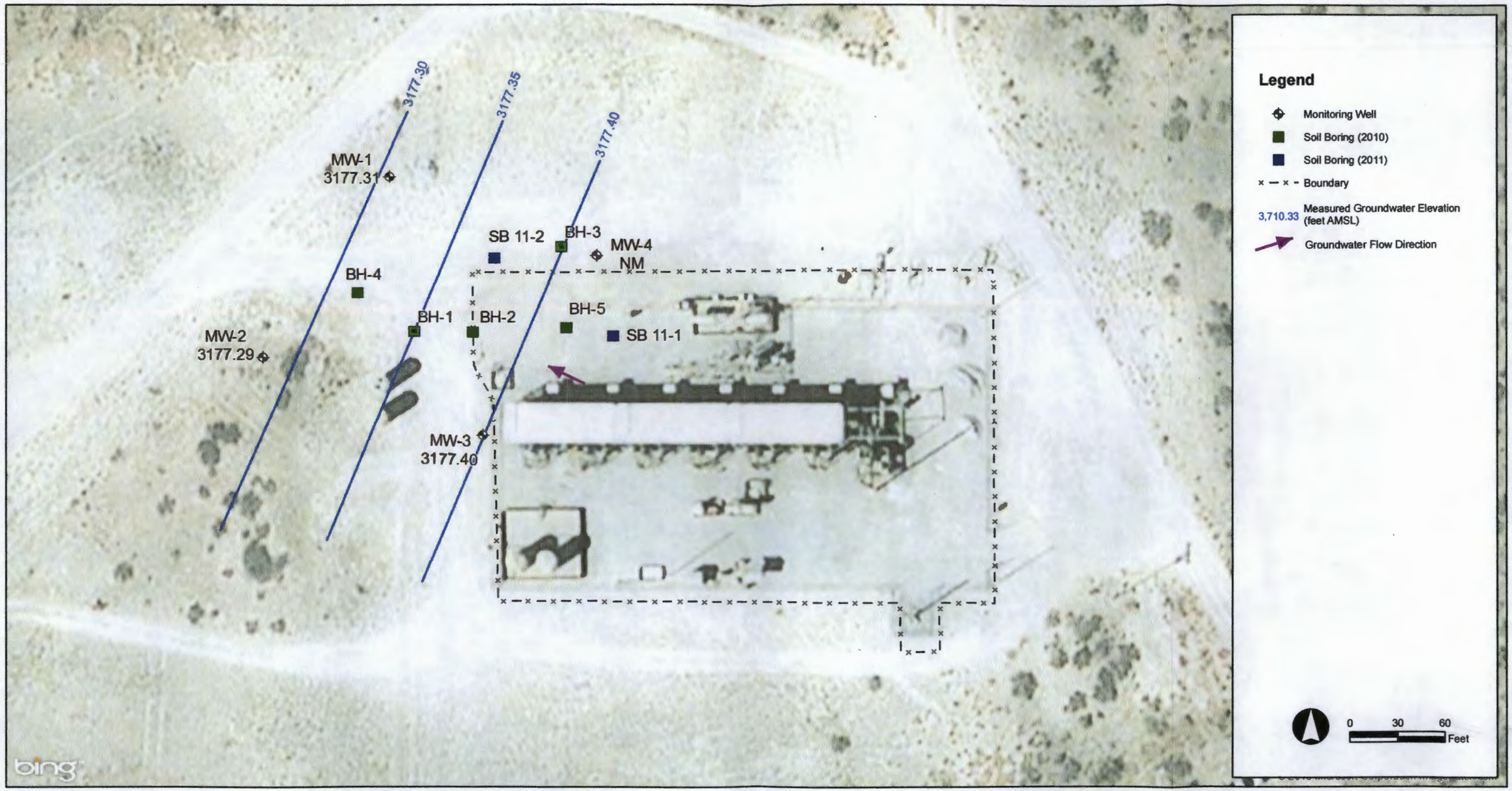
Lots 4 and 5, Section 1, Township 21 South, Range 27 East
Eddy County, New Mexico

SITE 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

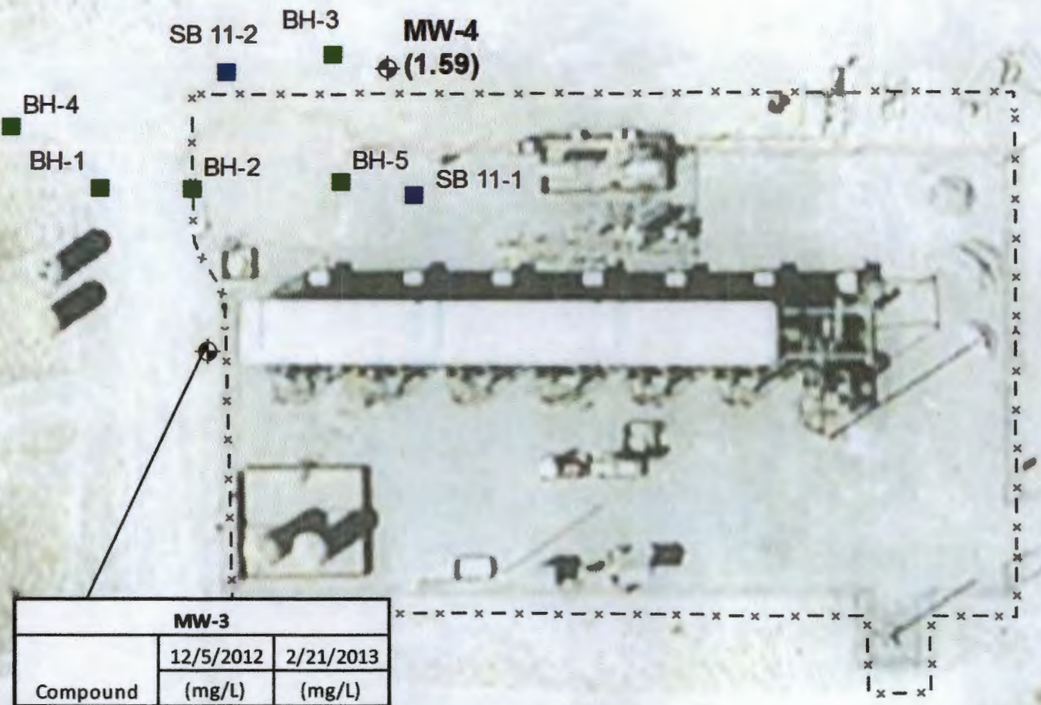


DESIGNED BY: C. Wasko DRAWN BY: J. Clonts SHEET CHK'D BY: CROSS CHK'D BY: APPROVED BY: APPROVED BY:	TASMAN GEOSCIENCES Tasman Geosciences, LLC 6899 Pecos Street - Unit C Denver, CO 80221 303 487 1228	**DCP Midstream** **Burton Flats Booster Station** *Lots 4 and 5, Section 1, Township 21 South, Range 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

DESIGNED BY: C. Wasko
DRAWN BY: J. Clonts
SHEET CHK'D BY:
CROSS CHK'D BY:
APPROVED BY:
APPROVED BY:

TASMAN GEOSCIENCES
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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

ANALYTICAL RESULTS MAP
(FEBRUARY 21, 2013)

FIGURE
4

Appendix A

Laboratory Analytical Reports

ALS Environmental

04-Mar-2013

Christine Wasko
Tasman Geosciences
5690 Webster Street
Arvada, CO 80002

Tel: (720) 988-2024
Fax:

Re: Burton Flats Booster Station Work Order: **1302790**

Dear Christine,

ALS Environmental received 5 samples on 23-Feb-2013 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 18.

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

Sincerely,

Sonia West

Electronically approved by: Jumoke M. Lawal

Sonia West
Project Manager

Certificate No: T104704231-12-10

ALS Environmental

Date: 04-Mar-13

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Work Order: **1302790**

Work Order Sample Summary

Lab Samp ID	Client Sample ID	Matrix	Tag Number	Collection Date	Date Received	Hold
1302790-01	MW-1D	Water		2/21/2013 14:00	2/23/2013 09:20	☐
1302790-02	MW-2	Water		2/21/2013 13:45	2/23/2013 09:20	☐
1302790-03	MW-3	Water		2/21/2013 13:30	2/23/2013 09:20	☐
1302790-04	DUPE	Water		2/21/2013	2/23/2013 09:20	☐
1302790-05	TRIP BLANK	Water		2/21/2013	2/23/2013 09:20	☐

ALS Environmental

Date: 04-Mar-13

Client:	Tasman Geosciences
Project:	Burton Flats Booster Station
Work Order:	1302790

Case Narrative

The chain of custody was not marked for MW-2 & MW-3. As per the clients request all samples were analyzed for BTEX and Chloride.

ALS Environmental

Date: *04-Mar-13*

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Work Order: 1302790
Sample ID: MW-1D
Lab ID: 1302790-01
Collection Date: 2/21/2013 02:00 PM
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	**0.0021**		**0.0010**	**mg/L**	1	2/26/2013 01:56 AM
Ethylbenzene	**0.0058**		**0.0010**	**mg/L**	1	2/26/2013 01:56 AM
Toluene	ND		0.0010	mg/L	1	2/26/2013 01:56 AM
Xylenes, Total	ND		0.0030	mg/L	1	2/26/2013 01:56 AM
Surr: 1,2-Dichloroethane-d4	*109*		*71-125*	*%REC*	1	2/26/2013 01:56 AM
Surr: 4-Bromofluorobenzene	*106*		*70-125*	*%REC*	1	2/26/2013 01:56 AM
Surr: Dibromofluoromethane	*100*		*74-125*	*%REC*	1	2/26/2013 01:56 AM
Surr: Toluene-d8	*103*		*78-123*	*%REC*	1	2/26/2013 01:56 AM
ANIONS			**SW9056**			Analyst: **JKP**
Chloride	**668**		**5.00**	**mg/L**	10	3/1/2013 08:02 PM
Surr: Selenate (surr)	*105*		*80-120*	*%REC*	10	3/1/2013 08:02 PM

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

ALS Environmental

Date: *04-Mar-13*

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Sample ID: MW-2
Collection Date: 2/21/2013 01:45 PM

Work Order: 1302790
Lab ID: 1302790-02
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	2/25/2013 12:36 PM
Ethylbenzene	ND		0.0010	mg/L	1	2/25/2013 12:36 PM
Toluene	ND		0.0010	mg/L	1	2/25/2013 12:36 PM
Xylenes, Total	ND		0.0030	mg/L	1	2/25/2013 12:36 PM
Surr: 1,2-Dichloroethane-d4	*113*		*71-125*	*%REC*	1	2/25/2013 12:36 PM
Surr: 4-Bromofluorobenzene	*106*		*70-125*	*%REC*	1	2/25/2013 12:36 PM
Surr: Dibromofluoromethane	*103*		*74-125*	*%REC*	1	2/25/2013 12:36 PM
Surr: Toluene-d8	*103*		*78-123*	*%REC*	1	2/25/2013 12:36 PM
ANIONS			**SW9056**			Analyst: **JKP**
Chloride	**1,250**		**25.0**	**mg/L**	50	3/1/2013 09:29 PM
Surr: Selenate (surr)	*109*		*80-120*	*%REC*	50	3/1/2013 09:29 PM

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

ALS Environmental

Date: *04-Mar-13*

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Work Order: 1302790
Sample ID: MW-3
Lab ID: 1302790-03
Collection Date: 2/21/2013 01:30 PM
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	2/26/2013 02:20 AM
Ethylbenzene	ND		0.0010	mg/L	1	2/26/2013 02:20 AM
Toluene	ND		0.0010	mg/L	1	2/26/2013 02:20 AM
Xylenes, Total	ND		0.0030	mg/L	1	2/26/2013 02:20 AM
Surr: 1,2-Dichloroethane-d4	*110*		*71-125*	*%REC*	1	2/26/2013 02:20 AM
Surr: 4-Bromofluorobenzene	*104*		*70-125*	*%REC*	1	2/26/2013 02:20 AM
Surr: Dibromofluoromethane	*102*		*74-125*	*%REC*	1	2/26/2013 02:20 AM
Surr: Toluene-d8	*103*		*78-123*	*%REC*	1	2/26/2013 02:20 AM
ANIONS			**SW9056**			Analyst: **JKP**
Chloride	**503**		**5.00**	**mg/L**	10	3/1/2013 09:51 PM
Surr: Selenate (surr)	*109*		*80-120*	*%REC*	10	3/1/2013 09:51 PM

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

ALS Environmental

Date: *04-Mar-13*

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Sample ID: DUPE
Collection Date: 2/21/2013

Work Order: 1302790
Lab ID: 1302790-04
Matrix: WATER

Analyses	Result	Qual	Report Limit	Units	Dilution Factor	Date Analyzed
LOW LEVEL VOLATILES - SW8260C			**SW8260**			Analyst: **AKP**
Benzene	**0.0021**		**0.0010**	**mg/L**	1	2/26/2013 02:44 AM
Ethylbenzene	**0.0056**		**0.0010**	**mg/L**	1	2/26/2013 02:44 AM
Toluene	ND		0.0010	mg/L	1	2/26/2013 02:44 AM
Xylenes, Total	ND		0.0030	mg/L	1	2/26/2013 02:44 AM
Surr: 1,2-Dichloroethane-d4	*110*		*71-125*	*%REC*	1	2/26/2013 02:44 AM
Surr: 4-Bromofluorobenzene	*106*		*70-125*	*%REC*	1	2/26/2013 02:44 AM
Surr: Dibromofluoromethane	*99.5*		*74-125*	*%REC*	1	2/26/2013 02:44 AM
Surr: Toluene-d8	*102*		*78-123*	*%REC*	1	2/26/2013 02:44 AM

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

ALS Environmental

Date: *04-Mar-13*

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Work Order: 1302790
Sample ID: TRIP BLANK
Lab ID: 1302790-05
Collection Date: 2/21/2013
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	2/26/2013 03:09 AM
Ethylbenzene	ND		0.0010	mg/L	1	2/26/2013 03:09 AM
Toluene	ND		0.0010	mg/L	1	2/26/2013 03:09 AM
Xylenes, Total	ND		0.0030	mg/L	1	2/26/2013 03:09 AM
Surr: 1,2-Dichloroethane-d4	*110*		*71-125*	*%REC*	1	2/26/2013 03:09 AM
Surr: 4-Bromofluorobenzene	*102*		*70-125*	*%REC*	1	2/26/2013 03:09 AM
Surr: Dibromofluoromethane	*101*		*74-125*	*%REC*	1	2/26/2013 03:09 AM
Surr: Toluene-d8	*102*		*78-123*	*%REC*	1	2/26/2013 03:09 AM

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

Batch ID: **R143209** Instrument ID **VOA4** Method: **SW8260**

MBLK Sample ID: **VBLKW-130225-R143209** Units: **µg/L** Analysis Date: **2/25/2013 10:59 AM**

Client ID: Run ID: **VOA4_130225A** SeqNo: **3122814** 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	1.0								
Surr: 1,2-Dichloroethane-d4	53.4	1.0	*50*	0	*107*	*71-125*	0			
Surr: 4-Bromofluorobenzene	50.78	1.0	*50*	0	*102*	*70-125*	0			
Surr: Dibromofluoromethane	49.91	1.0	*50*	0	*99.8*	*74-125*	0			
Surr: Toluene-d8	51.08	1.0	*50*	0	*102*	*78-123*	0			

LCS Sample ID: **VLCSW-130225-R143209** Units: **µg/L** Analysis Date: **2/25/2013 09:44 AM**

Client ID: Run ID: **VOA4_130225A** SeqNo: **3122812** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	51.76	1.0	50	0	104	80-120	0			
Ethylbenzene	50.18	1.0	50	0	100	80-120	0			
Toluene	49.92	1.0	50	0	99.8	80-121	0			
Xylenes, Total	151	1.0	150	0	101	80-124	0			
Surr: 1,2-Dichloroethane-d4	56.46	1.0	*50*	0	*113*	*71-125*	0			
Surr: 4-Bromofluorobenzene	53.05	1.0	*50*	0	*106*	*70-125*	0			
Surr: Dibromofluoromethane	53.64	1.0	*50*	0	*107*	*74-125*	0			
Surr: Toluene-d8	50.29	1.0	*50*	0	*101*	*78-123*	0			

LCSD Sample ID: **VLCSDW-130225-R143209** Units: **µg/L** Analysis Date: **2/25/2013 10:10 AM**

Client ID: Run ID: **VOA4_130225A** SeqNo: **3122813** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	53.07	1.0	50	0	106	80-120	51.76	2.5	20	
Ethylbenzene	52.85	1.0	50	0	106	80-120	50.18	5.2	20	
Toluene	53.07	1.0	50	0	106	80-121	49.92	6.12	20	
Xylenes, Total	159.4	1.0	150	0	106	80-124	151	5.37	20	
Surr: 1,2-Dichloroethane-d4	58.09	1.0	*50*	0	*116*	*71-125*	56.46	*2.85*	*20*	
Surr: 4-Bromofluorobenzene	56.43	1.0	*50*	0	*113*	*70-125*	53.05	*6.16*	*20*	
Surr: Dibromofluoromethane	55.67	1.0	*50*	0	*111*	*74-125*	53.64	*3.71*	*20*	
Surr: Toluene-d8	52.45	1.0	*50*	0	*105*	*78-123*	50.29	*4.2*	*20*	

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

Client: Tasman Geosciences
Work Order: 1302790
Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: **R143209** Instrument ID **VOA4** Method: **SW8260**

MS Sample ID: **1302790-02AMS** Units: **µg/L** Analysis Date: **2/25/2013 01:24 PM**
Client ID: **MW-2** Run ID: **VOA4_130225A** SeqNo: **3122960** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	52.74	1.0	50	0	105	80-120	0			
Ethylbenzene	56.31	1.0	50	0	113	80-120	0			
Toluene	55.93	1.0	50	0	112	80-121	0			
Xylenes, Total	168.7	1.0	150	0	112	80-124	0			
Surr: 1,2-Dichloroethane-d4	53.29	1.0	*50*	0	*107*	*71-125*	0			
Surr: 4-Bromofluorobenzene	56.29	1.0	*50*	0	*113*	*70-125*	0			
Surr: Dibromofluoromethane	50.27	1.0	*50*	0	*101*	*74-125*	0			
Surr: Toluene-d8	51.79	1.0	*50*	0	*104*	*78-123*	0			

MSD Sample ID: **1302790-02AMSD** Units: **µg/L** Analysis Date: **2/25/2013 01:49 PM**
Client ID: **MW-2** Run ID: **VOA4_130225A** SeqNo: **3122961** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	51.87	1.0	50	0	104	80-120	52.74	1.66	20	
Ethylbenzene	55.29	1.0	50	0	111	80-120	56.31	1.82	20	
Toluene	54.38	1.0	50	0	109	80-121	55.93	2.82	20	
Xylenes, Total	165	1.0	150	0	110	80-124	168.7	2.21	20	
Surr: 1,2-Dichloroethane-d4	52.1	1.0	*50*	0	*104*	*71-125*	53.29	*2.25*	*20*	
Surr: 4-Bromofluorobenzene	54.29	1.0	*50*	0	*109*	*70-125*	56.29	*3.61*	*20*	
Surr: Dibromofluoromethane	50.08	1.0	*50*	0	*100*	*74-125*	50.27	*0.377*	*20*	
Surr: Toluene-d8	50.78	1.0	*50*	0	*102*	*78-123*	51.79	*1.98*	*20*	

The following samples were analyzed in this batch: 1302790-02A

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

Client: Tasman Geosciences
Work Order: 1302790
Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: **R143252** Instrument ID **VOA4** Method: **SW8260**

MBLK Sample ID: **VBLKW2-130225-R143252** Units: **µg/L** Analysis Date: **2/25/2013 10:18 PM**
Client ID: Run ID: **VOA4_130225C** SeqNo: **3123594** 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	1.0								
Surr: 1,2-Dichloroethane-d4	53.1	1.0	*50*	0	*106*	*71-125*	0			
Surr: 4-Bromofluorobenzene	51.42	1.0	*50*	0	*103*	*70-125*	0			
Surr: Dibromofluoromethane	50.53	1.0	*50*	0	*101*	*74-125*	0			
Surr: Toluene-d8	51.7	1.0	*50*	0	*103*	*78-123*	0			

LCS Sample ID: **VLCSW2-130225-R143252** Units: **µg/L** Analysis Date: **2/25/2013 09:06 PM**
Client ID: Run ID: **VOA4_130225C** SeqNo: **3123592** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	49.77	1.0	50	0	99.5	80-120	0			
Ethylbenzene	52.76	1.0	50	0	106	80-120	0			
Toluene	52.07	1.0	50	0	104	80-121	0			
Xylenes, Total	157.5	1.0	150	0	105	80-124	0			
Surr: 1,2-Dichloroethane-d4	51.92	1.0	*50*	0	*104*	*71-125*	0			
Surr: 4-Bromofluorobenzene	56.01	1.0	*50*	0	*112*	*70-125*	0			
Surr: Dibromofluoromethane	49.84	1.0	*50*	0	*99.7*	*74-125*	0			
Surr: Toluene-d8	51.2	1.0	*50*	0	*102*	*78-123*	0			

LCSD Sample ID: **VLCSDW2-130225-R143252** Units: **µg/L** Analysis Date: **2/25/2013 09:30 PM**
Client ID: Run ID: **VOA4_130225C** SeqNo: **3123593** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	48.21	1.0	50	0	96.4	80-120	49.77	3.18	20	
Ethylbenzene	51.1	1.0	50	0	102	80-120	52.76	3.18	20	
Toluene	51.03	1.0	50	0	102	80-121	52.07	2.03	20	
Xylenes, Total	152.7	1.0	150	0	102	80-124	157.5	3.13	20	
Surr: 1,2-Dichloroethane-d4	53.04	1.0	*50*	0	*106*	*71-125*	51.92	*2.14*	*20*	
Surr: 4-Bromofluorobenzene	55.37	1.0	*50*	0	*111*	*70-125*	56.01	*1.15*	*20*	
Surr: Dibromofluoromethane	50.54	1.0	*50*	0	*101*	*74-125*	49.84	*1.4*	*20*	
Surr: Toluene-d8	51.77	1.0	*50*	0	*104*	*78-123*	51.2	*1.11*	*20*	

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

Client: Tasman Geosciences
Work Order: 1302790
Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: **R143252** Instrument ID **VOA4** Method: **SW8260**

MS Sample ID: **1302791-02AMS** Units: **µg/L** Analysis Date: **2/25/2013 11:31 PM**
Client ID: Run ID: **VOA4_130225C** SeqNo: **3123597** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	52.9	1.0	50	0	106	80-120	0			
Ethylbenzene	55.6	1.0	50	0	111	80-120	0			
Toluene	55.86	1.0	50	0	112	80-121	0			
Xylenes, Total	167	1.0	150	0	111	80-124	0			
Surr: 1,2-Dichloroethane-d4	52.43	1.0	*50*	0	*105*	*71-125*	0			
Surr: 4-Bromofluorobenzene	55.78	1.0	*50*	0	*112*	*70-125*	0			
Surr: Dibromofluoromethane	50.19	1.0	*50*	0	*100*	*74-125*	0			
Surr: Toluene-d8	51.72	1.0	*50*	0	*103*	*78-123*	0			

MSD Sample ID: **1302791-02AMSD** Units: **µg/L** Analysis Date: **2/25/2013 11:55 PM**
Client ID: Run ID: **VOA4_130225C** SeqNo: **3123598** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	53.88	1.0	50	0	108	80-120	52.9	1.85	20	
Ethylbenzene	56.69	1.0	50	0	113	80-120	55.6	1.94	20	
Toluene	55.98	1.0	50	0	112	80-121	55.86	0.204	20	
Xylenes, Total	169.7	1.0	150	0	113	80-124	167	1.59	20	
Surr: 1,2-Dichloroethane-d4	52.6	1.0	*50*	0	*105*	*71-125*	52.43	*0.322*	*20*	
Surr: 4-Bromofluorobenzene	55.38	1.0	*50*	0	*111*	*70-125*	55.78	*0.727*	*20*	
Surr: Dibromofluoromethane	50.25	1.0	*50*	0	*100*	*74-125*	50.19	*0.109*	*20*	
Surr: Toluene-d8	51.41	1.0	*50*	0	*103*	*78-123*	51.72	*0.605*	*20*	

The following samples were analyzed in this batch: 1302790-01A 1302790-03A 1302790-04A 1302790-05A

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

Client: Tasman Geosciences
Work Order: 1302790
Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: **R143496** Instrument ID **ICS3K2** Method: **SW9056** **(Dissolve)**

MBLK Sample ID: **WBLKW1-R143496** Units: **mg/L** Analysis Date: **3/1/2013 12:00 PM**
Client ID: Run ID: **ICS3K2_130301A** SeqNo: **3128826** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.50								
Surr: Selenate (surr)	5.39	0.10	*5*	0	*108*	*80-120*	0			

LCS Sample ID: **WLCSW1-R143496** Units: **mg/L** Analysis Date: **3/1/2013 12:21 PM**
Client ID: Run ID: **ICS3K2_130301A** SeqNo: **3128827** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	19.62	0.50	20	0	98.1	80-120	0			
Surr: Selenate (surr)	5.439	0.10	*5*	0	*109*	*80-120*	0			

MS Sample ID: **1302792-05BMS** Units: **mg/L** Analysis Date: **3/2/2013 12:01 AM**
Client ID: Run ID: **ICS3K2_130301A** SeqNo: **3128846** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	78.65	0.50	10	70.12	85.3	80-120	0			O
Surr: Selenate (surr)	5.157	0.10	*5*	0	*103*	*80-120*	0			

MS Sample ID: **1302790-02BMS** Units: **mg/L** Analysis Date: **3/4/2013 10:47 AM**
Client ID: **MW-2** Run ID: **ICS3K2_130301A** SeqNo: **3128973** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	1693	25	500	1254	87.8	80-120	0			
Surr: Selenate (surr)	264.6	5.0	*250*	0	*106*	*80-120*	0			

MSD Sample ID: **1302792-05BMSD** Units: **mg/L** Analysis Date: **3/2/2013 12:23 AM**
Client ID: Run ID: **ICS3K2_130301A** SeqNo: **3128847** Prep Date: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	79.22	0.50	10	70.12	91	80-120	78.65	0.722	20	O
Surr: Selenate (surr)	5.203	0.10	*5*	0	*104*	*80-120*	5.157	*0.888*	*20*	

MSD Sample ID: **1302790-02BMSD** Units: **mg/L** Analysis Date: **3/4/2013 11:08 AM**
Client ID: **MW-2** Run ID: **ICS3K2_130301A** SeqNo: **3128974** Prep Date: DF: **50**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	1662	25	500	1254	81.5	80-120	1693	1.88	20	
Surr: Selenate (surr)	262.7	5.0	*250*	0	*105*	*80-120*	264.6	*0.698*	*20*	

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

Client: Tasman Geosciences
Work Order: 1302790
Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: **R143496** Instrument ID **ICS3K2** Method: **SW9056** **(Dissolve)**

The following samples were analyzed in this batch:	1302790-01B	1302790-02B	1302790-03B

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

Client: Tasman Geosciences
Project: Burton Flats Booster Station
WorkOrder: 1302790

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: **23-Feb-13 09:20**

Work Order: **1302790** Received by: **RDN**

Checklist completed by Rishel D. Naran (eSignature) 23-Feb-13 (Date) Reviewed by: Sonia West (eSignature) 25-Feb-13 (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):	1.3C U/C	005	
Cooler(s)/Kit(s):	5222		
Date/Time sample(s) sent to storage:	2/23/13 10:55		
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:

SRC Page 1 of 1

ALS Environmental

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Everett, WA +1 425 356 2600 | Holland, MI +1 616 399 6070

Chain of Custody Fo

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COC ID: 76200

1302790

TASMAN GEOSCIENCES: Tasman Geosciences

Project: Burton Flats Booster Station 311090017 GN00

ALS Project Manager:

Customer Information		Project Information			
Purchase Order		Project Name	Burton Flats Booster Station	A	BTEX (8260B)
Work Order		Project Number	311090017 GN00	B	Anions (9056) Cl
Company Name	Tasman Geosciences	Bill To Company	DCP Midstream, LP	C	
Send Report To	Christine Wasko	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) 988-2024	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-1	2/21/13	1400	Water	HCl	4	X	X									☐
2	MW-2		1345	Water		4											☐
3	MW-3		1330	Water		4											☐
4	MS/MSD		1345	water		6	X				MW-2						
5	DUPE	—	—	water		3	X										
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign: Christine Wasko

Shipment Method: FedEx

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

Results Due Date:

	Date:	Time:	Received by:
Relinquished by:	2/22/13	1545	FedEx
Relinquished by:	2/23/13	09:20	
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):

Notes: 10 Day TAT

Cooler ID	Cooler Temp.

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

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.

1302790

ALS Environmental
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL

Date: 2/22/13 Time: 1800
Name: Christine Wasco
Company: Tasman

Seal Broken By:
Date: 2/23/13

2 of 2

MPS# 0681 7955 5133 3714

Mstr# 8013 7024 9422 0215

SATURDAY ### A1
PRIORITY OVERNIGHT

XO SGRA

77099
TX-US IAH

Appendix B

Historical Analytical Results

APPENDIX B
HISTORICAL DATA
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 Comission Groundwater Standards		**0.01 (mg/l)**	**0.75 (mg/l)**	**0.75 (mg/l)**	**0.62 (mg/l)**	**250***	
MW-1	3-2008	**1.4**	0.0395	**0.948**		0.128	
MW-1	6-2008	**2.75**	0.054	**2.17**		0.232	
MW-1	9-2008	**1.1**	0.0375	**0.845**		0.131	
MW-1	12-2008	**0.869**	0.0385	0.581		0.0709	
MW-1	3-2009	**0.288**	0.0149	0.107		0.0395	
MW-1	5-2009	**1.38**	0.0705	0.175		0.065	
MW-1	9-2009	**0.267**	0.024	0.0332		0.0078	
MW-1	12-2009	**0.819**	0.088	0.0267		0.012	
MW-1	3-2010	**0.726**	0.0879	0.107		0.0278	
MW-3	3/29/2010	NS	NS	NS		NS	
MW-1	12/14/2011	**0.140**	0.0034	0.200	0.111	**665**	Duplicate sample collected
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	12/14/2011	<0.001	<0.001	<0.001	<0.003	**426**	
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:

1.) 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.

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

3.) 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 250 mg/L standard is established only as a guideline to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

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

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.