2R - 799

Q2 2012 GWMR

11 / 09 / 2012



DCP Midstream370 17th Street, Suite 2500
Denver, CO 80202
303-595-3331
303-605-2226 *FAX*

November 9, 2012

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 2012 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 2012 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



SECOND QUARTER 2012 GROUNDWATER MONITORING REPORT

BURTON FLATS BOOSTER STATION EDDY COUNTY, NEW MEXICO

Prepared For:

Mr. Chandler Cole DCP Midstream 370 17th Street, Suite 2500 Denver, Colorado 80202

Nicole Taylor

Project Geologist

John Riggi, P.G

Senior Project Geologist

Prepared by: Conestoga-Rovers & Associates

14998 West 6th Avenue; Suite 800 Golden, Colorado USA 80401

Office: (720) 974-0935 Fax: (720) 974-0936

web: http://www.CRAworld.com

NOVEMBER 6, 2012 Ref. NO. 070537(6)

This report is printed on recycled paper.

TABLE OF CONTENTS

		<u>Page</u>
1.0	INTRODUCTION	1
2.0	GROUNDWATER MONITORING AND SAMPLING	1
3.0	ANALYTICAL RESULTS	2
4.0	CONCLUSIONS	2

LIST OF FIGURES (Following Text)

FIGURE 1	VICINITY MAP
FIGURE 2	GROUNDWATER ELEVATION CONTOUR MAP
FIGURE 3	HYDROCARBON CONCENTRATIONS IN GROUNDWATER
	<u>LIST OF TABLES</u> (Following Text)
TABLE 1	CURRENT GROUNDWATER ANALYTICAL RESULTS
TABLE 2	HISTORICAL GROUNDWATER ANALYTICAL RESULTS
	LIST OF APPENDICES
APPENDIX A	WELL SAMPLING FORMS
APPENDIX B	STANDARD OPERATING PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING
APPENDIX C	LABORATORY ANALYTICAL REPORT

1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) is submitting this *Second Quarter* 2012 *Groundwater Monitoring Report* to DCP Midstream, LP (DCP) for the Burton Flats Booster Station in Eddy County, New Mexico. This report summarizes the June 2012 groundwater sampling event. Groundwater monitoring and sampling details, analytical results, and conclusions are presented below.

Site Background

The site is a booster station located in Eddy County, New Mexico. The property's legal description is Lots4 and 5, Section1, Township2l South (T2lS), Range 27 East (R27E) (Figure 1). Four groundwater monitoring wells MW-1 through MW-4 were installed in 2011.

Hydrogeology

Static groundwater depths ranged from 21.50 (MW-1) to 24.82 feet (ft) below ground surface (bgs) (MW-4) on June 20, 2012. Groundwater flows to the northwest with a gradient of 0.003 ft/ft (Figure 2).

2.0 GROUNDWATER MONITORING AND SAMPLING

CRA gauged groundwater monitoring wells MW-1 through MW-4 and collected groundwater samples from MW-1 through MW-3 on June 20, 2012. Light non-aqueous phase liquids (LNAPL) were measured in MW-4 during the sampling event. Each well cap was removed to allow groundwater levels to stabilize and equilibrate prior to gauging. All sampled groundwater monitoring wells were purged of approximately three well-casing volumes while temperature, pH, and conductivity were measured. Groundwater samples, including a duplicate sample, were collected using clean disposable bailers and decanted into clean containers supplied by the analytical laboratory. Groundwater samples were submitted under chain-of-custody to Accutest Laboratories of Texas. CRA well sampling forms are presented as Appendix A. CRA's standard operating procedures for groundwater monitoring and sampling are presented as Appendix B.

Purged Groundwater

Purged groundwater was transported to the DCP Linam Ranch Facility, where purged groundwater was disposed in the onsite sump.

070537 (6)

3.0 ANALYTICAL RESULTS

Groundwater Analytical Methods

Groundwater samples collected from MW-1 through MW-3 were analyzed for:

- Benzene, toluene, ethylbenzene, and xylenes (BTEX) by SW846 8021B
- Total petroleum hydrocarbons as gasoline (TPH GRO) by SW846 8015
- Total petroleum hydrocarbons as diesel (TPH DRO) by SW845 8015M and SW846 3510C
- Chlorides by Environmental Protection Agency 300/SW846 9056

Groundwater Sampling Results

Water Quality Control **BTEX** was detected above New Mexico Commission (NMWQCC) cleanup levels in groundwater samples MW-2 and MW-3. Groundwater sample MW-1 contained 96.7 micrograms per liter (µg/l) benzene, 4,600 µg/1 TPH GRO, and 27,400 µg/1 TPH DRO. Sample MW-2 contained the highest chloride concentration (1,150,000 µg/l). BTEX, TPH GRO, TPH DRO, and chloride concentrations in groundwater are presented on Figure 3. Current groundwater analytical results are summarized in Table 1. Historical groundwater analytical results The laboratory analytical report is presented as are summarized in Table 2. Appendix C.

4.0 CONCLUSIONS

Benzene was detected above groundwater cleanup levels in monitoring well MW-1. Chloride has been detected above NMWQCC cleanup levels in groundwater samples MW-1 through MW-3. DCP will continue quarterly monitoring and sampling in 2012 to evaluate site groundwater conditions.

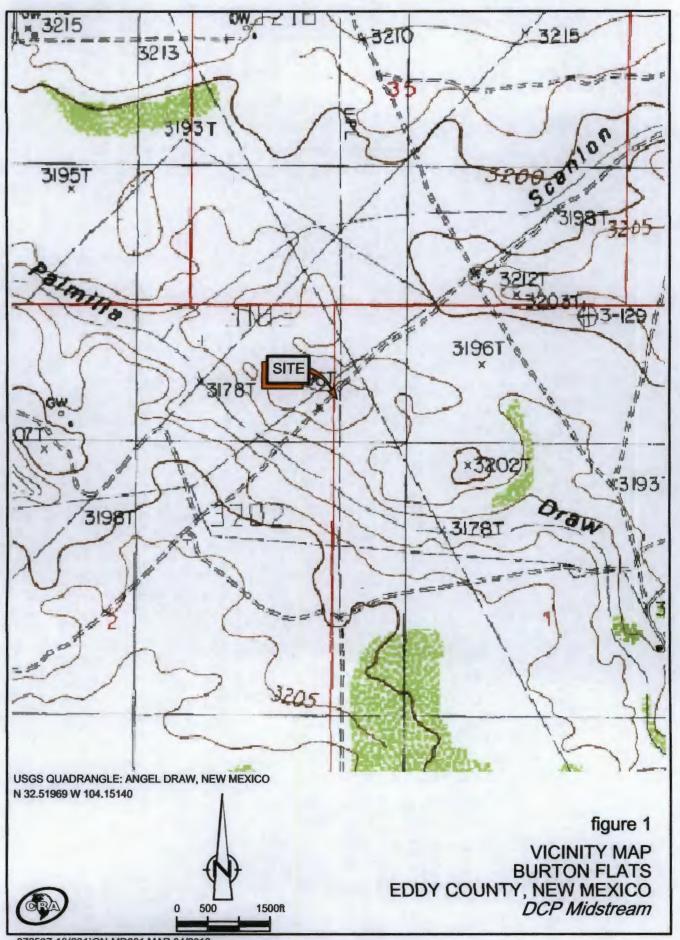
070537 (6)

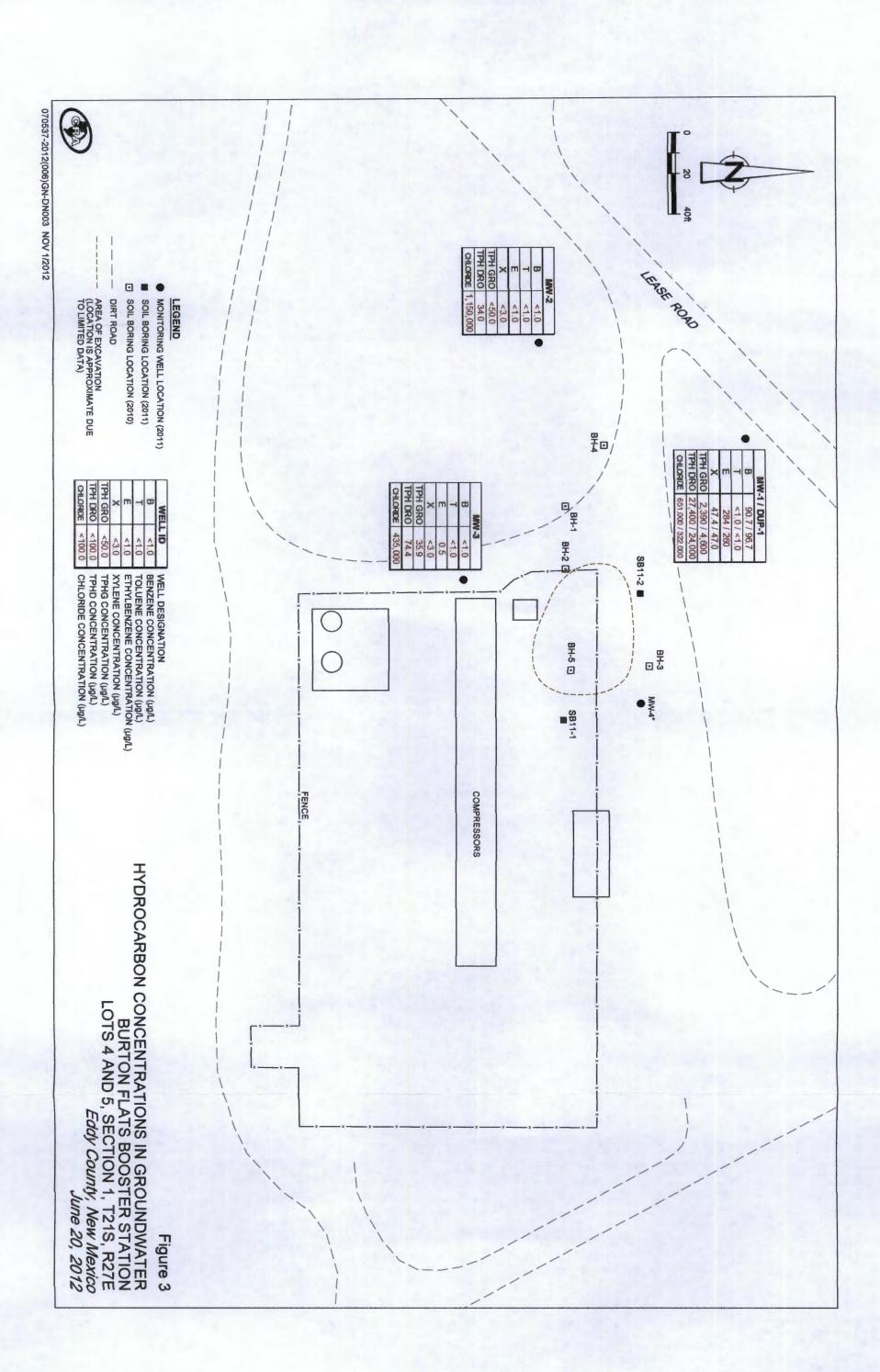
FIGURES

FIGURE 1: VICINITY MAP

FIGURE 2: GROUNDWATER ELEVATION CONTOUR MAP

FIGURE 3: HYROCARBON CONCENTRATIONS IN GROUNDWATER





TABLES

TABLE 1: CURRENT GROUNDWATER ANALYTICAL RESULTS

TABLE 2: HISTORICAL GROUNDWATER ANALYTICAL RESULTS

CONESTOGA-ROVERS & ASSOCIATES

Table T.	able 1. Current Groundwaler Analytical Assums - burton right booster Station, Edgy County, they present	ndwater Ar	naiyticai Ke	Suits - Duri	OII FIATS DO	Uster Station,	Luuy Coun	LY, INCW INIC	AICU		
Well ID	Date	TOC	DTW	GWE	Benzene	Benzene Toluene	Ethyl - benzene	Total Xylenes	TPH GRO	TPH DRO	Chloride
		(ft msl)	(ft msl) (ft bgs)	(ft msl) ◆				- Concent	Concentrations in µg/1 —		
NMWQCC	NMWQCC Cleanup Levels	sle			10	750	750	620	•	•	250,000
MW-1	6/20/2012	3,198.88	21.50	3177.38	20.7/96.7	<1.0/<1.0	$284^{a}/260^{a}$	47.4/47.0	90.7/96.7 <1.0/<1.0 284 ^a /260 ^a 47.4/47.0 2,390/4,600	27,400/24,000	651,000/322,000
MW-2	6/20/2012	3,200.00	22.66	3177.34	<1.0	<1.0	<1.0	<3.0	<50.0	34.0	1,150,000
MW-3	6/20/2012	3,200.85	23.18	3177.67	<1.0	<1.0	0.50	<3.0	35.9	74.4	435,000
MW-4	6/20/2012	1	24.82	ě				LNA	LNAPL Present		

Notes and Abbreviations:

ID = Identification

TOC = Top of casing

DTW = Depth to water

GWE = Groundwater elevation

BTEX = Benzene, toluene, ethylbenzene, and total xylenes by SW846 8021

TPH GRO =Total petroleum hydrocarbons as gasoline by SW846 8015

TPH DRO = Total petroleum hydrocarbons as diesel by SW845 8015M and SW846 3510C

Chloride = By Environmental Protection Agency 300/SW846 9056

ft msl = Feet above mean sea level

ft bgs = Feet below ground surface

 $\mu g/l = Micrograms per liter$

NMWQCC = New Mexico Water Quality Control Commission

- = NMWQCC Cleanup Level not established

BOLD = Indicates concentration above the NMWQCC Cleanup Levels

x/y = Sample results/blind duplicate results

 $< x = Not detected above x \mu g/1$

a = Result is from run #2

-- = Not measured

LNAPL = Light Non-Aqueous Phase Liquid

CONESTOGA-ROVERS & ASSOCIATES

		LNAPL Present	LNA					1.75	24.82	*-	6/20/2012	MW-4
		LNAPL Present	LNA					0.99	24.00	ı	4/26/2012	MW-4
435,000	74.4	35.9	<3.0	0.50	<1.0	<1.0	3,177.67	ı	23.18	3,200.85	6/20/2012	MW-3
396,000/406,000	46.1/50.7	8.0/<50.0	<3.0/<3.0	<1.0/<1.0	<1.0/<1.0	<1.0/<1.0	3,177.77	:	23.08	3,200.85	4/26/2012	MW-3
426,000	139	<50.0	<3.0	<1.0	<1.0	<1.0	1	1	23.02	ı	12/14/2011	MW-3
1,150,000	34.0	<50.0	<3.0	<1.0	<1.0	<1.0	3177.34	ı	22.66	3,200.00	6/20/2012	MW-2
1,040,000	<100.0	<50.0	<3.0	<1.0	<1.0	<1.0	3177.61	ŀ	22.39	3,200.00	4/26/2012	MW-2
1,170,000	106	<50.0	<3.0	<1.0	<1.0	<1.0	ŀ	1	22.33	1	12/14/2011	MW-2
	•	•				,						
651,000/322,000	27,400/24,000	47.4/47.0 2,390/4,600	47.4/47.0	$284^{a}/260^{a}$	<1.0/<1.0	90.7/96.7	3177.38	1	21.50	3,198.88	6/20/2012	MW-1
584,000	16,900	3,010	7.3	229	<1.0	153	3177.64	ı	21.24	3,198.88	4/26/2012	MW-1
665,000 / 641,000	111 / 99.9 3,890 / 2,880 44,900 / 37,300	3,890 / 2,880	111 / 99.9	200 / 178	3.4 / 2.6	108/140	:	1	21.17	-	12/14/2011	MW-1
250,000	•	•	620	750	750	10				els	NMWQCC Cleanup Levels	NMWQC
+		Concentrations in µg/1-	Concent			†	(ft msl)	(fbgs)	(ft bgs)	(ft msl)		
Chloride	TPH DRO	TPH GRO	Total Xylenes	Ethyl - benzene	Toluene	Benzene	GWE	LNAPL thickness	DTW	TOC	Date	Well ID
			Mexico	ounty, New	ion, Eddy C	Booster Stati	ırton Flats	Results - Bı	Analytical	oundwater	Historical Groundwater Analytical Results - Burton Flats Booster Station, Eddy County, New Mexico	Table 2.

Notes and Abbreviations: ID = Identification

TOC = Top of casing
DTW = Depth to water

GWE = Groundwater elevation

BTEX = Benzene, toluene, ethylbenzene, and total xylenes by SW846 8021
TPH GRO =Total petroleum hydrocarbons as gasoline by SW846 8015
TPH DRO = Total petroleum hydrocarbons as diesel by SW845 8015M and SW846 3510C

Chloride = By Environmental Protection Agency 300/SW846 9056

ft msl = Feet above mean sea level ft bgs = Feet below ground surface

 $\mu g/l = Micrograms per liter$

NMWQCC = New Mexico Water Quality Control Commission
. = NMWQCC Cleanup Level not established

-- = Not measured

BOLD = Indicates concentration above the NMWQCC Cleanup Levels

x/y = Sample results/blind duplicate results $<_X$ = Not detected above \times μ g/1

LNAPL = Light Non-Aqueous Phase Liquid

APPENDIX A WELL SAMPLING FORMS

Groundwater Monitoring Field Sheet

Comments			DUP-1					:		
			(1)							
Casing Diam.	2 ;	6	2"	20						
Amount of Product Removed	l	,		\						The second secon
Amo Pro Ren	ļ	,		١						
Product Thickness				500						
P. Thi	· ·	,	•							
Depth to Bottom	23.18 34.32	22,66 32,93	21,50 34,5	24,82 35.00						
DTW	®	و	000	.82						
D	23	22	7	2,7						
DTP	1	t	-	23.01						
Time										Assessment of the second secon
Well ID	MW-3	MW-2	NW-1	MW-H						

Project Name: By 12-TON FLOORS

Technician: J. PRICESE

Project Number/Task: OJCEST

ate: (0)20)12_



WELL SAMPLING FORM *DISPOSABLE BAILER SAMPLING*

				T							
Site ID:	BURTO	M 1	FLATS	CRA	Mgr:	<u>).</u>	Riccol		Well ID): MW-	·
CRA Pi	roject No.:	07	0537	Date	" Cola	26	2/12		Field St	aff: JPRI	MERA
Street A	ddress:			City,	, State:				Purging	Device:	Teflon Disp. Bailer ()
				E	004 (<u>Cc</u>	N CHTANC	ini	Samplir	ng Method:	Teflon Disp. Bailer () POLY BALLEL
Depth to	o Water:	21.	50	Dept	th to Botto	om	:34.13		Water C	Column Heigl	ht: 12(63
Volume	/ft: 0010	9		1 Ca	sing Volu	ıme	e: 2.02			g Volumes:	
Well Di		2 u					er?: NO				l: 6.25
Start Pu	rge Time:	12	40	$\overline{}$			1248			me: Sr	
	asing Volume =	Water	column height x Vo	olume/ ft.	YES [NO (If NO, please		Diam. 2" 4" 6"	Volume/ft (gall 0.16 0.65 1.47	
Time	Volume Purged	l .	mp. (°C) ± 10%	DO ± 10%	pH ± 0.1		Cond. (mS)	OF	CP (mv) ±10	Con	mments
	(gallons)			1070			-5%		_10		
1246	5,75	2	2.5		7.44	+	8905				
1247	(0.00		0.3		7.36		8943				
1248	6.25		7.9				8940				
		-									
						_		-		,	
*** A minim	um of three para	neiers	must be monitored	and record	ded ***			<u> </u>			-
NOTE: If we	ll is purged dry, i	<i>00 NO</i>	T collect sample un	til it has r	echarged to ap		eximately 80% of its pre				
FIELD K	IT RESULTS	S:	Ferrous I	ron		1	mg/L	Nitrate	·	mg/L	
Sai	mple ID		Date		Time		Ana	lytes	s / Analy	ytical Metl	hod
							-		Cs by TCL82 by 6010	270 O PAHs by O PAHs by	
A A 4 A	l-al					0	Alkalinity by 2320B	O Meth	ane by 80151	B O Nitrate/N	Nitrite by 353.2
	V-1		(0/20)12	- 12	250			A	20 80 li 20 80 li		oride 9056
						ŀ	GRO by AK101 BTEX by 8021B		X by 8260B	OEDB by 8	
DIF	2-1		6/20/12	_			-		E by 8260B	O 1,2-DCA	
Additiona	l Comments:									name of Sitting to a section of	



WELL SAMPLING FORM DISPOSABLE BAILER SAMPLING

Site ID:	BURTO	F LAC	FLATS	CRA	A Mgr: _ \	١	Ricoal		Well ID	: WW-	. 2
	oject No.:			Date	e: (0 2				Field St		MERA
Street A					, State:				Purging	Device:	Teflon Disp. Bailer O
				E) Yad	C	OUNTY, N	imi	Samplin	g Method:	Teflon Disp. Bailer ()
Depth to	o Water:	22.	6 (c)	Dep	th to Botto	m	: 32,93		Water C	olumn Heig	ht: 10.27
Volume				1 Ca	asing Volu	me	e: 10(04		3 Casing	g Volumes:	4.92
Well Di	ameter:	2 N		Did	Well Dew	ate	er?: NO			allons Purge	1
Start Pu	rge Time:	12	237	Stor	Purge Tir	ne	:1244		Total Ti	me: ¬r	nine
	Casing Volume ==				YES [NO (If NO, please		Diam. 2" 4" 6"	Volume/ft (gall 0.16 0.65 1.47	
Time	Volume Purged (gallons)	1	mp. (°C) ± 10%	DO ± 10%	pH ± 0.1		Cond. (mS) ± 3%	OI	&P (mv) ± 10	Со	mments
1242	4.50	2	1.8		7.6	ŧ	13.67	-			
1243	4.75		9.9		7.6%		13.83				
1244	5.00	10	7.7		7.00	٥	13.83				
					-						
				•		_		-			
	um of three para ell is purged dry,					pro	oximately 80% of its pre	e-purge v	olume.		
FIELD K	IT RESULT	S:	Ferrous	Iron _			mg/L	Nitrat	e	mg/L	
Sa	mple ID		Date		Time		Ana	alyte	s / Anal	ytical Met	hod
WW	V-		(0 20)1	2 1	245	0000	ORRO by AK103 OAlkalinity by 2320B OSulfate by 300 OGRO by AK101 OBTEX by 8021B	O Lead O Mett O D O BTI	DCs by TCL82 d by 6010 hane by 8015 RO POS LX by 8260B E by 8260B	O PAHs by B O Nitrate	y 8270SIM Nitrite by 353.2 DCIDE 9050 8011
Additions	I Comments										



WELL SAMPLING FORM DISPOSABLE BAILER SAMPLING

Site ID:	BURITO	NF	FLATS	C	RA	Mgr:	، ــــا	RiGGI		Well ID	: MW	-3
1	oject No.:			ŧ	ate:					Field St	aff: JPe	MERA
Street A			72.46	C	ity,	State:				Purging	_	Teflon Disp. Bailer ()
				1	EC	NO4 C	C	DUNTY, N	ini	Samplin	g Method:	Teflon Disp. Bailer ()
Depth to	Water:	23	.18	D	epth	to Botto	m	: 34.32		Water C	olumn Hei	ght: 11,14
Volume				1	Cas	ing Volu	me	: 1.78		3 Casing	g Volumes:	5,84
Well Di		2 u		D	id W	/ell Dew	ate	er?: NO		Total Ga	allons Purg	ed: 5,50
Start Pu	rge Time:	18	Ο1	S	top I	Purge Tir	ne	: 1310		Total Ti	me: Or	\sim ID
	asing Volume =				≠ n .	YES [NO (If NO, please		Diam. 2" 4" 6" rameters below	Volume/ft (g 0.16 0.65 1.47	
Time	Volume		mp. (°C)	DO	0	рН		Cond. (mS)	T	RP (mv)		omments
	Purged (gallons)	1	± 10%	± 10		± 0.1		± 3%		± 10		
1308	5,00	2	2.3			7.3	1	9133	T			
1309	5.25		2.4			7.35		9184				
1310	5,50		5.1			7.30		9068				
							-					
							_		_			•
*** A minim	um of three para	meters	must be monitor	red and i	recorde	ed ***	aner/	ximalely 80% of its pro	-nurop	พาไบเทค		
	IT RESULT					churged to ep		mg/L	Nitrat		mg/	L
Sa	mple ID		Date	,	T	ime		Ana	alyte	s / Anal	ytical Me	ethod
	v-3		(0 20)	12	12	<i>5</i> 11		DRO by AK102 DRO by AK103 DAlkalinity by 2320B Sulfate by 300 DGRO by AK101 DBTEX by 8021B DHVOCs by 8260B	O Lea O Met O D O GI	OCs by TCL8 d by 6010 bane by 8015 RO SO 16 EX by 8260B BE by 8260B	O PAHs B O Nitra 5 6 CO CEDB	by 8270SIM te/Nitrite by 353,2 10C1 dC 9050
	V-3	•	(0)20)	12	12	<i>\\</i>	C	OSulfate by 300 OGRO by AK101 OBTEX by 8021B	● D ● <u>©</u> 1	RO 801 <u>RO 801</u> EX by 8260B	5 <u>6</u> <u>Ocdb</u> Oedb	<u>locide 90</u>

APPENDIX B

STANDARD OPERATING PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING



STANDARD FIELD PROCEDURES FOR GROUNDWATER MONITORING AND SAMPLING

This document presents standard field methods for groundwater monitoring, purging and sampling, and well development. These procedures are designed to comply with Federal, State and local regulatory guidelines. Conestoga-Rovers & Associates' specific field procedures are summarized below.

Groundwater Monitoring

Prior to performing monitoring activities, the historical monitoring and analytical data of each monitoring well shall be reviewed to determine if any of the wells are likely to contain separate phase hydrocarbons (SPH) and to determine the order in which the wells will be monitored (i.e. cleanest to dirtiest). Groundwater monitoring should not be performed when the potential exists for surface water to enter the well (i.e. flooding during a rainstorm).

Prior to monitoring, each well shall be opened and the well cap removed to allow water levels to stabilize and equilibrate. The condition of the well box and well cap shall be observed and recommended repairs noted. Any surface water that may have entered and flooded the well box should be evacuated prior to removing the well cap. In wells with no history of SPH, the static water level and total well depth shall be measured to the nearest 0.01 foot with an electronic water level meter. Wells with the highest contaminant concentrations shall be monitored last. In wells with a history of SPH, the SPH level/thickness and static water level shall be measured to the nearest 0.01 foot using an electronic interface probe. The water level meter and/or interface probe shall be thoroughly cleaned and decontaminated at the beginning of the monitoring event and between each well. Monitoring equipment shall be washed using soapy water consisting of Liqui-noxTM or AlconoxTM followed by one rinse of clean tap water and then two rinses of distilled water.

Groundwater Purging and Sampling

Prior to groundwater purging and sampling, the historical analytical data of each monitoring well shall be reviewed to determine the order in which the wells should be purged and sampled (i.e. cleanest to dirtiest). No purging or groundwater sampling shall be performed on wells with a measurable thickness of SPH or floating SPH globules. If a sheen is observed, the well should be purged and a groundwater sample collected only if no SPH is present. Wells shall be purged either by hand using a disposal or PVC bailer or by using an aboveground pump (e.g. peristaltic or WatteraTM) or down-hole pump (e.g. GrundfosTM or DC Purger pump).

Groundwater wells shall be purged approximately three to ten well-casing volumes (depending on the regulatory agency requirements) or until groundwater parameters of temperature, pH, and conductivity have stabilized to within 10% for three consecutive readings. Temperature, pH, and conductivity shall be measured and recorded at the start of purging, once per well casing volume removed, and at the completion of purging. The total volume of groundwater removed shall be recorded along with any other notable physical characteristic such as color and odor. If required, field parameters such as turbidity, dissolved oxygen (DO), and oxidation-reduction potential (ORP) shall be measured prior to collection of each groundwater sample.

Groundwater samples shall be collected after the well has been purged and allowed to recharge to 80% of the pre-purging static water level, or if the well is slow to recharge, after waiting a minimum of 2 hours. Groundwater samples shall be collected using clean disposable bailers or



pumps (if an operating remediation system exists on site and the project manager approves of its use for sampling) and shall be decanted into clean containers supplied by the analytical laboratory. New latex gloves and disposable tubing or bailers shall be used for sampling each well. If a PVC bailer or down-hole pump is used for groundwater purging, it shall be decontaminated before purging each well by using soapy water consisting of Liqui-noxTM or AlconoxTM followed by one rinse of clean tap water and then two rinses of distilled water. If a submersible pump with non-dedicated discharge tubing is used for groundwater purging, both the inside and outside of pump and discharge tubing shall be decontaminated as described above.

Sample Handling

Except for samples that will be tested in the field, or that require special handling or preservation, samples shall be stored in coolers chilled to 4° C for shipment to the analytical laboratory. Samples shall be labeled, placed in protective foam sleeves or bubble wrap as needed, stored on crushed ice at or below 4° C, and submitted under chain-of-custody (COC) to the laboratory. The laboratory shall be notified of the sample shipment schedule and arrival time. Samples shall be shipped to the laboratory within a time frame to allow for extraction and analysis to be performed within the standard sample holding times.

Sample labels shall be filled out using indelible ink and must contain the site name; field identification number; the date, time, and location of sample collection; notation of the type of sample; identification of preservatives used; remarks; and the signature of the sampler. Field identification must be sufficient to allow easy cross-reference with the field datasheet.

All samples submitted to the laboratory shall be accompanied by a COC record to ensure adequate documentation. One copy of the COC shall be kept in the QA/QC file and another copy shall be retained in the project file. Information on the COC shall consist of the project name and number; project location; sample numbers; sampler/recorder's signature; date and time of collection of each sample; sample type; analyses requested; name of person receiving the sample; and date of receipt of sample.

Laboratory-supplied trip blanks shall accompany the samples and be analyzed to check for cross-contamination, if requested by the project manager.

Well Development

Wells shall be developed using a combination of groundwater surging and extraction. A surge block shall be used to swab the well and agitate the groundwater in order to dislodge any fine sediment from the sand pack. After approximately ten minutes of swabbing the well, groundwater shall be extracted from the well using a bailer, pump and/or reverse air-lifting through a pipe to remove the sediments from the well. Alternating surging and extraction shall continue until the sediment volume in the groundwater (i.e. turbidity) is negligible, which typically requires extraction of approximately ten well-casing volumes of groundwater. Preliminary well development usually is performed during well installation prior to placing the sanitary surface seal to ensure sand pack stabilization. Well development that is performed after surface seal installation, should occur 72 hours after seal installation to ensure that the cement has had adequate time to set.



Waste Handling and Disposal

Groundwater extracted during development and sampling shall be stored onsite in sealed U.S. DOT H17 55-gallon drums. Each drum shall be labeled with the contents, date of generation, generator identification and consultant contact. If hydrocarbon concentrations in the purged groundwater are below ADEC cleanup levels or the site is in a remote area (pending ADEC approval) groundwater will be discharged to the ground surface, at least 100 feet from the nearest surface water body.

\\DEN-S1\Shared\Denver\Alaska\AK SOP\CRA Alaska SOP\AK Groundwater Monitoring and Sampling SOP - CRA.doc

APPENDIX C LABORATORY ANALYTICAL REPORT



07/27/12





Technical Report for

DCP Midstream, LLC

CRA: Burton Flats Eddy County Carlsbad, NM

Accutest Job Number: TC11357

Sampling Date: 06/20/12

Report to:

DCP Midstream, L.P.

ntaylor@craworld.com

ATTN: Mr. Chandler Cole

Total number of pages in report: 48



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

Paul Canevaro Laboratory Director

Paul K Canevaro

Client Service contact: Georgia Jones 713-271-4700

Certifications: TX (T104704220-12-7) AR (11-028-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (211-035)

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1 of 48

ACCUTEST

TC11367

Sections:

Table of Contents

-1-

Section 1: Sample Summary	3
Section 2: Summary of Hits	4
Section 3: Sample Results	5
3.1: TC11357-1: MW-1	
3.2: TC11357-2: MW-3	10
3.3: TC11357-3: MW-2	14
3.4: TC11357-4: DUP-1	18
3.5: TC11357-5: TRIP BLANK	
Section 4: Misc. Forms	23
4.1: Chain of Custody	24
Section 5: GC Volatiles - QC Data Summaries	
5.1: Method Blank Summary	
5.2: Blank Spike Summary	
5.3: Matrix Spike/Matrix Spike Duplicate Summary	
Section 6: GC Semi-volatiles - QC Data Summaries	
6.1: Method Blank Summary	
6.2: Blank Spike/Blank Spike Duplicate Summary	
Section 7: General Chemistry - QC Data Summaries	
7.1: Method Blank and Spike Results Summary	
7.2: Duplicate Results Summary	
7.3: Matrix Spike Results Summary	

















TC11357

Job No:

TRIP BLANK

Sample Summary

DCP Midstream, LLC

TC11357-5 06/20/12 00:00

CRA: Burton Flats Eddy County Carlsbad, NM

Sample Number	Collected Date	Time By	Received	Matri Code		Client Sample ID	
TC11357-1	06/20/12	12:50	06/26/12	AQ	Ground Water	MW-1	
TC11357-2	06/20/12	13:11	06/26/12	AQ	Ground Water	MW-3	
TC11357-3	06/20/12	12:45	06/26/12	AQ	Ground Water	MW-2	
TC11357-4	06/20/12	00:00	06/26/12	AQ	Ground Water	DUP-1	

06/26/12 AQ Trip Blank Water



Summary of Hits Job Number: TC11357

DCP Midstream, LLC

Account: Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Collected:

06/20/12

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TC11357-1	MW-1	1.00				
TPH-GRO (C6-C	C10) a	2.39	0.25	0.030	mg/l	SW846 8015
Benzene	•	0.0907	0.0010	0.00036	mg/l	SW846 8021B
Ethylbenzene		0.284	0.050	0.013	mg/l	SW846 8021B
Xylenes (total)		0.0474	0.0030	0.00093	mg/l	SW846 8021B
TPH (C10-C28)		27.4	2.0	0.48	mg/l	SW846 8015 M
Chloride		651	25	13	mg/l	EPA 300/SW846 9056
TC11357-2	MW-3					
TPH-GRO (C6-C	210)	0.0359 J	0.050	0.0060	mg/l	SW846 8015
Ethylbenzene	,	0.00050 J	0.0010	0.00025	mg/l	SW846 8021B
TPH (C10-C28)		0.0744 J	0.10	0.024	mg/l	SW846 8015 M
Chloride		435	25	13	mg/l	EPA 300/SW846 9056
TC11357-3	MW-2					
TPH (C10-C28)		0.0340 J	0.10	0.024	mg/l	SW846 8015 M
Chloride		1150	50	25	mg/l	EPA 300/SW846 9056
TC11357-4	DUP-1					
TPH-GRO (C6-C	C10) a	4.60	0.50	0.060	mg/l	SW846 8015
Benzene		0.0967	0.0010	0.00036	mg/l	SW846 8021B
Ethylbenzene		0.260	0.050	0.013	mg/l	SW846 8021B
Xylenes (total)		0.0470	0.0030	0.00093	mg/l	SW846 8021B
TPH (C10-C28)		24.0	2.0	0.48	mg/l	SW846 8015 M
Chloride		322	25	13	mg/l	EPA 300/SW846 9056
TC11357-5	TRIP BLANK					
Ethylbenzene		0.00055 J	0.0010	0.00025	mg/l	SW846 8021B

⁽a) Sample dilution required. Analyzed beyond hold time.





Sample Results	
Report of Analysis	
report of family ord	



Report of Analysis

Page 1 of 1

Client Sample ID: MW-1 Lab Sample ID: TC11357-1

Matrix:

AQ - Ground Water

Method: SW846 8015

Project:

Date Sampled: 06/20/12 Date Received: 06/26/12

Percent Solids: n/a

CRA: Burton Flats Eddy County Carlsbad, NM

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 a	BB0013346.D	5	07/05/12	FI	n/a	n/a	GBB689
Run #2							

	Purge Volume		
Run #1	5.0 ml		
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	2.39	0.25	0.030	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	2 Limits		
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	91%		42-1 51-1	23% 30%	

⁽a) Sample dilution required. Analyzed beyond hold time.

ND = Not detected

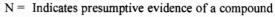
MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank







Page 1 of 1

Client Sample ID: MW-1

Lab Sample ID: TC11357-1

Matrix: Method:

Project:

AQ - Ground Water

SW846 8021B

CRA: Burton Flats Eddy County Carlsbad, NM

Date Sampled: 06/20/12 Date Received: 06/26/12

Percent Solids: n/a

	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
Run #1	TT006564.D	1	07/03/12	CC	n/a	n/a	GTT286
Run #2	TT006535.D	50	07/02/12	CC	n/a	n/a	GTT284

	Purge Volume	
Run #1	5.0 ml	
Run #2	5.0 ml	

Purgeable Aromatics

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Report of Analysis

By

RM

Prep Date

06/27/12

Page 1 of 1

Client Sample ID: MW-1 Lab Sample ID: TC11357-1

File ID

CC226586.D

Matrix:

AQ - Ground Water

DF

20

Method:

SW846 8015 M SW846 3510C

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Analyzed

06/29/12

Date Sampled: 06/20/12 Date Received: 06/26/12

Percent Solids: n/a

Prep Batch **Analytical Batch**

OP24016 GCC1349

Run #1 Run #2

> **Initial Volume** Final Volume

Run #1

980 ml 1.0 ml

Run #2

CAS No. Compound Result RL **MDL** Units Q

> TPH (C10-C28) 27.4 2.0 0.48 mg/l

CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits

84-15-1 96% 25-112% o-Terphenyl

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





Report of Analysis

Page 1 of 1

Client Sample ID: MW-1

Lab Sample ID: TC11357-1

Matrix:

AQ - Ground Water

Date Sampled: 06/20/12 **Date Received:** 06/26/12

Percent Solids: n/a

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	651	25	mg/l	50	06/28/12 16:39	RA	EPA 300/SW846 9056

Client Sample ID: MW-3 Lab Sample ID: TC11357-2

Matrix: Method:

Project:

AQ - Ground Water

SW846 8015

CRA: Burton Flats Eddy County Carlsbad, NM

Date Sampled: 06/20/12 **Date Received:** 06/26/12

Percent Solids: n/a

File ID DF By **Prep Date** Prep Batch Analyzed

Run #2

Run #1

BB0013321.D 1 07/03/12 FI n/a

n/a

Analytical Batch

GBB687

Purge Volume

Run #1 5.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	0.0359	0.050	0.0060	mg/l	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	its	

4-Bromofluorobenzene 460-00-4 89% 42-123% 98-08-8 aaa-Trifluorotoluene 98% 51-130%

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





Report of Analysis

Client Sample ID: MW-3

Lab Sample ID: TC11357-2 Matrix:

AQ - Ground Water

Date Received: 06/26/12

Method: Project:

SW846 8021B CRA: Burton Flats Eddy County Carlsbad, NM Percent Solids: n/a

Date Sampled: 06/20/12

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TT006565.D	1	07/03/12	CC	n/a	n/a	GTT286
Run #2							

Purge Volume

Run #1 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL Units	Q
71-43-2	Benzene	ND	0.0010	0.00036 mg/l	
108-88-3	Toluene	ND	0.0010	0.00028 mg/l	
100-41-4	Ethylbenzene	0.00050	0.0010	0.00025 mg/l	J
1330-20-7	Xylenes (total)	ND	0.0030	0.00093 mg/1	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	99%		58-125%	
98-08-8	aaa-Trifluorotoluene	93%		73-139%	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 1 of 1

Report of Analysis

Page 1 of 1

Client Sample ID: MW-3

Lab Sample ID: Matrix:

TC11357-2

AQ - Ground Water

1

Method: Project:

SW846 8015 M SW846 3510C

CRA: Burton Flats Eddy County Carlsbad, NM

DF Analyzed 06/29/12

 $\mathbf{B}\mathbf{y}$ RM **Prep Date** 06/27/12

Prep Batch

Date Sampled: 06/20/12

Date Received: 06/26/12

Percent Solids: n/a

Analytical Batch OP24016 GCC1349

Run #1 Run #2

> Initial Volume **Final Volume**

Run #1

CAS No.

990 ml

File ID

CC226587.D

1.0 ml

Run #2

RLCompound Result MDL Units

TPH (C10-C28)

0.0744

0.10

Run# 2

0.024

mg/l

Q

J

Limits

CAS No. Surrogate Recoveries

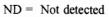
Run#1

84-15-1

o-Terphenyl

83%

25-112%



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





Client Sample ID: MW-3

Lab Sample ID: TC11357-2

Matrix:

AQ - Ground Water

Date Sampled: 06/20/12

Date Received: 06/26/12 **Percent Solids:** n/a

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	435	25	mg/l	50	06/28/12 16:56	RA	EPA 300/SW846 9056

Page 1 of 1

Client Sample ID: MW-2 Lab Sample ID: TC11357-3

Matrix: AQ - Ground Water

Method: SW846 8015 Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Date Sampled: 06/20/12 Date Received: 06/26/12

Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0013324.D	1	07/03/12	FI	n/a	n/a	GBB687
Run #2							

Purge Volume Run #1 5.0 ml

Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	
CAS No. Surrogate Recoveries		Run# 1	Run# 2	Limi	Limits	
460-00-4	4-Bromofluorobenzene	90%		42-12	23%	
98-08-8	aaa-Trifluorotoluene	99%		51-13	30%	

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





Page 1 of 1

Client Sample ID: MW-2

Lab Sample ID: TC11357-3

Matrix:

AQ - Ground Water

DF

1

Date Sampled: 06/20/12 Date Received: 06/26/12

Method:

SW846 8021B

Percent Solids: n/a

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Prep Batch Analytical Batch

Run #1

Run #2

Analyzed By 07/03/12 CC **Prep Date** n/a

n/a

GTT286

Purge Volume

Run #1

5.0 ml

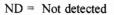
File ID

TT006568.D

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylenes (total)	ND ND ND ND	0.0010 0.0010 0.0010 0.0030	0.00036 0.00028 0.00025 0.00093	mg/l mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limit	ts	
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	99% 94%		58-12 73-13		



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





Client Sample ID: MW-2

Lab Sample ID:

TC11357-3

Matrix: Method: AQ - Ground Water

SW846 8015 M SW846 3510C

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Date Sampled: 06/20/12

Date Received: 06/26/12

Percent Solids: n/a

F	ile ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 C	C226588.D	1	06/29/12	RM	06/27/12	OP24016	GCC1349

Run #2

Initial Volume Final Volume 970 ml

Run #1

1.0 ml

Run #2

CAS No. Compound Result RL**MDL** Q Units

TPH (C10-C28)

0.0340

0.10

0.024

mg/l

J

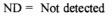
CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits

84-15-1

o-Terphenyl

80%

25-112%



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



ω M

Client Sample ID: MW-2

Lab Sample ID: TC11357-3

Matrix:

AQ - Ground Water

Date Sampled: 06/20/12 **Date Received:** 06/26/12

Percent Solids: n/a

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	1150	50	mg/l	100	06/28/12 17:47	RA	EPA 300/SW846 9056

Method:

Project:

Report of Analysis

Page 1 of 1

Client Sample ID: DUP-1

Lab Sample ID: TC11357-4
Matrix: AQ - Ground Water

SW846 8015

CRA: Burton Flats Eddy County Carlsbad, NM

Date Sampled: 06/20/12 **Date Received:** 06/26/12

Percent Solids: n/a

File ID DF Analyzed By **Prep Date** Prep Batch **Analytical Batch** Run #1 a BB0013347.D 10 07/05/12 FΪ **GBB689** n/a n/a Run #2

Purge Volume
Run #1 5.0 ml
Run #2

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	4.60	0.50	0.060	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits		
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	104% 101%			23% 30%	

(a) Sample dilution required. Analyzed beyond hold time.

ND = Not detected

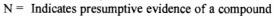
MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank







Client Sample ID: DUP-1

Lab Sample ID:

TC11357-4

Matrix: Method: Project:

AQ - Ground Water

SW846 8021B

Date Sampled: 06/20/12 Date Received: 06/26/12

Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	TT006566, D	1	07/03/12	CC	n/a	n/a	GTT286
Run #2	TT006541.D	50	07/02/12	CC	n/a	n/a	GTT284

	Purge Volume			
Run #1	5.0 ml			
Run #2	5.0 ml			

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL Units	Q
71-43-2	Benzene	0.0967	0.0010	0.00036 mg/l	
108-88-3	Toluene	ND	0.0010	0.00028 mg/l	
100-41-4	Ethylbenzene	0.260 a	0.050	0.013 mg/l	
1330-20-7	Xylenes (total)	0.0470	0.0030	0.00093 mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	305% b	101%	58-125%	
98-08-8	aaa-Trifluorotoluene	95%	95%	73-139%	

CRA: Burton Flats Eddy County Carlsbad, NM

ND = Not detected

MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



⁽a) Result is from Run# 2

⁽b) Outside control limits due to matrix interference. Confirmed by reanalysis.

Page 1 of 1

Client Sample ID: DUP-1 Lab Sample ID: TC11357-4

Matrix: AQ - Ground Water

Method: SW846 8015 M SW846 3510C

Project: CRA: Burton Flats Eddy County Carlsbad, NM

Date Sampled: 06/20/12 **Date Received:** 06/26/12

Percent Solids: n/a

	File ID	DF	Analyzed	$\mathbf{B}\mathbf{y}$	Prep Date	Prep Batch	Analytical Batch
Run #1	CC226589.D	20	06/29/12	RM	06/27/12	OP24016	GCC1349
Run #2							

Run #1 980 ml 1.0 ml

Run #2

CAS No. Compound Result RL MDL Units Q

TPH (C10-C28) 24.0 2.0 0.48 mg/l

CAS No. Surrogate Recoveries Run# 1 Run# 2 Limits

84-15-1 o-Terphenyl 103% 25-112%

ND = Not detected

med MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank





Page 1 of 1

Client Sample ID: DUP-1 Lab Sample ID: TC1135

TC11357-4

Matrix:

AQ - Ground Water

Date Sampled: 06/20/12 Date Received: 06/26/12

Percent Solids: n/a

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Chloride	322	25	mg/l	50	06/28/12 18:04	RA	EPA 300/SW846 9056

Page 1 of 1

Client Sample ID: TRIP BLANK Lab Sample ID: TC11357-5

Matrix:

AQ - Trip Blank Water

Method: Project:

SW846 8021B

CRA: Burton Flats Eddy County Carlsbad, NM

Date Sampled: 06/20/12 Date Received: 06/26/12

Percent Solids: n/a

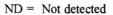
File ID DF By **Prep Date Analytical Batch** Analyzed Prep Batch Run #1 TT006567.D 07/03/12 CC**GTT286** 1 n/a n/a Run #2

Purge Volume Run #1 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylenes (total)	ND ND 0.00055 ND	0.0010 0.0010 0.0010 0.0030	0.00036 mg/l 0.00028 mg/l 0.00025 mg/l 0.00093 mg/l	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	101% 95%		58-125% 73-139%	



MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank N = Indicates presumptive evidence of a compound







MISC. Forms
Custody Documents and Other Forms
Includes the following where applicable: • Chain of Custody



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CHAIN OF CUSTODY

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Conestoga Rovers and Associates	DC	P Midstream	Hoph	o ONO	0/390	5606	01-			ı											GW - Ground Water
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J. PRIMERA											X	4	0	١.							
Accutest	Collec	tion			Num	ber o	f pre	serve	d bottle	es	B.	Ac	7								
Sample # Field ID / Point of Collection				# of	HC?	ş	ğ	8 8	MEO	NONE	8260BTEX	Š	<u>آ</u>	S			[LAB USE ONLY
	Date	Time	Matrix	bottles	-	12	-\$	<u> </u>	1 2	ž	86	_			\vdash		\rightarrow		\rightarrow		DAD GOL GILL
mw-1	6-20-12	1250	GW	84	6	\perp	\perp	_	\perp	2	X	\mathbf{X}	X	7				L			
2 Mw-3	6-20-12	1311	GW	84	6					al	X	اندا	\mathbf{v}	¥							
3 mw	6-20-12	1245	GW	94	6	TT		\top		اد	V	\searrow	Ì	V					\dashv	\neg	
4 Dup-1	6-20-12		GW	84	6	11		_		۵		マ	ہد	×				-	+		
			GW	3	9	П		\top	11		-Д			•				-		\dashv	
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<u> </u>			GW	2	4	╁	+	+	++	+	-	\dashv		\dashv	-				+	-+	
Tumaround Time (Bosiness days)				Deliverable	Informa	ation		_								Com	ments /	Remarks			
10 Day STANDARD Approved By:/ Da	te:	Comm	ercial "A	- [71	RRP-1	3														
7 Day		X Comm	ercial "B	· i	<u> </u>	DD For	mat_														
4 Day RUSH		Reduc	ed Tier 1	ĺ	۰ ⊏	ther			_		Ì										
3 Day EMERGENCY		Full Da	ta Packa	age							ļ										
2 Day EMERGENCY		i																			
1 Day EMERGENCY		Comme	rcial "A"	= Results	s Only						ı										
X Other 10 calendar d	ay	Comme	rcial "B"	= Result	s & Star	ndard (ac				- 1										
Real time analytical data available via Lablink	MUST BE DOCUMEN	TED BELOW SAC	4 TIME	AMDI FO	CHAP	ie po	QQEA	900	MACL LES	uwa -	~ (0)	d ne	N/EO'								_/
	Date Time:	Received By:	T		VALAN	7	Reting	uished	EV 1	7	JUNIE		Deta Ti	me:	-8 !	14	Received	By:	71	-	//
	6-25-12		1/				2		1	X			0-	X1-	12		2	Oer	Ell		
Relinquished By:	Date Time:	Received By:	.,			1	Relinq A	vished	8y: [¶]				Date Th	ne:		f	tocohas	ey:	1		
Retinquished by:	Date Time:	Received By:					Custod	ty Seal	•			Preserve	d whe	e applic	abie	1	•		in E	Cooler T	'emp.
5		5												.,					Ø.		0.5

TC11357: Chain of Custody Page 1 of 5





Accutest Laboratories Sample Receipt Summary

Page 1 of 4

ccutest Job Number: TC1	1357	Client:	CONESTOGA F	ROVERS	Project: DCP Mi	DSTREAM-BI	JRTON	IFLATS	3
ate / Time Received: 6/26	2012		Delivery Metho	od:	Airbill #'s: 7985516	326124			
lo. Coolers: 1	Therm ID	: IRGUN5;			Temp Adjustment F	actor: -0.4;			
cooler Temps (Initial/Adjuste	ed): #1: (0.	9/0.5);							
ooler Security Y	or N			or N	Sample Integrity - Documentation		Y o	r N	
I. Custody Seals Present:		3. COC P			1. Sample labels present on bottles:		¥		
2. Custody Seals Intact:		4. Smpl Date	s/Time OK 😿		Container labeling complete:		✓		
ooler Temperature	Y or	N_			3. Sample container label / COC agree:			V	
Temp criteria achieved:	₹:				Sample Integrity - Condition	_	Y o	<u>N</u>	
Cooler temp verification:					Sample recvd within HT:		✓		
3. Cooler media:					2. All containers accounted for:		✓		
uality Control Preservation	Y or	N N/A	WTE	STB	3. Condition of sample:		Inta	act	
Trip Blank present / cooler:	\mathbf{Z}		$\mathbf{\mathcal{Y}}$		Sample Integrity - Instructions		Y or	. N	N/A
2. Trip Blank listed on COC:					Analysis requested is clear:		7		
3. Samples preserved property:	~				2. Bottles received for unspecified tests			✓	
4. VOCs headspace free:	✓				3. Sufficient volume recvd for analysis:		✓		
					Compositing instructions clear:				\mathbf{Z}
					5. Filtering instructions clear:				\checkmark
comments 1) RECEIVED TB'S	NOT LISTED	ON COC.							The second secon
2) ALL N/P CONTA	INERS LIST	"HCL" AS PE	RESERVATIVE ON	LABEL					
,									
3) RECEIVED ONL	Y ONE LITER	R AMBER GL	ASS FOR "DRO-	SU15" ANAL	YSIS PER SAMPLE, LIMITED VÖLUME.				

TC11357: Chain of Custody

Page 2 of 5





Problem Resolution

Page 2 of 4

Accutest Job Number: TC11357

CSR: Georgia Jones Response Date: 6/26/2012

Response: Trip blank analyzed per project requirements.

4

TC11357: Chain of Custody Page 3 of 5









Sample Receipt Log

Job #: TC11357 Date / Time Received: 6/26/2012 8:20:00 AM

Initials: CH

Client: CONESTOGA ROVERS

Cooler#	Sample ID:	Vol	Bot#	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC11357-1	LAG	1	4X	N/P	Note #2 - Preservative check not applicable.	IRGUN5	0.9	-0.4	0.5
1	TC11357-1	250mi	2	3J	N/P	Note #2 - Preservative check not applicable.	IRGUN5	0.9	-0.4	0.5
1	TC11357-1	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-1	40ml	4	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-1	40ml	5	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-1	40ml	6	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-1	40ml	7	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-1	40ml	8	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-2	LAG	1	4X	N/P	Note #2 - Preservative check not applicable.	IRGUN5	0.9	-0.4	0.5
1	TC11357-2	250ml	2	3J	N/P	Note #2 - Preservative check not applicable.	IRGUN5	0.9	-0.4	0.5
1	TC11357-2	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-2	40ml	4	VR	HCL	Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-2	40ml	5	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-2	40ml	6	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-2	40ml	7	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-2	40ml	8	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-3	LAG	1	4X	N/P	at the instrument. Note #2 - Preservative check not applicable.	IRGUN5	0.9	-0.4	0.5
1	TC11357-3	250ml	2	3.J	N/P	Note #2 - Preservative check not applicable.	IRGUN5	0.9	-0.4	0.5
1	TC11357-3	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-3	40ml	4	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-3	40ml	5	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-3	40ml	6	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-3	40ml	7	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst	IRGUN5	0.9	-0.4	0.5
1	TC11357-3	40mi	8	VR	HCL	at the instrument. Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5

TC11357: Chain of Custody Page 4 of 5









Sample Receipt Log

Job #: TC11357

Date / Time Received: 6/26/2012 8:20:00 AM

Initials: CH

Client: CONESTOGA ROVERS

Cooler#	Sample ID:	Vol	Bot #	Location	Pres	рН	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC11357-4	LAG	1	4X	N/P	Note #2 - Preservative check not applicable.	IRGUN5	0.9	-0.4	0.5
1	TC11357-4	250ml	2	3J	N/P	Note #2 - Preservative check not applicable.	IRGUN5	0.9	-0.4	0.5
1	TC11357-4	40ml	3	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-4	40mi	4	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-4	40ml	5	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-4	40ml	6	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-4	40ml	7	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-4	40ml	8	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-5	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5
1	TC11357-5	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IRGUN5	0.9	-0.4	0.5

TC11357: Chain of Custody

Page 5 of 5





QC Data Summaries		

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method Blank Summary Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample	File ID DF	Analyzed 07/03/12	By	Prep Date	Prep Batch	Analytical Batch
GBB687-MB	BB0013319.D1		FI	n/a	n/a	GBB687

The QC reported here applies to the following samples:

Method: SW846 8015

TC11357-2, TC11357-3

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l	
CAS No.	Surrogate Recoveries		Limits			



Method: SW846 8015

Method Blank Summary

Job Number: TC11357

Account: DUKE DCP Midstream, LLC

Project: CRA: Burton Flats Eddy County Carlsbad, NM

Sample GBB689-MB	File ID DF BB0013345. D1	Analyzed 07/05/12	By FI	Prep Date n/a	Prep Batch n/a	Analytical Batch GBB689

The QC reported here applies to the following samples:

TC11357-1, TC11357-4

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-GRO (C6-C10)	ND	0.050	0.0060	mg/l
CAS No.	Surrogate Recoveries		Limits	S	
460-00-4 98-08-8	4-Bromofluorobenzene	87% 96%	42-123 51-130	. , •	



Method: SW846 8021B

Method Blank Summary Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample GTT284-MB	File ID TT006534.D	DF	Analyzed 07/02/12	By CC	Prep Date n/a	Prep Batch n/a	Analytical Batch GTT284

The QC reported here applies to the following samples:

TC11357-1, TC11357-4

CAS No.	Compound	Result	RL	MDL	Units Q
100-41-4	Ethylbenzene	ND	1.0	0.25	ug/l
CAS No.	Surrogate Recoveries		Limits	S	



Method: SW846 8021B

Method Blank Summary

Job Number: TC11357

Account: DUKE DCP Midstream, LLC

Project: CRA: Burton Flats Eddy County Carlsbad, NM

Sample GTT286-MB	File ID TT006560,D	DF	Analyzed 07/03/12	By CC	Prep Date n/a	Prep Batch n/a	Analytical Batch GTT286

The QC reported here applies to the following samples:

TC11357-1, TC11357-2, TC11357-3, TC11357-4, TC11357-5

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2 100-41-4 108-88-3 1330-20-7	Benzene Ethylbenzene Toluene Xylenes (total)	ND ND ND ND	1.0 1.0 1.0 3.0	0.36 0.25 0.28 0.93	ug/l ug/l ug/l ug/l
CAS No.	Surrogate Recoveries		Limi	ts	
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	99% 94%	58-12 73-13		



Blank Spike Summary Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample	File ID DF	Analyzed 07/03/12	By	Prep Date	Prep Batch	Analytical Batch
GBB687-BS	BB0013317.DI		FI	n/a	n/a	GBB687

The QC reported here applies to the following samples:

Method: SW846 8015

TC11357-2, TC11357-3

CAS No.	Compound	Spike mg/l	BSP mg/i	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.378	95	81-113
CAS No.	Surrogate Recoveries	BSP	Limi	its	
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	91% 101%	42-1: 51-1:	, _	



^{* =} Outside of Control Limits.

Blank Spike Summary

Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample	File ID	DF	Analyzed 07/05/12	By	Prep Date	Prep Batch	Analytical Batch
GBB689-BS	BB0013343	3.Dl		FI	n/a	n/a	GBB689

The QC reported here applies to the following samples:

Method: SW846 8015

TC11357-1, TC11357-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.384	96	81-113
CAS No.	Surrogate Recoveries	BSP	Lin	nits	
460-00-4 98-08-8	4-Bromofluorobenzene	93%	42-	123%	



^{* =} Outside of Control Limits.

Blank Spike Summary Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample GTT284-BS	File ID TT006533.D	DF	Analyzed 07/02/12	By CC	Prep Date n/a	Prep Batch n/a	Analytical Batch GTT284

The QC reported here applies to the following samples:

Method: SW846 8021B

TC11357-1, TC11357-4

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	20	20.0	100	81-116
CAS No.	Surrogate Recoveries	BSP	Lim	its	
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	99% 94%	58-1 73-1	25% 39%	



^{* =} Outside of Control Limits.

Blank Spike Summary Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample	File ID DF	Analyzed 07/03/12	By	Prep Date	Prep Batch	Analytical Batch
GTT286-BS	TT006559.D 1		CC	n/a	n/a	GTT286

The QC reported here applies to the following samples:

Method: SW846 8021B

TC11357-1, TC11357-2, TC11357-3, TC11357-4, TC11357-5

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2 100-41-4	Benzene Ethylbenzene	20 20	19.2 18.7	96 94	86-121 81-116
108-88-3 1330-20-7	Toluene Xylenes (total)	20 60	19.0 56.1	95 94	87-117 85-115
CAS No.	Surrogate Recoveries	BSP	Lim	its	
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	100% 95%		25% 39%	



^{* =} Outside of Control Limits.

Method: SW846 8015

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample File ID DF Analyzed By Prep Date Prep Batch Analytical Batch TC11357-2MS BB0013322.Dl 07/03/12 FI n/a n/a GBB687 TC11357-2MSD BB0013323.Dl 07/03/12 FI n/a n/a GBB687 TC11357-2 BB0013321.Dl 07/03/12 FI n/a n/a GBB687
--

The QC reported here applies to the following samples:

TC11357-2, TC11357-3

CAS No.	Compound	TC1135' mg/l	7-2 Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.0359	J	0.4	0.413	94	0.389	88	6	81-113/31
CAS No.	Surrogate Recoveries	MS		MSD	TC	11357-2	Limits			
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	92% 112%		91% 109%	89% 98%	-	42-123% 51-130%	-		



^{* =} Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample	File ID DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
TC11357-4MS	BB0013348.D10	07/05/12	FI	n/a	n/a	GBB689
TC11357-4MSD	BB0013349, D10	07/05/12	F1	n/a	n/a	GBB689
TC11357-4 a	BB0013347.D10	07/05/12	FI	n/a	n/a	GBB689

The QC reported here applies to the following samples:

Method: SW846 8015

TC11357-1, TC11357-4

CAS No.	Compound	TC11357-4 mg/l Q	Spike mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	4.60	4	5.33	18*	5.18	15*	3	81-113/31
CAS No.	Surrogate Recoveries	MS	MSD	TC	11357-4	Limits			
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	100% 100%	99% 101%	104 ⁹ 101 ⁹		42-123% 51-130%			

⁽a) Sample dilution required. Analyzed beyond hold time.

^{* =} Outside of Control Limits.

Method: SW846 8021B

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC11357

Account: DU

DUKE DCP Midstream, LLC

Project: CRA: Burton Flats Eddy County Carlsbad, NM

Sample TC11357-3MS TC11357-3MSD	File ID TT006538.D TT006539.D		Analyzed 07/02/12 07/02/12	By CC CC	Prep Date n/a n/a	Prep Batch n/a n/a	Analytical Batch GTT284 GTT284
TC11357-3 a	TT006537.D	50	07/02/12	CC	n/a	n/a	GTT284

The QC reported here applies to the following samples:

TC11357-1, TC11357-4

CAS No.	Compound	TC11357-3 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND	1000	952	95	940	94	1	81-116/14
CAS No.	Surrogate Recoveries	MS	MSD	TC	11357-3	Limits			
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	99% 94%	99% 94%			58-125% 73-139%	-		

(a) Sample used for QC purposes only.

^{* =} Outside of Control Limits.

Method: SW846 8021B

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC11357

Account: DUKE DCP Midstream, LLC

Project: CRA: Burton Flats Eddy County Carlsbad, NM

Sample TC11485-1MS	File ID TT006562.D	DF	Analyzed 07/03/12	By CC	Prep Date	Prep Batch	Analytical Batch GTT286
TC11485-1MSD	TT006563.D	-	07/03/12	CC	n/a	n/a n/a	GTT286
TC11485-1	TT006561.D	1	07/03/12	CC	n/a	n/a	GTT286

The QC reported here applies to the following samples:

TC11357-1, TC11357-2, TC11357-3, TC11357-4, TC11357-5

CAS No.	Compound	TC11485-1 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	20	20.6	103	20.3	102	1	86-121/19
100-41-4	Ethylbenzene	ND	20	21.5	108	21.3	107	1	81-116/14
108-88-3	Toluene	ND	20	20.9	105	20.6	103	1	87-117/16
1330-20-7	Xylenes (total)	ND	60	64.2	107	63.5	106	1	85-115/12
CAS No.	Surrogate Recoveries	MS	MSD	TC	11485-1	Limits			
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	101% 97%	102% 98%	100 97%		58-125% 73-139%	•		



^{* =} Outside of Control Limits.



Method Blank SummariesBlank Spike Summaries

· Matrix Spike and Duplicate Summaries

Method: SW846 8015 M

Method Blank Summary

Job Number: TC11357

Account: DUKE DCP Midstream, LLC

Project: CRA: Burton Flats Eddy County Carlsbad, NM

Sample OP24016-MB	File ID CC226583.D	DF 1	Analyzed 06/29/12	By RM	Prep Date 06/27/12	Prep Batch OP24016	Analytical Batch GCC1349

The QC reported here applies to the following samples:

TC11357-1, TC11357-2, TC11357-3, TC11357-4

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH (C10-C28)	ND	0.10	0.023	mg/l
CAS No.	Surrogate Recoveries		Limits	i	
84-15-1	o-Terphenyl	82%	25-112	!%	

Method: SW846 8015 M

Blank Spike/Blank Spike Duplicate Summary

Job Number: TC11357

Account:

DUKE DCP Midstream, LLC

Project:

CRA: Burton Flats Eddy County Carlsbad, NM

Sample OP24016-BS OP24016-BSD ^a	File ID DF CC226584.D 1 CC226585.D 1	Analyzed 06/29/12 06/29/12	By RM RM	Prep Date 06/27/12 06/27/12	Prep Batch OP24016 OP24016	Analytical Batch GCC1349 GCC1349

The QC reported here applies to the following samples:

TC11357-1, TC11357-2, TC11357-3, TC11357-4

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	BSD mg/l	BSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1	0.647	65	0.661	66	2	41-105/30
CAS No.	Surrogate Recoveries	BSP	BSD		Limits			
84-15-1	o-Terphenyl	7 7%	86%	6	25-1129	6		

⁽a) Insufficient sample volume for MS/MSD



^{* =} Outside of Control Limits.



General Chemistry	
QC Data Summaries	
Includes the following where applicable:	

Method Blank and Blank Spike SummariesDuplicate Summaries

Matrix Spike Summaries



METHOD BLANK AND SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TC11357 Account: DUKE - DCP Midstream, LLC Project: CRA: Burton Flats Eddy County Carlsbad, NM

Analyte	Batch ID	RL	MB Result	Units	Spike Amount	BSP Result	BSP %Recov	QC Limits
Chloride	GP19797/GN43216	0.50	0.0	mg/l	10	10.3	103.0	90-110%

Associated Samples: Batch GP19797: TC11357-1, TC11357-2, TC11357-3, TC11357-4 (*) Outside of QC limits

DUPLICATE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TC11357
Account: DUKE - DCP Midstream, LLC
Project: CRA: Burton Flats Eddy County Carlsbad, NM

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Chloride	GP19797/GN43216	TC11357-2	mg/l	435	434	0.2	0-20%

Associated Samples: Batch GP19797: TC11357-1, TC11357-2, TC11357-3, TC11357-4 (*) Outside of QC limits

MATRIX SPIKE RESULTS SUMMARY GENERAL CHEMISTRY

Login Number: TC11357 Account: DUKE - DCP Midstream, LLC Project: CRA: Burton Flats Eddy County Carlsbad, NM

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Chloride	GP19797/GN43216	TC11357-2	mg/l	435	500	942	101.4	80-120%

Associated Samples:
Batch GP19797: TC11357-1, TC11357-2, TC11357-3, TC11357-4
(*) Outside of QC limits
(N) Matrix Spike Rec. outside of QC limits

