

2R – 799

Q2 2014
GWMR

08 / 11 / 2014



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

August 11, 2014

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

**RE: Second Quarter 2014 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 Second Quarter 2014 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

A handwritten signature in blue ink that reads "Chandler E. Cole".

Chandler E Cole
Senior Environmental Specialist

Enclosure

cc: Mr. Mike Bratcher - EMNRD
Mr. Jim Griswold - EMNRD
Mr. Jim Amos - BLM Carlsbad
Environmental Files

Second Quarter 2014 Groundwater Monitoring Summary Report

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

Prepared for:



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

Prepared by:



6899 Pecos Street, Unit C
Denver, Colorado 80221

July 31, 2014

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A	Historic Analytical Results – BTEX and Chloride Concentrations in Groundwater
B	Laboratory Analytical Report (Electronic Only)
	- ALS Report #: HS14060138

1. Introduction

This report summarizes groundwater monitoring activities conducted during the second quarter of 2014 at the Burton Flats Booster Station (Site) in Eddy County, New Mexico (Figure 1). Tasman Geosciences, LLC (Tasman) performed these activities on behalf of DCP Midstream, LP (DCP). 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 production and gathering.

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. The C-141 report was submitted on October 12, 2009 and Site investigation and soil sampling within the release area occurred during the third quarter of 2009 and early fourth 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 efforts, four groundwater monitoring wells were installed around and down-gradient from the release area during the fourth 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 impacts (SB 11-1 and SB 11-2). Monitoring well and soil boring locations are shown in 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 following installation.

3. Groundwater Monitoring

This section describes the field and laboratory activities performed during the second quarter 2014 groundwater monitoring event. Quarterly monitoring activities were conducted on June 2, 2014 and 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 of groundwater and LNAPL elevations at the Site. During the second quarter 2014, groundwater levels were measured at four Site monitoring well locations (MW-1 through MW-4).

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 subsequently converted to elevation (feet above mean sea level [AMSL]).

Groundwater and LNAPL measurements collected during the reporting period as well as historical elevations are presented in Table 1. A second quarter 2014 groundwater elevation contour map, included as Figure 3, indicates that groundwater flow at the Site trends to the north-northwest. A groundwater elevations range, average elevation change from the previous monitoring event, and the calculated hydraulic gradient at the Site are summarized in the table below.

Summary of Measured Hydraulic Parameters

	Second Quarter 2014 (6/2/2014)
Maximum Elevation (Well ID)	3177.04 (MW-3)
Minimum Elevation (Well ID)	3176.71 (MW-1)
Average Change from Previous Monitoring Event – All Wells	-0.16 foot
Hydraulic Gradient (ft/ft) / (Well IDs)	0.0019 (MW-3 to MW-1)

LNAPL was detected at monitoring well MW-1 with a measured thickness of 0.48-feet. MW-1 is located down-gradient of MW-4, which exhibited a measured thickness of 1.72-feet during the second quarter monitoring event. The observed thickness of LNAPL in these wells may be influenced due to the deployment of passive LNAPL collection bailers.

3.2 Groundwater Quality Monitoring

Subsequent to recording groundwater level measurements at each monitoring well, groundwater samples were collected from the two monitoring wells that did not contain measurable LNAPL. A minimum of three well casing volumes of groundwater were purged from the subject well prior to the collection of groundwater samples. Groundwater samples were collected using dedicated polyethylene bailers, placed in clean laboratory supplied containers, packed in an ice-filled cooler and maintained at approximately four (4) degrees Celsius ($^{\circ}\text{C}$) for transportation to the laboratory. Groundwater samples were then shipped under chain-of-custody procedures to ALS Environmental (ALS) laboratory in Houston, Texas.

Water quality samples were submitted for analysis of benzene, toluene, ethylbenzene, and total xylenes (BTEX) by United States Environmental Protection Agency (USEPA) Method 8260B and chloride by USEPA Method 300.

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

Analytical results for samples collected from MW-2 and MW-3 indicated the following:

- BTEX concentrations were below laboratory detection limits at both locations during the reporting period.
- Chloride was detected in exceedance of the NMWQCC suggested guideline (250 mg/l) in MW-2 and MW-3 with concentrations of 1,270 mg/l (1,290 duplicate) and 519 mg/l, respectively.

3.3 Data Quality Assurance / Quality Control

A trip blank, matrix spike / matrix spike duplicate (MS/MSD), and field duplicate sample (MW-2) were collected during the sampling event. The data were reviewed for compliance with the analytical method and the associated quality assurance/quality control (QA/QC) procedures. All samples were analyzed using the correct analytical methods and within the correct holding times. Chain of custody forms were in order and properly executed indicating that samples were received at the proper temperature and with no headspace. All data were reported using the correct method number and reporting units. The trip blank was fully in control, having no detection of target analytes.

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

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

4. Remediation Activities

As indicated above, passive LNAPL collection bailers were deployed in MW-1 and MW-4. During the second quarter 2014 monitoring event the MW-1 bailer was approximately 1/8 full and the MW-4 bailer was approximately 3/4 full. Cumulative LNAPL removal volumes from the current and previous monitoring periods are included in the table below.

Summary of LNAPL Recovery Volumes

Measurement Period	LNAPL Recovery Volume	Comment
Third and Fourth Quarters 2013	0.35 Liter	Passive recovery bailers (MW-4 and MW-1)
First Quarter 2014	1.25 Liter	Passive recovery bailers (MW-4 and MW-1)
Second Quarter 2014	0.53 Liter	Passive recovery bailers (MW-4 and MW-1)

These volumes indicate that the passive bailers were able to remove LNAPL during the quarter. Due to limitations in the construction of the unit deployed in MW-1, the bailer was removed during June 2014 and a replacement is being procured for deployment during the third quarter.

Dissolved phase petroleum hydrocarbon concentrations are currently being addressed via natural attenuation.

5. Conclusions

Evaluation of the second quarter 2014 monitoring data and historic information provides the following general observations:

- Groundwater elevation at the Site has remained relatively stable with minor seasonal and annual fluctuations. There was no significant deviation from this trend during the second quarter 2014.
- LNAPL recovery from MW-1 indicates the continued presence of a separate phase plume in this area. Continued monitoring of recovery volumes (e.g., stable or increasing) will provide additional information related to the LNAPL plume stability.

6. Recommendations

Based on evaluation of second quarter 2014 and historic Site monitoring results, recommendations for future activities include:

- Continue quarterly groundwater monitoring and sampling at the monitoring locations illustrated on Figure 2.
- Continue LNAPL monitoring and passive bailer deployment at MW-1 and install a new passive bailer unit at MW-4 during the third quarter 2014.

Tables

TABLE 1
SECOND QUARTER 2014
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)	Change in Groundwater Elevation Since Previous Event (3) (feet)
MW-1*	6/3/2013	21.60			34.25	3198.88	3177.28	-0.03
MW-1*	9/11/2013	22.27	22.23	0.04	34.25	3198.88	3176.64	-0.64
MW-1*	12/3/2013	22.12	22.00	0.12	34.25	3198.88	3176.85	0.21
MW-1*	2/26/2014	22.09	21.98	0.11	NM	3198.88	3176.87	0.02
MW-1*	6/2/2014	22.53	22.05	0.48	NM	3198.88	3176.71	-0.16
MW-2	6/3/2013	22.81			32.85	3200.00	3177.19	-0.10
MW-2	9/11/2013	23.18			32.85	3200.00	3176.82	-0.37
MW-2	12/3/2013	22.95			32.85	3200.00	3177.05	0.23
MW-2	2/26/2014	22.93			NM	3200.00	3177.07	0.02
MW-2	6/2/2014	23.11			32.95	3200.00	3176.89	-0.18
MW-3	6/3/2013	23.46			34.23	3200.85	3177.39	-0.01
MW-3	9/11/2013	23.86			34.23	3200.85	3176.99	-0.40
MW-3	12/3/2013	23.64			34.23	3200.85	3177.21	0.22
MW-3	2/26/2014	23.68			NM	3200.85	3177.17	-0.04
MW-3	6/2/2014	23.81			34.44	3200.85	3177.04	-0.13
MW-4	6/3/2013	24.86	23.33	1.53	NM	NM	NM	NM
MW-4	9/11/2013	25.63	23.95	1.68	NM	NM	NM	NM
MW-4	12/3/2013	25.03	24.84	0.19	NM	NM	NM	NM
MW-4	2/26/2014	25.25	23.66	1.59	NM	NM	NM	NM
MW-4*	6/2/2014	25.38	23.66	1.72	NM	3200.99 **	3176.90	NA
Average change in groundwater elevation (12/3/13 to 2/26/14)								-0.16

Notes:

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

2- Total depths were collected and recorded during the second quarter 2014 monitoring event (with the exception of wells that contained LNAPL).

3- 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.

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

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

amsl - feet above mean sea level.

TOC - top of casing

NM - not measured

* Groundwater elevation is corrected for product thickness 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

** The TOC elevation for MW-4 has been calculated based on a relative elevation survey conducted by Tasman on 6/2/14. The elevation reflects the relative change in elevation between MW-4 and the known elevation for MW-3.

TABLE 2
SECOND QUARTER 2014
SUMMARY OF BTEX AND CHLORIDE 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	6/2/2014	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-2	6/2/2014	<0.001	<0.001	<0.001	<0.001	1,270	Duplicate sample collected
MW-2 (Duplicate)	6/2/2014	<0.001	<0.001	<0.001	<0.001	1,290	
MW-3	6/2/2014	<0.001	<0.001	<0.001	<0.001	519	
MW-4	6/2/2014	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
Trip Blank	6/2/2014	<0.001	<0.001	<0.001	<0.001	NA	

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 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.

* Chlorides are subject to the National Secondary Drinking Water Regulations (NSDWR) secondary maximum contaminant levels (SMCLs) and not an enforceably regulated constituent. The 250 mg/L standard is established only as a guideline to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

LNAPL = Light Non-Aqueous Phase Liquid

mg/L = milligrams per liter.

NM = Not measured.

NA = Not applicable

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

Site Location
Map

Figure
1



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



DCP Midstream
Burton Flats Booster Station
Second Quarter 2014 Groundwater Monitoring
Summary Report

Site Map with Monitoring
Well Locations

Figure
2



Legend

- Monitoring Well
- Soil Boring (2010)
- Soil Boring (2011)
- Boundary
- Measured Groundwater Elevation (feet AMSL) (dashed where inferred)
- Groundwater Flow Direction
- Groundwater Elevation Contour (Dashed where inferred)

Notes:

- * - 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)
- ** - The TOC elevation for MW-4 has been calculated based on a relative elevation survey conducted by Tasman on 6/2/14. The elevation reflects the relative change in elevation between MW-4 and the known elevation for MW-3.

N

0 35 70 Feet

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

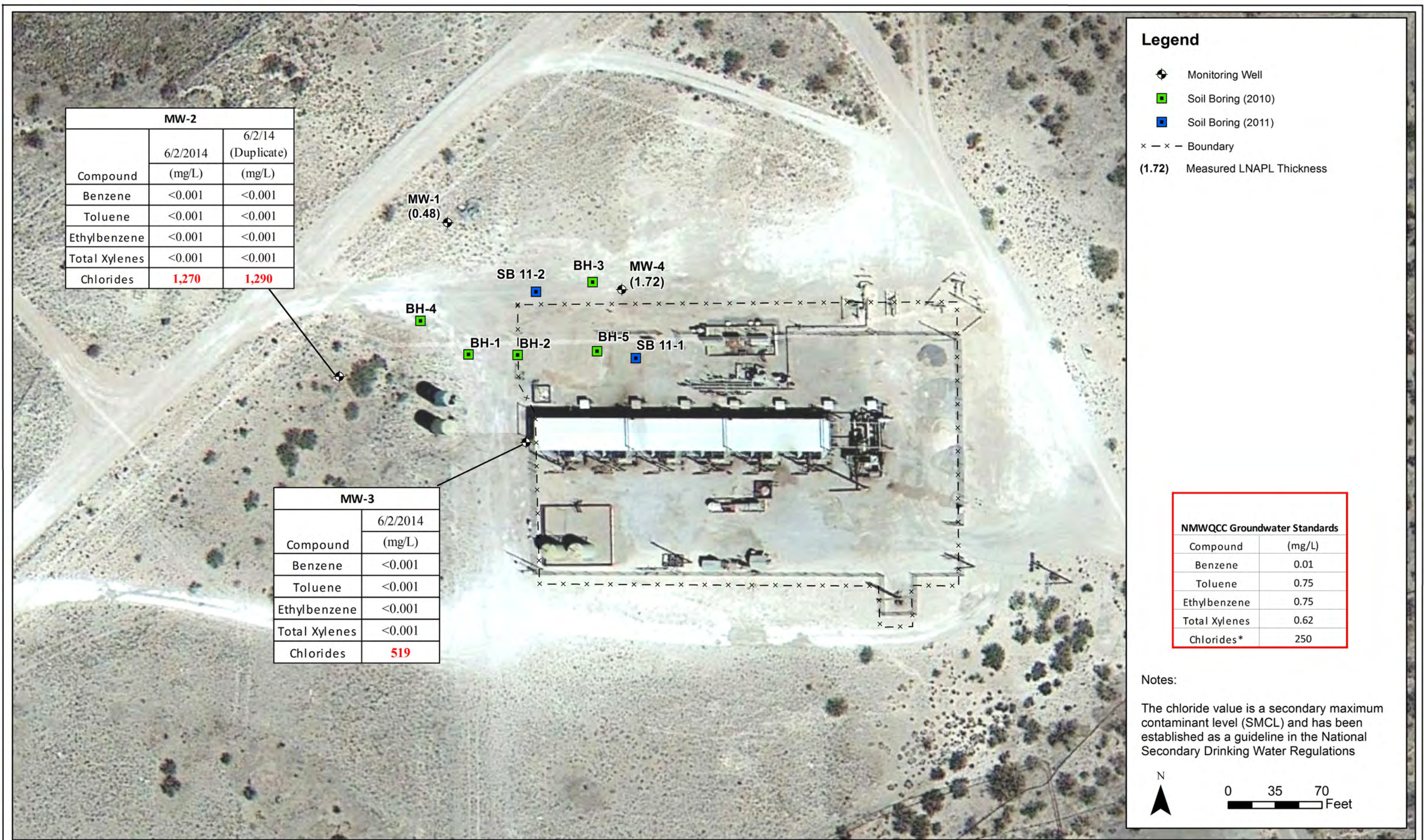
TASMAN
GEOSCIENCES

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

DCP Midstream
Burton Flats Booster Station
 Second Quarter 2014 Groundwater Monitoring
 Summary Report

Groundwater Elevation
 Contour Map
 (June 2, 2014)

Figure
3



DATE: June 1 2014

DESIGNED BY: T. Johansen

DRAWN BY: D. Arnold

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

DCP Midstream
Burton Flats Booster Station
Second Quarter 2014 Groundwater Monitoring
Summary Report

Analytical Results
Map
(June 2, 2014)

Figure
4

Appendix A

Historic Analytical Results

APPENDIX A
HISTORIC ANALYTICAL RESULTS
BTEX AND CHLORIDE 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	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-1	6/3/2013	0.0049	<0.001	0.0048	<0.001	703	Duplicate sample collected
MW-1	9/11/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	2/26/2014	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-1	6/2/2014	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
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-2	6/3/2013	<0.001	<0.001	<0.001	<0.001	1,150	
MW-2	9/11/2013	<0.001	<0.001	<0.001	<0.001	1,410	Duplicate sample collected
MW-2	12/3/2013	<0.001	<0.001	<0.001	<0.001	1,120	Duplicate sample collected
MW-2	2/26/2014	<0.001	<0.001	<0.001	<0.001	1,220	Duplicate sample collected
MW-2 (Duplicate)	2/26/2014	<0.001	<0.001	<0.001	<0.001	1,270	
MW-2	6/2/2014	<0.001	<0.001	<0.001	<0.001	1,270	Duplicate sample collected
MW-2 (Duplicate)	6/2/2014	<0.001	<0.001	<0.001	<0.001	1,290	
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-3	6/12/2013	<0.001	<0.001	<0.001	<0.001	474	
MW-3	9/11/2013	<0.001	<0.001	<0.001	<0.001	589	
MW-3	12/3/2013	<0.001	<0.001	<0.001	<0.001	432	
MW-3	2/26/2014	<0.001	<0.001	<0.001	<0.001	484	
MW-3	6/2/2014	<0.001	<0.001	<0.001	<0.001	519	
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	
MW-4	6/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	9/11/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	12/3/2013	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	2/26/2014	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
MW-4	6/2/2014	LNAPL	LNAPL	LNAPL	LNAPL	LNAPL	
Trip Blank	6/2/2014	<0.001	<0.001	<0.001	<0.001	NA	

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.

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

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

* Chlorides are subject to the National Secondary Drinking Water Regulations (NSDWR) secondary maximum contaminant levels (SMCLs) and not an enforceably regulated constituent. The 250 mg/L standard is established only as a guideline to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

LNAPL = Light Non-Aqueous Phase Liquid

mg/L = milligrams per liter.

NA = Not applicable



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June 19, 2014

Don Baggus
Tasman Geosciences
5690 Webster Street
Arvada, CO 80002

Work Order: **HS14060138**

Laboratory Results for: **Burton Flats Booster Station**

Dear Don,

ALS Environmental received 4 sample(s) on Jun 03, 2014 for the analysis 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.

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

Sincerely,

A handwritten signature in cursive script that reads "Sonia West".

Generated By: Sonia.West
Sonia West
Project Manager

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Work Order: HS14060138

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS14060138-01	MW-2-060214	Water		02-Jun-2014 10:45	03-Jun-2014 09:30	<input type="checkbox"/>
HS14060138-02	MW-3-060214	Water		02-Jun-2014 11:00	03-Jun-2014 09:30	<input type="checkbox"/>
HS14060138-03	Trip Blank	Water		02-Jun-2014 10:30	03-Jun-2014 09:30	<input type="checkbox"/>
HS14060138-04	Duplicate	Water		02-Jun-2014 00:00	03-Jun-2014 09:30	<input type="checkbox"/>

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Work Order: HS14060138

CASE NARRATIVE

Batch 235683, Chloride by method 9045, Sample Duplicate (HS14060138-04): The MS recovery was outside of the control limits due to possible matrix interference.

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Sample ID: MW-2-060214
Collection Date: 02-Jun-2014 10:45

ANALYTICAL REPORT

WorkOrder:HS14060138
Lab ID:HS14060138-01
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS		Method:SW9056		Analyst: KKB		
Chloride	1,270		50.0	mg/L	100	16-Jun-2014 23:13
LOW LEVEL VOLATILES - SW8260C		Method:SW8260		Analyst: AKP		
Benzene	ND		0.0010	mg/L	1	12-Jun-2014 01:16
Toluene	ND		0.0010	mg/L	1	12-Jun-2014 01:16
Ethylbenzene	ND		0.0010	mg/L	1	12-Jun-2014 01:16
Xylenes, Total	ND		0.0010	mg/L	1	12-Jun-2014 01:16
Surr: 1,2-Dichloroethane-d4	109		71-125	%REC	1	12-Jun-2014 01:16
Surr: 4-Bromofluorobenzene	98.7		70-125	%REC	1	12-Jun-2014 01:16
Surr: Dibromofluoromethane	110		74-125	%REC	1	12-Jun-2014 01:16
Surr: Toluene-d8	105		75-125	%REC	1	12-Jun-2014 01:16

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

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Sample ID: MW-3-060214
Collection Date: 02-Jun-2014 11:00

ANALYTICAL REPORT

WorkOrder:HS14060138
Lab ID:HS14060138-02
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS	Method:SW9056					Analyst: KKB
Chloride	519		5.00	mg/L	10	17-Jun-2014 00:26
LOW LEVEL VOLATILES - SW8260C	Method:SW8260					Analyst: AKP
Benzene	ND		0.0010	mg/L	1	12-Jun-2014 02:52
Toluene	ND		0.0010	mg/L	1	12-Jun-2014 02:52
Ethylbenzene	ND		0.0010	mg/L	1	12-Jun-2014 02:52
Xylenes, Total	ND		0.0010	mg/L	1	12-Jun-2014 02:52
Surr: 1,2-Dichloroethane-d4	107		71-125	%REC	1	12-Jun-2014 02:52
Surr: 4-Bromofluorobenzene	102		70-125	%REC	1	12-Jun-2014 02:52
Surr: Dibromofluoromethane	108		74-125	%REC	1	12-Jun-2014 02:52
Surr: Toluene-d8	107		75-125	%REC	1	12-Jun-2014 02:52

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

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Sample ID: Trip Blank
Collection Date: 02-Jun-2014 10:30

ANALYTICAL REPORT

WorkOrder:HS14060138
Lab ID:HS14060138-03
Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
LOW LEVEL VOLATILES - SW8260C		Method:SW8260		Analyst: AKP		
Benzene	ND		0.0010	mg/L	1	12-Jun-2014 00:52
Toluene	ND		0.0010	mg/L	1	12-Jun-2014 00:52
Ethylbenzene	ND		0.0010	mg/L	1	12-Jun-2014 00:52
Xylenes, Total	ND		0.0010	mg/L	1	12-Jun-2014 00:52
Surr: 1,2-Dichloroethane-d4	106		71-125	%REC	1	12-Jun-2014 00:52
Surr: 4-Bromofluorobenzene	99.1		70-125	%REC	1	12-Jun-2014 00:52
Surr: Dibromofluoromethane	108		74-125	%REC	1	12-Jun-2014 00:52
Surr: Toluene-d8	104		75-125	%REC	1	12-Jun-2014 00:52

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

Client: Tasman Geosciences
 Project: Burton Flats Booster Station
 Sample ID: Duplicate
 Collection Date: 02-Jun-2014 00:00

ANALYTICAL REPORT

WorkOrder:HS14060138
 Lab ID:HS14060138-04
 Matrix:Water

ANALYSES	RESULT	QUAL	REPORT LIMIT	UNITS	DILUTION FACTOR	DATE ANALYZED
ANIONS		Method:SW9056		Analyst: KKB		
Chloride	1,290		50.0	mg/L	100	17-Jun-2014 00:55
LOW LEVEL VOLATILES - SW8260C		Method:SW8260		Analyst: AKP		
Benzene	ND		0.0010	mg/L	1	12-Jun-2014 01:37
Toluene	ND		0.0010	mg/L	1	12-Jun-2014 01:37
Ethylbenzene	ND		0.0010	mg/L	1	12-Jun-2014 01:37
Xylenes, Total	ND		0.0010	mg/L	1	12-Jun-2014 01:37
Surr: 1,2-Dichloroethane-d4	94.4		71-125	%REC	1	12-Jun-2014 01:37
Surr: 4-Bromofluorobenzene	96.8		70-125	%REC	1	12-Jun-2014 01:37
Surr: Dibromofluoromethane	91.0		74-125	%REC	1	12-Jun-2014 01:37
Surr: Toluene-d8	94.3		75-125	%REC	1	12-Jun-2014 01:37

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

Client: Tasman Geosciences
Project: Burton Flats Booster Station
WorkOrder: HS14060138

DATES REPORT

Sample ID	Client Samp ID	Collection Date	TCLP Date	Prep Date	Analysis Date	DF
Batch ID R235431 Test Name : LOW LEVEL VOLATILES - SW8260C Matrix: Water						
HS14060138-04	Duplicate	02 Jun 2014 00:00			12 Jun 2014 01:37	1
Batch ID R235466 Test Name : LOW LEVEL VOLATILES - SW8260C Matrix: Water						
HS14060138-01	MW-2-060214	02 Jun 2014 10:45			12 Jun 2014 01:16	1
HS14060138-02	MW-3-060214	02 Jun 2014 11:00			12 Jun 2014 02:52	1
HS14060138-03	Trip Blank	02 Jun 2014 10:30			12 Jun 2014 00:52	1
Batch ID R235683 Test Name : ANIONS Matrix: Water						
HS14060138-01	MW-2-060214	02 Jun 2014 10:45			16 Jun 2014 23:13	100
HS14060138-02	MW-3-060214	02 Jun 2014 11:00			17 Jun 2014 00:26	10
HS14060138-04	Duplicate	02 Jun 2014 00:00			17 Jun 2014 00:55	100

Client: Tasman Geosciences
 WorkOrder: HS14060138
 Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: R235431		Instrument: VOA4		Method: SW8260						
MBLK	Sample ID: VBLKW-140611	Units: ug/L				Analysis Date: 11-Jun-2014 23:53				
Client ID:	Run ID: VOA4_235431	SeqNo: 2876639				PrepDate:		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	46.2	1.0	50	0	92.4	71 - 125				
Surr: 4-Bromofluorobenzene	47.18	1.0	50	0	94.4	70 - 125				
Surr: Dibromofluoromethane	45.21	1.0	50	0	90.4	74 - 125				
Surr: Toluene-d8	46.24	1.0	50	0	92.5	75 - 125				

LCS	Sample ID: VLCSW-140611	Units: ug/L				Analysis Date: 11-Jun-2014 23:01				
Client ID:	Run ID: VOA4_235431	SeqNo: 2876638				PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	49.63	1.0	50	0	99.3	80 - 120				
Ethylbenzene	49.98	1.0	50	0	100.0	80 - 120				
Toluene	49.52	1.0	50	0	99.0	80 - 121				
Xylenes, Total	148.4	3.0	150	0	98.9	80 - 124				
Surr: 1,2-Dichloroethane-d4	45.3	1.0	50	0	90.6	71 - 125				
Surr: 4-Bromofluorobenzene	48.56	1.0	50	0	97.1	70 - 125				
Surr: Dibromofluoromethane	45.74	1.0	50	0	91.5	74 - 125				
Surr: Toluene-d8	46.22	1.0	50	0	92.4	75 - 125				

MS	Sample ID: HS14060138-04MS	Units: ug/L				Analysis Date: 12-Jun-2014 02:03				
Client ID: Duplicate	Run ID: VOA4_235431	SeqNo: 2876644				PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	51.43	1.0	50	0	103	80 - 120				
Ethylbenzene	52.57	1.0	50	0	105	80 - 120				
Toluene	52.04	1.0	50	0	104	80 - 121				
Xylenes, Total	155	3.0	150	0	103	80 - 124				
Surr: 1,2-Dichloroethane-d4	46.91	1.0	50	0	93.8	71 - 125				
Surr: 4-Bromofluorobenzene	49.3	1.0	50	0	98.6	70 - 125				
Surr: Dibromofluoromethane	46.97	1.0	50	0	93.9	74 - 125				
Surr: Toluene-d8	47.05	1.0	50	0	94.1	75 - 125				

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

Client: Tasman Geosciences
 WorkOrder: HS14060138
 Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: R235431		Instrument: VOA4		Method: SW8260						
MSD		Sample ID: HS14060138-04MSD		Units: ug/L		Analysis Date: 12-Jun-2014 02:28				
Client ID: Duplicate		Run ID: VOA4_235431		SeqNo: 2876645		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	54.16	1.0	50	0	108	80 - 120	51.43	5.18	20	
Ethylbenzene	54.34	1.0	50	0	109	80 - 120	52.57	3.32	20	
Toluene	54.16	1.0	50	0	108	80 - 121	52.04	3.99	20	
Xylenes, Total	161.6	3.0	150	0	108	80 - 124	155	4.18	20	
Surr: 1,2-Dichloroethane-d4	46.47	1.0	50	0	92.9	71 - 125	46.91	0.948	20	
Surr: 4-Bromofluorobenzene	48.9	1.0	50	0	97.8	70 - 125	49.3	0.813	20	
Surr: Dibromofluoromethane	46.82	1.0	50	0	93.6	74 - 125	46.97	0.303	20	
Surr: Toluene-d8	46.8	1.0	50	0	93.6	75 - 125	47.05	0.539	20	
The following samples were anayzed in this batch: HS14060138-04										

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

Client: Tasman Geosciences
 WorkOrder: HS14060138
 Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: R235466		Instrument: VOA7		Method: SW8260						
MBLK	Sample ID: VBLKW-140611	Units: ug/L				Analysis Date: 12-Jun-2014 00:05				
Client ID:	Run ID: VOA7_235466	SeqNo: 2877682				PrepDate:		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	54.5	1.0	50	0	109	71 - 125				
Surr: 4-Bromofluorobenzene	51.34	1.0	50	0	103	70 - 125				
Surr: Dibromofluoromethane	54.98	1.0	50	0	110	74 - 125				
Surr: Toluene-d8	52.99	1.0	50	0	106	75 - 125				

LCS	Sample ID: VLCSW-140611	Units: ug/L				Analysis Date: 11-Jun-2014 22:53				
Client ID:	Run ID: VOA7_235466	SeqNo: 2877681				PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	45.26	1.0	50	0	90.5	80 - 120				
Ethylbenzene	51.57	1.0	50	0	103	80 - 120				
Toluene	49.6	1.0	50	0	99.2	80 - 121				
Xylenes, Total	155.5	3.0	150	0	104	80 - 124				
Surr: 1,2-Dichloroethane-d4	52.49	1.0	50	0	105	71 - 125				
Surr: 4-Bromofluorobenzene	52.74	1.0	50	0	105	70 - 125				
Surr: Dibromofluoromethane	54.65	1.0	50	0	109	74 - 125				
Surr: Toluene-d8	52.64	1.0	50	0	105	75 - 125				

MS	Sample ID: HS14060138-01MS	Units: ug/L				Analysis Date: 12-Jun-2014 01:40				
Client ID: MW-2-060214	Run ID: VOA7_235466	SeqNo: 2877686				PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	47.58	1.0	50	0	95.2	80 - 120				
Ethylbenzene	51.72	1.0	50	0	103	80 - 120				
Toluene	50.25	1.0	50	0	101	80 - 121				
Xylenes, Total	156	3.0	150	0	104	80 - 124				
Surr: 1,2-Dichloroethane-d4	53	1.0	50	0	106	71 - 125				
Surr: 4-Bromofluorobenzene	53.25	1.0	50	0	106	70 - 125				
Surr: Dibromofluoromethane	54.37	1.0	50	0	109	74 - 125				
Surr: Toluene-d8	52.34	1.0	50	0	105	75 - 125				

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

Client: Tasman Geosciences
 WorkOrder: HS14060138
 Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: R235466		Instrument: VOA7		Method: SW8260						
MSD		Sample ID: HS14060138-01MSD		Units: ug/L		Analysis Date: 12-Jun-2014 02:04				
Client ID: MW-2-060214		Run ID: VOA7_235466		SeqNo: 2877687		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Benzene	49.32	1.0	50	0	98.6	80 - 120	47.58	3.6	20	
Ethylbenzene	53.86	1.0	50	0	108	80 - 120	51.72	4.07	20	
Toluene	52.94	1.0	50	0	106	80 - 121	50.25	5.21	20	
Xylenes, Total	163.6	3.0	150	0	109	80 - 124	156	4.73	20	
Surr: 1,2-Dichloroethane-d4	56.28	1.0	50	0	113	71 - 125	53	6.01	20	
Surr: 4-Bromofluorobenzene	54.46	1.0	50	0	109	70 - 125	53.25	2.25	20	
Surr: Dibromofluoromethane	56.32	1.0	50	0	113	74 - 125	54.37	3.52	20	
Surr: Toluene-d8	54.22	1.0	50	0	108	75 - 125	52.34	3.54	20	
The following samples were anayzed in this batch:										
HS14060138-01		HS14060138-02		HS14060138-03						

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

Client: Tasman Geosciences
 WorkOrder: HS14060138
 Project: Burton Flats Booster Station

QC BATCH REPORT

Batch ID: R235683		Instrument: ICS2100		Method: SW9056						
MBLK	Sample ID: WBLKW1	Units: mg/L				Analysis Date: 16-Jun-2014 18:22				
Client ID:		Run ID: ICS2100_235683		SeqNo: 2882576		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	ND	0.500								
LCS	Sample ID: WLCSW2	Units: mg/L				Analysis Date: 16-Jun-2014 18:37				
Client ID:		Run ID: ICS2100_235683		SeqNo: 2882577		PrepDate:		DF: 1		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	20.21	0.500	20	0	101	80 - 120				
MS	Sample ID: HS14060138-04MS	Units: mg/L				Analysis Date: 17-Jun-2014 01:10				
Client ID: Duplicate		Run ID: ICS2100_235683		SeqNo: 2882604		PrepDate:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	2579	50.0	1000	1289	129	80 - 120				S
MS	Sample ID: HS14060138-01MS	Units: mg/L				Analysis Date: 16-Jun-2014 23:28				
Client ID: MW-2-060214		Run ID: ICS2100_235683		SeqNo: 2882597		PrepDate:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	2369	50.0	1000	1269	110	80 - 120				
MSD	Sample ID: HS14060138-04MSD	Units: mg/L				Analysis Date: 17-Jun-2014 01:24				
Client ID: Duplicate		Run ID: ICS2100_235683		SeqNo: 2882605		PrepDate:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	2342	50.0	1000	1289	105	80 - 120	2579	9.63	20	
MSD	Sample ID: HS14060138-01MSD	Units: mg/L				Analysis Date: 17-Jun-2014 00:11				
Client ID: MW-2-060214		Run ID: ICS2100_235683		SeqNo: 2882600		PrepDate:		DF: 100		
Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chloride	2336	50.0	1000	1269	107	80 - 120	2369	1.4	20	
The following samples were analyzed in this batch: HS14060138-01 HS14060138-02 HS14060138-04										

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

Client: Tasman Geosciences
Project: Burton Flats Booster Station
WorkOrder: HS14060138

**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/SDL

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

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	AR - 2014	27-Mar-2015
California	06248CA 2013-2014	31-Jul-2014
Dept of Defense	L2231 Rev 3-20-2014	22-Dec-2015
Illinois	003403	09-May-2015
Kansas	E-10352 8/15/2013-2014	31-Jul-2014
Kentucky	KY 2014-2015	30-Apr-2015
Louisiana	03087 2013/2014	30-Jun-2014
North Carolina	624 - 2014	31-Dec-2014
North Dakota	R-193 2025	30-Apr-2015
Oklahoma	2013-024	31-Aug-2014
Texas	TX104704231-14-13	30-Apr-2015

Client: Tasman Geosciences
Project: Burton Flats Booster Station
Work Order: HS14060138

SAMPLE TRACKING

Lab Samp ID	Client Sample ID	Action	Date	Person	New Location
HS14060138-01	MW-2-060214	Login	04-Jun-14 08:18	DRC	27E
HS14060138-01	MW-2-060214	Login	04-Jun-14 08:18	DRC	VW-3
HS14060138-02	MW-3-060214	Login	04-Jun-14 08:18	DRC	27E
HS14060138-02	MW-3-060214	Login	04-Jun-14 08:18	DRC	VW-3
HS14060138-03	Trip Blank	Login	04-Jun-14 08:18	DRC	VW-3
HS14060138-04	Duplicate	Login	04-Jun-14 05:41	PMG	27E
HS14060138-04	Duplicate	Login	04-Jun-14 05:41	PMG	VW-3

Sample Receipt Checklist

Client Name: Tasman Geosciences

Date/Time Received: **03-Jun-2014 09:30**

Work Order: HS14060138

Received by: **JDE**

Checklist completed by:	<u>Dana.Capps</u>	<u>4-Jun-2014</u>	Reviewed by:	<u>Sonia West</u>	<u>12-Jun-2014</u>
	eSignature	Date		eSignature	Date

Matrices: **Water**Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	

Temperature(s)/Thermometer(s):	1.4/1.4 C/U			IR3
Cooler(s)/Kit(s):	5214			
Date/Time sample(s) sent to storage:	06/04/2014			
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted	<input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A	<input checked="" type="checkbox"/>
pH adjusted by:				

Login Notes:

Client Contacted:

Date Contacted:

Person Contacted:

Contacted By: 0

Regarding:

Comments:

Corrective Action:



Environmental

Cincinnati, OH
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+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 099146

HS14060138

, WV

Tasman Geosciences

Burton Flats Booster Station 311090017 F255



ALS Project Manager:

Customer Information		Project Information		
Purchase Order		Project Name	Burton Flats Booster Station	A BTEX (8260B)
Work Order		Project Number	311090017 F255	B Anions (9056) Cl
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) 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	-	-	Water	HCL/4C	4	X	X		LN APL							
2	MW-2 - 060214	6/2/2014	1045	Water	HCL/4C	4	X	X									
3	MW-2 MS	6/2/2014	1045	Water	HCL/4C	4	X	X									
4	MW-2 MSD	6/2/2014	1045	Water	HCL/4C	4	X	X									
5	MW-3 - 060214	6/2/2014	1100	Water	HCL/4C	4	X	X									
6	Duplicate.	-	-	Water	HCL/4C	4	X	X									
7	Trip Blank	6/2/2014	1030	Water	HCL/4C	2	X										
8																	
9																	
10																	

Sampler(s) Please Print & Sign D. Baggus		Shipment Method Fed Ex		Required Turnaround Time: (Check Box) <input checked="" type="checkbox"/> Std. 10 WK days <input type="checkbox"/> 5 WK Days <input type="checkbox"/> 2 WK Days <input type="checkbox"/> 24-hour				Results Due Date:					
Relinquished by: D. Baggus	Date: 6/2/14	Time: 1720	Received by:		Notes: 10 Day TAT								
Relinquished by:	Date: 6-3-14	Time: 9:30	Received by (Laboratory): [Signature]		Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)						
Logged by (Laboratory):	Date:	Time:	Checked by (Laboratory):				<input checked="" type="checkbox"/> Level 2 Std QC	<input type="checkbox"/> TRRP ChkList					
							<input type="checkbox"/> Level 3 Std QC/Row da	<input type="checkbox"/> TRRP Level 4					
							<input type="checkbox"/> Level 4 SW246/CLP						
							<input type="checkbox"/> Other/EDD						
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O 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.

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	CUSTOD	
	Date: 6/2/14	Tin
	Name: DON BACAS	
	Company: TASMAR	

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net: 1420
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Appendix B

Laboratory Analytical Report

- ALS Report #: HS14060138