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

January 13, 2014

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

RE: Site Assessment Report
DCP Hobbs Gas Plant (AP-122)
Unit G, Section 36, Township 18 South, Range 36 East
Lea County, New Mexico

Dear Mr. Lowe:

DCP Midstream, LP (DCP) is pleased to submit for your review, one copy of the Site Assessment Report for the DCP Hobbs Gas Plant located in Lea County, New Mexico (Unit G, Section 36, Township 18 South, Range 36 East).

If you have any questions regarding the report, please call at 303-605-1718 or e-mail me swweathers@dcpmidstream.com.

Sincerely

DCP Midstream, LP

Stephen Weathers, P.G.
Principal Environmental Specialist

cc: Geoffery Leking, OCD Hobbs District Office (Copy on CD)
Environmental Files

SITE ASSESSMENT REPORT

DCP Hobbs Gas Plant
AP-122
Latitude: N 32.70533° Longitude: W 103.3066°
Lea County, New Mexico

Prepared for:
Mr. Steve Weathers
DCP Midstream, LP
307 17th Steet, Suite 2500
Denver, Colorado 80202

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DECEMBER 2013
REF. NO. 059097 (19)

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Section 1.0 Introduction

Conestoga-Rovers & Associates (CRA) is submitting this *Site Assessment Report* to DCP Midstream (DCP) for the Hobbs Gas Plant in Lea County, New Mexico. Previous investigations identified soil and groundwater impact near the product surge tank and the dehydrators, east and southeast of the site compressors. CRA recommended installing a groundwater monitoring well downgradient of well MW-B to define the magnitude and extent of soil and groundwater impact in an August 2, 2010 Supplemental *Site Assessment Workplan*. Monitoring well MW-A was accidentally destroyed during site upgrades in early 2013; requiring replacement. CRA prepared this report detailing the 2013 well installation and decommissioning.

Section 2.0 Regulatory Framework

The New Mexico Oil Conservation Division (NMOCD) has regulatory jurisdiction over oil and gas production operations in the State of New Mexico. The NMOCD petroleum hydrocarbon recommended remediation action levels (RRALs) are determined by ranking criteria on a site-by-site basis, which is outlined in the NMOCD *Guidelines for Remediation of Spills, Leaks, and Releases,* dated August 13, 1993. The ranking criteria are based on three site characteristics: depth to groundwater, wellhead protection and distance to surface water. The site qualifies for the most stringent cleanup levels since the site is located within 1,000 feet of a water source.

Section 3.0 Site Background

3.1 Site Description

The site is a cryogenic processing plant located in Lea County, New Mexico approximately nine miles west of Hobbs, New Mexico (Figure 1). The site occupies approximately 3.5 acres in an undeveloped area. Facilities include a laboratory, an amine unit, compressors, sumps, mol sieve dehydration, tank batteries and an onsite water production well used for non-potable water (Figure 2). The Apex Compressor Station is located approximately 750 feet (ft) north of the Hobbs Gas Plant. There are seven groundwater monitoring wells onsite (Figure 2).

3.2 Site Lithology and Hydrogeology

Site subsurface sediments consist primarily of interbedded caliche and sand units to the total explored depth of 70 ft below ground surface (bgs). Static groundwater depths in site monitoring wells ranged from 61.97 to 65.02 ft bgs during the June 2013 monitoring event. The groundwater flows southeast with a gradient of 0.005 ft /ft. North-south and east-west geologic cross sections are presented as Figure 3 and Figure 4.

3.3 Previous Investigations

Maxim Technologies Incorporated conducted a subsurface investigation in 2000. No petroleum hydrocarbons were detected above NMOCD remedial action levels in any collected soil sample.

Arcadis completed six monitoring wells MW-A through MW-F to determine if petroleum hydrocarbons were present in groundwater in 2004. The maximum benzene concentration detected in groundwater was 47 micrograms per liter (µg/l). No total petroleum hydrocarbons as gasoline (TPHg) or benzene, toluene, ethylbenzene or xylenes (BTEX) were detected in soil above NMOCD regulatory cleanup levels.

Section 4.0 Site Assessment

4.1 Investigation Rationale

Petroleum hydrocarbon concentrations in monitoring wells MW-A, MW-D, MW-E and MW-F have been below New Mexico Water Quality Control Commission groundwater cleanup levels since June 2008. Groundwater samples collected from monitoring wells MW-B and MW-C have historically contained benzene and/or xylenes above cleanup levels. Light non-aqueous phase liquids (LNAPL) were measured in MW-B and MW-C in 2013. CRA proposed installing one groundwater monitoring well downgradient of MW-B and MW-C to delineate the southeast extent of petroleum hydrocarbon impact. A replacement well was installed southeast of the former monitoring well MW-A (Figure 2). Monitoring well MW-A was destroyed during site upgrades in early 2013.

4.2 Site Safety and Project Coordination

CRA prepared a site health and safety plan to inform site workers of known hazards and provide health and safety guidance. CRA coordinated site activities with the laboratory, subcontractor, New Mexico Office of the State Engineer (NMOSE), and DCP. New Mexico One Call was notified prior to site activities to clear borehole locations with utility companies. Monitoring well MW-G was cleared to 5 ft bgs with an air knife prior to drilling. Monitoring wells MW-A and MW-AR were cleared to 1 ft bgs where caliche was encountered and indicated the ground was undisturbed. The Hobbs operational manager confirmed no subsurface work had occurred in the area and the caliche represented an undisturbed area. The caliche also caused refusal for additional clearance beyond 1 ft bgs.

4.3 Monitoring Wells and Sampling

Monitoring wells were installed by Hungry Horse Drilling, a New Mexico State licensed water well driller. Drilling activities began on June 26 but were delayed by mechanical repairs to equipment. Monitoring well MW-G was advanced to 73 ft bgs and completed on August 5, 2013. MW-AR was advanced to 71 ft bgs and completed on August 5, 2013. CRA supervised the drilling and performed all soil sampling.

Field activities were conducted in accordance with the NMOCD *Guidelines for Remediation of Spills, Leaks, and Releases* and CRA's *Health and Safety Plan*. Field notes are presented as Appendix A.

Monitoring wells were advanced using an air rotary drill rig. A trained geologist logged soil cuttings from each boring using the Unified Soil Classification System. Soil cuttings were screened for volatile organic compounds (VOCs) using a MiniRae 3000 photoionization detector. Field screening results are presented on the soil boring logs (Appendix B). Select soil samples were submitted for laboratory analyses under chain-of-custody to Accutest Laboratories of Houston, Texas based on field screening results and proximity to the capillary fringe.

Groundwater monitoring wells MW-AR and MW-G were screened from approximately 10 ft below to 5 ft above the potentiometric surface. The wells were constructed with 2-inch diameter Schedule 40 polyvinyl chloride (PVC) blank casing and 0.010 inch slotted PVC screen. The well annulus was filled with a sand filter pack to 2 ft above the top of the screen interval. The filter pack was sealed with 2 ft of hydrated bentonite and the remaining borehole was filled with a bentonite Portland grout to 2 ft bgs. The monitoring wells were completed at the ground surface using flush mount well vaults and set in concrete pads. The NMOSE application and permit to drill the water wells is presented as Appendix C.

4.4 Well Development

Groundwater monitoring well MW-AR was developed on September 16, 2013. The monitoring well was developed by submersible pump evacuation until the pH and specific conductivity were stabilized and turbidity was reduced to the greatest extent possible. Monitoring well MW-G was not developed due to damaged well casing.

4.5 Investigation Derived Waste Disposal

Soil cuttings and development water are stored in secondary containment onsite in 55-gallon United States Department of Transportation (US DOT) approved drums awaiting final transport and disposal.

4.6 Well Decommissioning

Monitoring well MW-A was destroyed during site upgrades in early 2013. On August 5, 2013, MW-A was overdrilled to a depth of approximately 59 ft bgs where refusal was encountered and plugged using a tremmie pipe to pump a blend of a minimum 20% active solid bentonite grout from the bottom to the ground surface as required by the New Mexico Environment Department.

4.7 Well Surveying

The newly installed groundwater wells were surveyed by Basin Surveys, a New Mexico licensed surveyor, on September 25, 2013 by Basins Surveys. The survey is presented as Appendix D.

Section 5.0 Results and Findings

5.1 Soil Analytical Methods

Collected soil samples were analyzed for the following:

- Total petroleum hydrocarbons as diesel TPHd by Method SW-846 8015M
- Total petroleum hydrocarbons as gasoline TPHg by Method SW-846 8015
- BTEX by Method SW-846 8260B

5.2 Soil Analytical Results

No BTEX was detected in any collected soil sample above the New Mexico Environmental Department cleanup levels. The maximum detected TPHd was 12.0 milligrams per kilogram (mg/kg) in sample MW-G-40 at 40 ft bgs. The Accutest laboratory analytical reports are presented as Appendix E. Soil analytical results are presented in Table 1. Soil analytical results are presented on Figure 2.

Section 6.0 Conclusions and Recommendations

- Site subsurface sediments consist primarily of interbedded caliche and sand units. Static groundwater depths at the site range from approximately 60 to 65 ft bgs. Newly installed wells were surveyed by a licensed New Mexico Surveyor and confirmed the historical groundwater flow direction.
- MW-A was overdrilled and decommissioned according to NMED guidelines.
- No BTEX or TPHg was detected above the NMOCD RRAL cleanup standards in soil samples collected from MW-AR and MW-G.
- The maximum TPHd detected was 12.0 mg/kg, collected from MW-G-40.
- CRA will continue groundwater monitoring and sampling to evaluate site groundwater conditions and plume stability. CRA will also attempt to repair the damaged well casing on monitoring well MW-G.

Figures

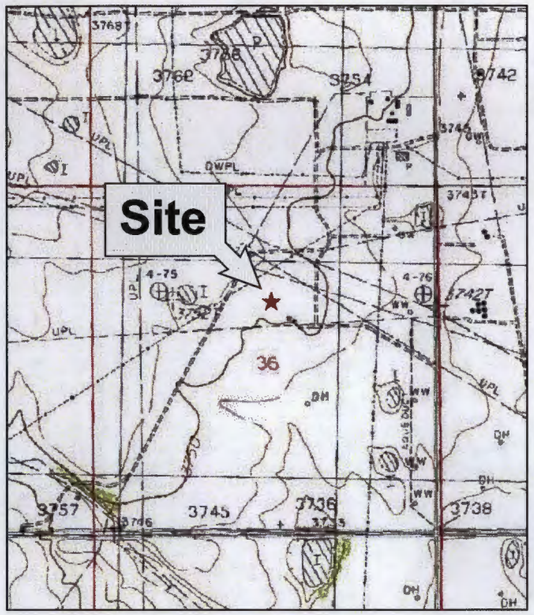
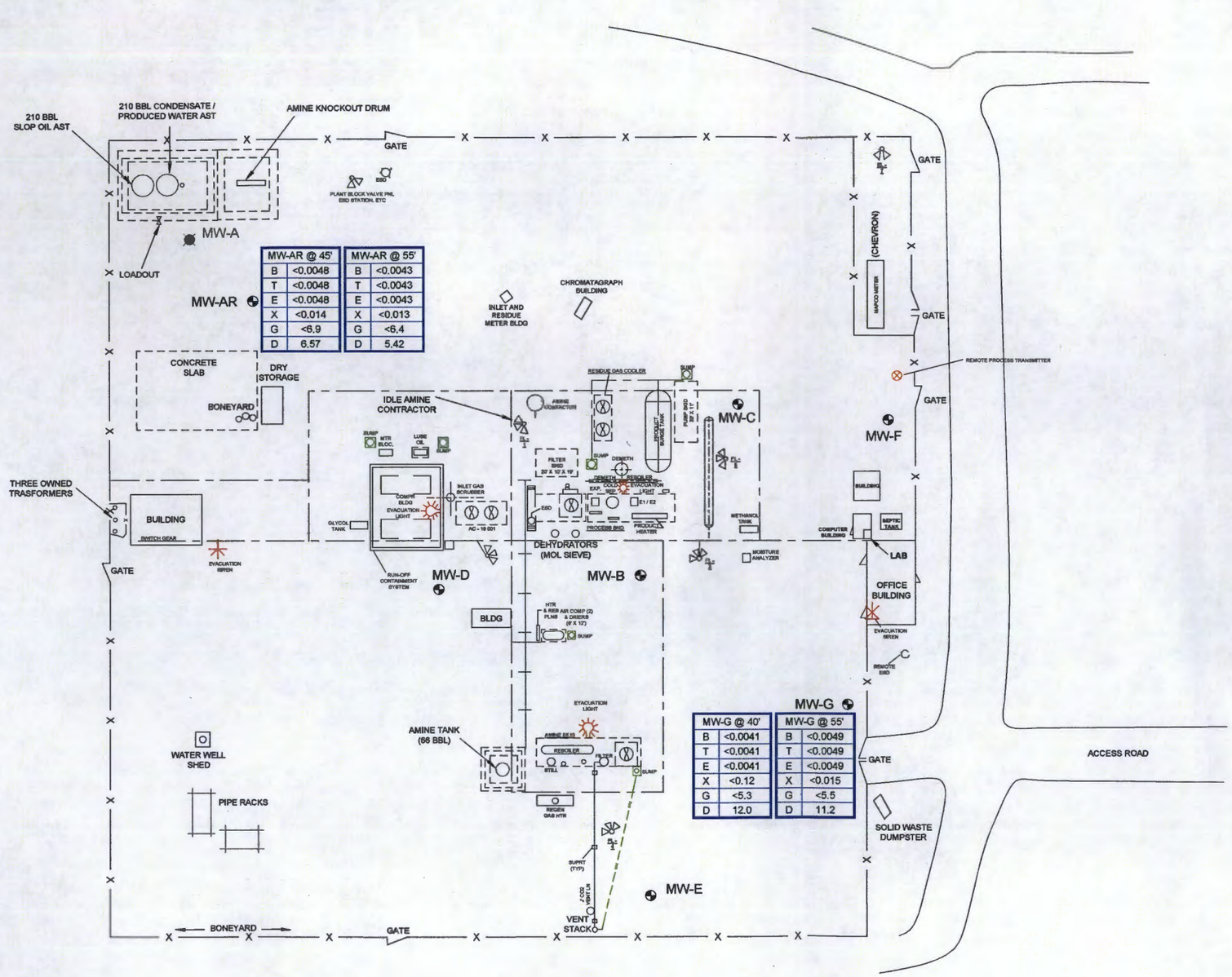


Figure 1

SITE LOCATION MAP
DCP HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO
DCP Midstream

059097-2012(013)GN-DN001 MAY 2/2012



LEGEND:

- FENCE LINE
- SECONDARY CONTAINMENT
- ABOVEGROUND STORAGE TANK (AST) OR DRUM
- MW-B — EXISTING MONITORING WELL
- MW-A — DESTROYED MONITORING WELL

	MW-G @ 40'	
BENZENE	B	<0.0041
TOLUENE	T	<0.0041
ETHYLBENZENE	E	<0.0041
XYLENES	X	<0.12
TPHG	G	<5.3
TPHD	D	11.2

WELL ID AND DEPTH OF SAMPLE

CONCENTRATION IN mg/kg

NOTES:

1. BTEX ANALYSIS WAS BY EPA METHOD 8260 AND REPORTED IN mg/kg.

2. TPHG AND TPHD WERE ANALYZED BY EPA METHOD 8015 AND REPORTED IN mg/kg.

Figure 2

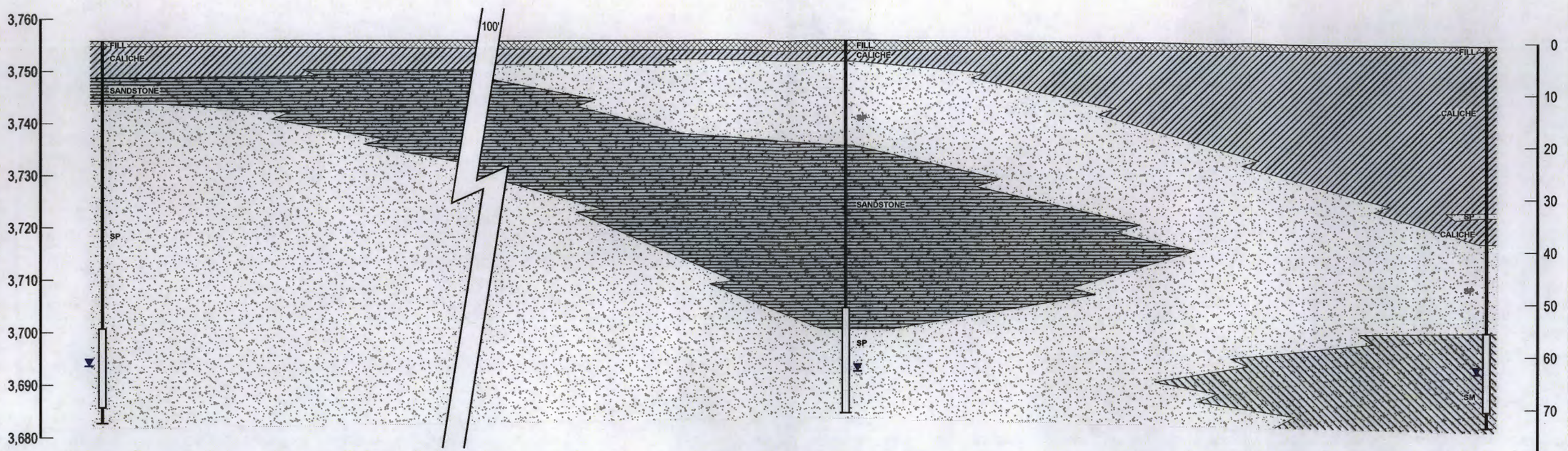
SOIL ANALYTICAL RESULTS
DCP HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO
DCP Midstream
July 10 and 11, 2013

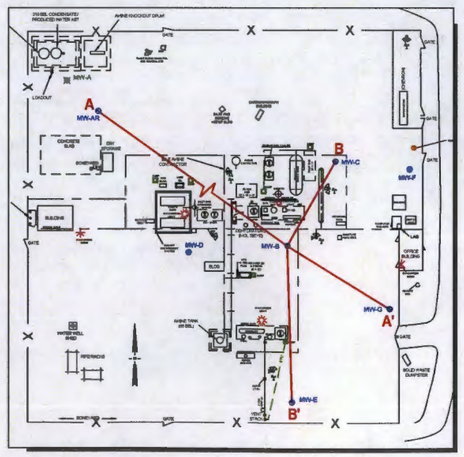
A Northwest — A' Southeast

MW-AR
3,755.74'

MW-B
3,755.92'

MW-G
3,754.86'





EXPLANATION

- FILL
- CALICHE
- SANDSTONE
- SP - Poorly graded sands
- SM - Silty sands

Well ID — Well Designation
Elev. (offset) — Top of Casing Elevation
Groundwater Monitoring Well
Well Screen Interval
Bottom of boring

Depth of Groundwater - 09/16/13

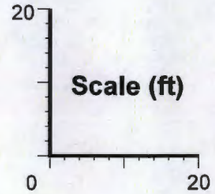
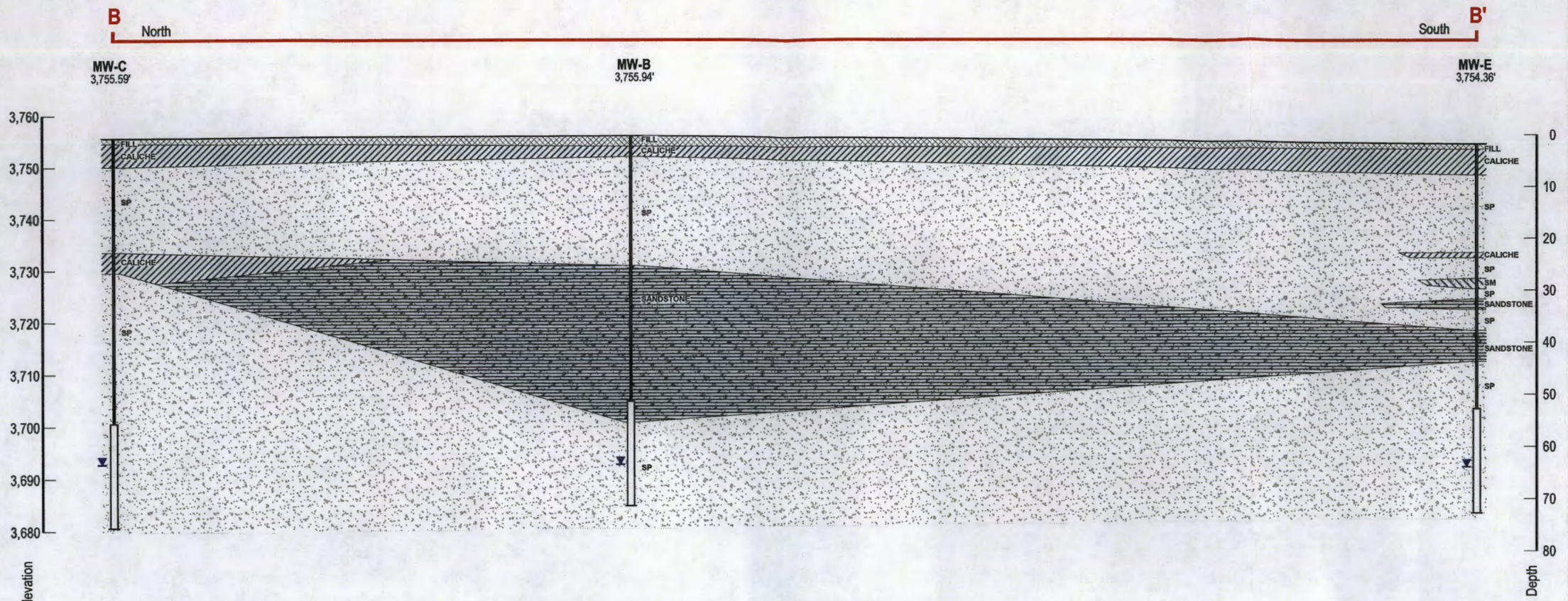


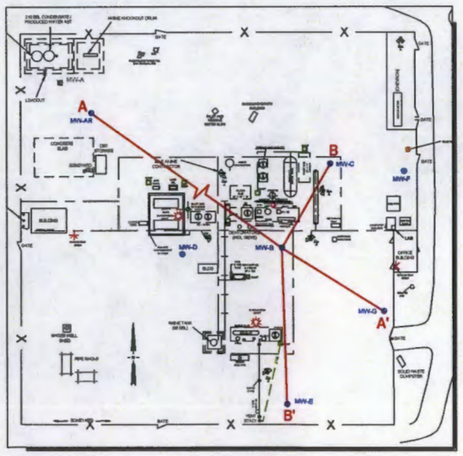
Figure 3

GEOLOGIC CROSS SECTION A-A'
DCP HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO
DCP Midstream

CRA

059097-2013(019)GN-DN003 OCT 22/2013





EXPLANATION

- FILL
- CALICHE
- SANDSTONE
- SP - Poorly graded sands
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Well ID — Well Designation
Elev. (offset) — Top of Casing Elevation
Groundwater Monitoring Well
Well Screen Interval
Bottom of boring

Depth of Groundwater - 09/16/13

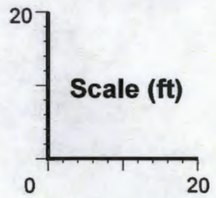


Figure 4

GEOLOGIC CROSS SECTION B-B'
DCP HOBBS GAS PLANT
LEA COUNTY, NEW MEXICO
DCP Midstream

059097-2013(019)GN-DN003 OCT 22/2013

Tables

Table 1. **Soil Analytical Results for BTEX, TPHg and TPHd**
DCP Hobbs Gas Plant, Lea County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft bgs)	Benzene	Toluene	Ethylbenzene	Xylenes (Total)	TPHg	TPHd	TPH
			← mg/kg →						
MW-AR-45	7/11/13	45	<0.0048	<0.0048	<0.0048	<0.014	<6.9	6.57	--
MW-AR-55	7/11/13	55	<0.0043	<0.0043	<0.0043	<0.013	<6.4	5.42	--
MW-G-40	7/10/13	40	<0.0041	<0.0041	<0.0041	<0.12	<5.3	12.0	--
MW-G-55	7/10/13	55	<0.0049	<0.0049	<0.0049	<0.015	<5.5	11.2	--
Recommended Remediation Action Levels*			10	--	--	--	--	--	100

Abbreviations and Methods:

BTEX = Benzene, toluene, ethylbenzene, and xylenes by Method SW-846 8260

TPHg = Total petroleum hydrocarbons as gasoline by Method SW-846 8015

TPHd = Total petroleum hydrocarbons as diesel by Method SW-846 8015

ft bgs = Feet below ground surface

mg/kg = Milligrams per kilogram

<x = Constituent not detected above x milligrams per kilogram

* = Levels established in New Mexico Oil Conservation Division Guidelins for Remediation of Leaks, Spills, and Releases, August, 1993

-- = Not analyzed/ not established

NMED = New Mexico Environment Department

DAF 1 = Soil screening levels for the migration to groundwater pathway which assumes no effective dilution or attenuation (e.g., shallow water tables)

** = Levels established in NMED Technical Background Document for Development of Soil Screening Levels, Revision 5.0, August 2009, Table A-1

DAF 20 = Soil screening levels to account for natural processes that reduce contaminat concentrations in the subsurface

Appendix A

Field Notes

LOCATION MAP	TEST HOLE / WELL LOG			Page 1 of 4
	Test/Well Number: MW-A12	Project: Hobbs Gas Plant (DCP)		
	Date: 7 / 11 / 2013	Project Number: 059097		
	Logged by: Justin Covey	Drilled By: Hungry Horse - Jacob		
	Drilling Method: Air Rotary	Sampling Method: Split Spoon		
Ground Elevation::	Detector: PID	Seal/Int: Bentonite to	Grout Interval: to	
Filter Pack Size: 10/20 sand		Interval: to	Hole Dia: 7-7/8"	Depth water Encountered during drilling:
Casing Type: Sch. 40	Diameter: 2 in.	Interval: to	DTW:	
Screen Type: Sch. 40	Slot: 20	Diameter: 2 in. Interval: to	Well Depth: 70'	Total depth: 71'

Depth	Soil/Rock Type	Moisture Content	% Fines	Color	Vapor (ppm)	Staining	Sample #	Soil Recovery	Water Level	LITHOLOGY/REMARKS	Fabric	WELL COMPLETION
0										FILL		flush mount
1										CALICHE - fine grained sandstone & limestone 7.5YR 8/2 pinkish white dry		
2												
3												
4												
5					1.9							
6												
7										becomes a softer sandstone 5YR 6/4 light reddish brown dry		grout
8												
9												
10					3.3							
11												
12										SAND (SP), fine grained, poorly graded, dense, 5YR 6/4 reddish brown, dry		
13												
14												
15					3.1							
16										becomes cemented.		
17												
18												
19												
20					3.4							

LOCATION MAP	TEST HOLE / WELL LOG		Page 2 of 4
	Test/Well Number: MW-AR	Project: **Hobbs Gas Plant (DCP)**	
	Date: 7/11 / 2013	Project Number: **059097**	
	Logged by: **Justin Covey**	Drilled By: **Hungry Horse - Jacob**	
	Drilling Method: **Air Rotary**	Sampling Method: **Split Spoon**	

Ground Elevation::	Detector: **PID**	Seal/Int: Bentonite	to	Grout Interval:	to
Filter Pack Size: **10/20 sand**			Interval: to	Hole Dia: **7-7/8"**	Depth water Encountered during drilling:
Casing Type: **Sch. 40**		Diameter: **2 in.**	Interval: to	DTW:	
Screen Type: **Sch. 40**	Slot: **20**	Diameter: **2 in.**	Interval: to	Well Depth: 70'	Total depth: 71'

Depth										
20										
21									few chert & Limestone	
22										
23										
24										
25					1.1				some chert & some limestone	
26										
27										
28									becomes cemented SAND	
29									w/ few chert & few limestone	
30					0.0					
31										
32										
33										
34										
35					1.2					
36										
37										
38										
39									SAND(SP) - fine grained, poorly	
40					3.6				graded, dense, dry 5yr 6/1 light reddish brown	

LOCATION MAP	TEST HOLE / WELL LOG	Page 3 of 4
	Test/Well Number: MW-AR	Project: **Hobbs Gas Plant (DCP)**
	Date: 7 / 11 / 2013	Project Number: **059097**
	Logged by: **Justin Covey**	Drilled By: **Hungry Horse** - JACOB
	Drilling Method: **Air Rotary**	Sampling Method: **Split Spoon**

Ground Elevation::	Detector: **PID**	Seal/Int: Bentonite	to	Grout Interval:	to
Filter Pack Size: **10/20 sand**			Interval: to	Hole Dia: **7-7/8"**	Depth water Encountered during drilling:
Casing Type: **Sch. 40**		Diameter: **2 in.**	Interval: to	DTW:	
Screen Type: **Sch. 40**	Slot: **20**	Diameter: **2 in.**	Interval: to	Well Depth: 70'	Total depth: 71'

Depth														
40														
41														
42														
43														
44														
45					2.2									
46														
47														
48														
49														
50					0.1					moist				
51														
52														
53														
54														
55					0.3					trace fine gravel				
56														
57														
58														
59														
60					0.7									

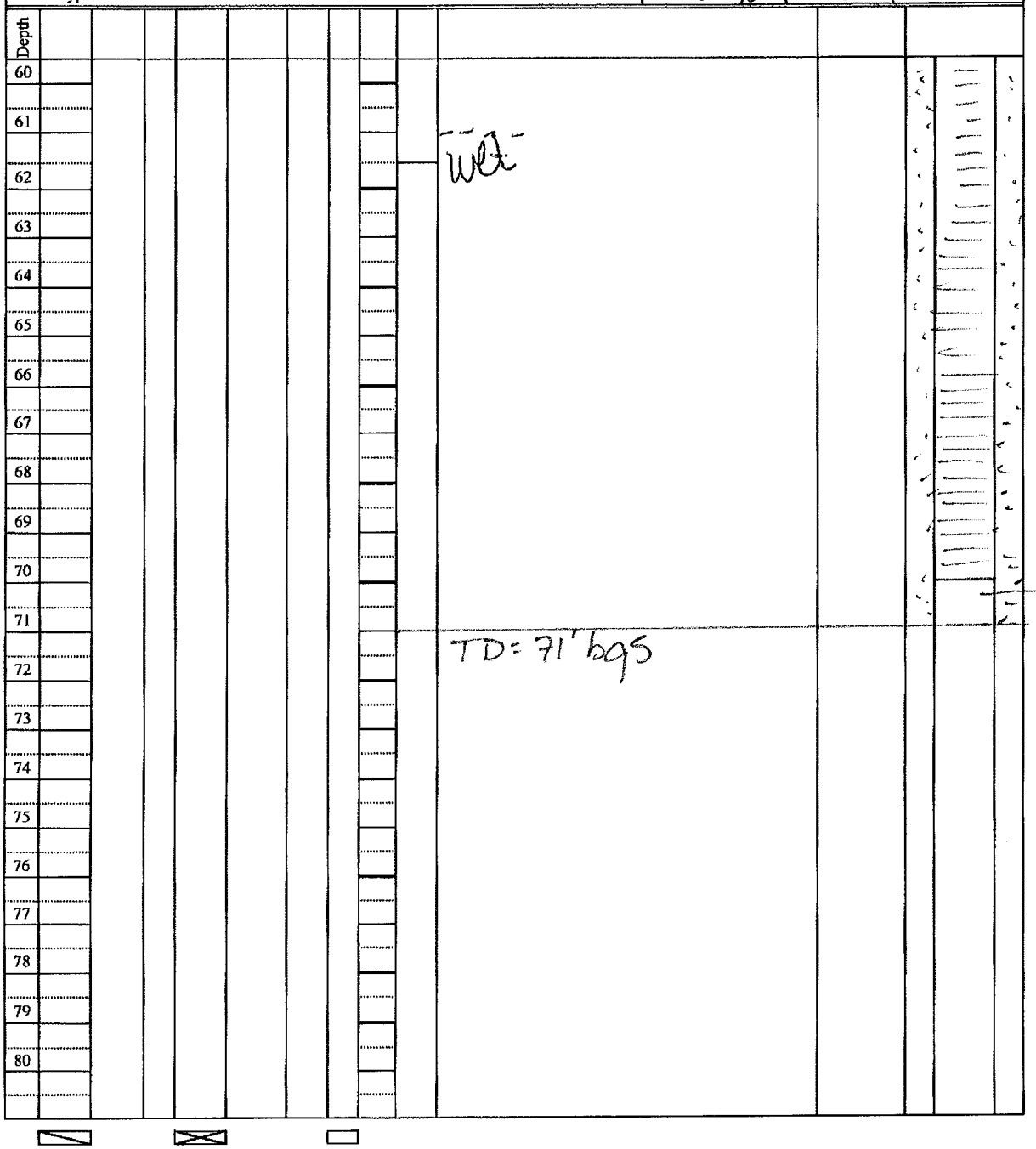
grout

2' hole plug

filterpack

LOCATION MAP	TEST HOLE / WELL LOG		Page 4 of 4
	Test/Well Number: ~~AR~~ MW-AR	Project: **Hobbs Gas Plant (DCP)**	
	Date: 7 11 / 2013	Project Number: **059097**	
	Logged by: **Justin Covey**	Drilled By: **Hungry Horse -** JACOB	
	Drilling Method: **Air Rotary**	Sampling Method: **Split Spoon**	

Ground Elevation::	Detector: **PID**	Seal/Int: Bentonite	to	Grout Interval:	to
Filter Pack Size: **10/20 sand**			Interval: to	Hole Dia: **7-7/8"**	Depth water Encountered during drilling:
Casing Type: **Sch. 40**		Diameter: **2 in.**	Interval: to	DTW:	
Screen Type: **Sch. 40**	Slot: **20**	Diameter: **2 in.**	Interval: to	Well Depth: 70'	Total depth: 71'



LOCATION MAP

TEST HOLE / WELL LOG — Page 1 of 4

Test/Well Number: MW-6	Project: Hobbs Gas Plant (DCP)
Date: 6/26/2013	Project Number: 059097
Logged by: Justin Covey	Drilled By: Hungry Horse - Jacob
Drilling Method: Air Rotary	Sampling Method: ~~Split Spoon~~ shovel cuttings

Ground Elevation::	Detector: PID	Seal/Int: Bentonite to 51.5	Grout Interval: to
Filter Pack Size: 10/20 sand		Interval: 51.5 to 70	Hole Dia: 7-7/8"
Casing Type: Sch. 40	Diameter: 2 in.	Interval: 0 to 55	DTW:
Screen Type: Sch. 40	Slot: 20	Diameter: 2 in. Interval: 55 to 70	Well Depth: 70'

Depth in feet

Depth	Soil/Rock Type	Moisture Content	% Fines	Color	Vapor (ppm)	Staining	Sample #	Soil Recovery	Water Level	LITHOLOGY/REMARKS	Fabric	WELL COMPLETION
1	SM									Silty Sand		
2										Caliche - sandstone + mudstone, very dense 5YR 7/2 pinkish gray		
3												
4												
5					2.1							
6												
7												
8												
9												
10					133							
11												
12												
13												
14												
15					15.1					--- becomes 5YR 6/4 light reddish brown		
16												
17												
18												
19												
20												

LOCATION MAP	TEST HOLE / WELL LOG		Page 2 of 4
	Test/Well Number: MW-29	Project: **Hobbs Gas Plant (DCP)**	
	Date: 7/8/10/2013	Project Number: **059097**	
	Logged by: **Justin Covey**	Drilled By: **Hungry Horse** - Jacob Cuevas	
	Drilling Method: **Air Rotary**	Sampling Method: ~~Split Spoon~~	

Ground Elevation::	Detector: **PID**	Seal/Int: Bentonite to	Grout Interval: to	
Filter Pack Size: **10/20 sand**		Interval: to	Hole Dia: **7-7/8"**	Depth water Encountered during drilling:
Casing Type: **Sch. 40**	Diameter: **2 in.**	Interval: to	DTW:	
Screen Type: **Sch. 40**	Slot: **20** Diameter: **2 in.**	Interval: to	Well Depth:	Total depth:

Depth		
20		
21		
22		becomes 5YR 7/3 pink
23		
24		
25	0.7	
26		
27		
28		
29	0.7	
30	[illegible]	
31		
32		
33		SAND (SP) - fine grained, poorly graded, dense, dry, 5YR 6/4 light reddish brown.
34		Caliche
35	3.3	
36		
37		
38		SAND (SP) - fine grained, poorly graded, dense, moist, 5YR 7/3 light reddish brown.
39		
40		

LOCATION MAP	TEST HOLE / WELL LOG		Page 3 of 4
	Test/Well Number: MW-G	Project: **Hobbs Gas Plant (DCP)**	
	Date: 7 / 10 / 2013	Project Number: **059097**	
	Logged by: **Justin Covey**	Drilled By: **Hungry Horse -**	
	Drilling Method: **Air Rotary**	Sampling Method: **Split Spoon**	

Ground Elevation::	Detector: **PID**	Seal/Int: Bentonite to		Grout Interval: to	
Filter Pack Size: **10/20 sand**			Interval: to	Hole Dia: **7-7/8"**	Depth water Encountered during drilling: **60'**
Casing Type: **Sch. 40**		Diameter: **2 in.**	Interval: to	DTW:	
Screen Type: **Sch. 40**	Slot: **20**	Diameter: **2 in.**	Interval: to	Well Depth: **70**	Total depth: **73'**

Depth												
40					3.4							
41												
42												
43												
44												
45					2.8							
46												
47												
48											48.5'	
49												
50					3.9							
51											51.5'	
52												
53												
54												
55					3.3							
56												
57												
58												
59												
60					1.5							

Sample MW-G-55 @ 1655

SILTY SAND (SM)

LOCATION MAP	TEST HOLE / WELL LOG	Page 4 of 4
	Test/Well Number: MW-6	Project: **Hobbs Gas Plant (DCP)**
	Date: 7/10 / 2013	Project Number: **059097**
	Logged by: **Justin Covey**	Drilled By: **Hungry Horse -**
	Drilling Method: **Air Rotary**	Sampling Method: **Split Spoon**

Ground Elevation::	Detector: **PID**	Seal/Int: Bentonite	to	Grout Interval:	to
Filter Pack Size: **10/20 sand**			Interval: to	Hole Dia: **7-7/8"**	Depth water Encountered during drilling:
Casing Type: **Sch. 40**		Diameter: **2 in.**	Interval: to	DTW:	
Screen Type: **Sch. 40**	Slot: **20**	Diameter: **2 in.**	Interval: to	Well Depth:	Total depth:

Depth	
60	
61	becomes wet
62	
63	
64	
65	
66	
67	
68	
69	
70	70' bgs
71	
72	
73	TD=73
74	
75	
76	
77	
78	
79	
80	

Arrived onsite
Personnel: J. Corey

Took sample of Hydrovac
Cuttings.
Samples.
TIME:

1145 Arrive onsite
Personnel: Justin Corey (CIRA)
Larry Clayton (Hungry Horse)
Jacob HH
Oscar HH
Equip: PID Mini Rae 3000
- Calibrated 100 ppm Isobutylene

1300 Began to continue drilling
MW-G (set up)
1325 Began drilling MW-G
1345 Stopped because hydraulic
fluid leaking. Will fix by tightening fitting
1405 fixed the fitting & continued
drilling
1510 Stopped to fix the fitting
again because it began leaking
again.
1535 fixed the fitting again &
continued drilling.

1655 Sample: MW-G-55
for
1730 Began install of MW-G
TD drilled 72 bgs
TD of MW = 70' bgs
Top of screen @ 55' bgs
Top of filterpack @ 51.5
Top of seal @ 48.5'
1810 finished MW-G install
& cleaned site & covered
well.
NOTE: Sample: MW-G-40
@ 1630 ✓

0700 Arrive onsite
Personnel: Justin Covey CRA
Larry Clayton HH
JACOB HH
OSCAR HH
Equip: PID, Mini Rae 3000
Calibrated w/ 100 ppm isobutylene
0715 Mob to Linam plant to
decon
0800 Arrive back @ Hobbs Gas
Plant after decon'g
0900 began set up on MW-AR
0935 began drilling MW-AR
1120 finished drilling to
TD drilled 72' bgs
TD of MW = 70' bgs
Top of screen = 55' bgs
Top of filter pack = 53' bgs
Top of seal = 49.5' bgs

Location: Hobbs Gas Plant Date: 7.11.13

Project / Client: 059097 DCP

J. Covey

NOTE: Samples taken:

ID	Time
MW-AR-45	1015
MW-AR-55	1045

1205 Began MW-AR, install

1230 hydrate & seal & clean up.

1600 Mob offsite

Location: Date:

Project / Client:

Appendix B

Boring Logs

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: HOBBS GAS PLANT (DCP)
PROJECT NUMBER: 059097
CLIENT: DCP MIDSTREAM
LOCATION: LEA COUNTY, NEW MEXICO

HOLE DESIGNATION: MW-AR
DATE COMPLETED: July 11, 2013
DRILLING METHOD: AIR ROTARY
FIELD PERSONNEL: J. COVEY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE BLOW COUNTS	SAMPLE PID (ppm)
0	FILL		CONCRETE					
2	CALICHE, sandstone and limestone, fine grained, 7.5YR 8/2 pinkish white, dry	1.00						1.9
4			2" PVC WELL CASING					
6			BENTONITE GROUT					
8	- transitioning to a softer sandstone, 5YR 6/4 light reddish brown at 7.0ft BGS		7-7/8" BOREHOLE					3.3
10								
12	SP-SAND, dense, fine grained, poorly graded, 5YR 6/4 reddish brown, dry	12.00						3.1
14								
16	- cemented at 16.0ft BGS							3.4
18								
20	- few chert and few limestone at 21.0ft BGS							
22								1.1
24								
26	- some chert and some limestone at 25.0ft BGS							
28	- cemented sand, with few chert and few limestone at 28.0ft BGS							0.6
30								
32								1.2
34								
36								
38								3.6
40	SP-SAND, dense, fine grained, poorly graded, 5YR 6/4 light reddish brown	39.00						
42								2.2
44								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 059097-WI.GPJ CRA_CORP.GDT 11/7/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: HOBBS GAS PLANT (DCP)
PROJECT NUMBER: 059097
CLIENT: DCP MIDSTREAM
LOCATION: LEA COUNTY, NEW MEXICO

HOLE DESIGNATION: MW-AR
DATE COMPLETED: July 11, 2013
DRILLING METHOD: AIR ROTARY
FIELD PERSONNEL: J. COVEY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE BLOW COUNTS	SAMPLE PID (ppm)
46				MW-AR-45				0.1
48								
50	- moist at 50.0ft BGS							
52			BENTONITE CHIPS					0.3
54								
56	- trace fine gravel at 55.0ft BGS			MW-AR-55				
58			2" PVC WELL SCREEN					0.7
60			SAND PACK					
62	- wet at 61.0ft BGS							
64								
66								
68								
70								
72	END OF BOREHOLE @ 71.0ft BGS	71.00						
74								
76								
78								
80								
82								
84								
86								
88								

WELL DETAILS
Screened interval:
55.00 to 70.00ft BGS
Length: 15ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
51.00 to 53.00ft BGS
Material: BENTONITE CHIPS
Sand Pack:
53.00 to 71.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 059097-WI.GPJ CRA_CORP.GDT 11/7/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: HOBBS GAS PLANT (DCP)
PROJECT NUMBER: 059097
CLIENT: DCP MIDSTREAM
LOCATION: LEA COUNTY, NEW MEXICO

HOLE DESIGNATION: MW-G
DATE COMPLETED: June 26, 2013
DRILLING METHOD: AIR ROTARY
FIELD PERSONNEL: J. COVEY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE BLOW COUNTS	SAMPLE PID (ppm)
0	SM-SILTY SAND	1.00	CONCRETE					
2	CALICHE, sandstone and mudstone, very dense, 5YR 7/2 pinkish gray							2.1
4			2" PVC WELL CASING					
6			BENTONITE GROUT					
8			7-7/8" BOREHOLE					13.3
10								
12								15.1
14								
16	- transitioning to 5YR 6/4 light reddish brown at 15.0ft BGS							
18								
20								
22	- transitioning to 5YR 7/3 pink at 21.5ft BGS							0.7
24								
26								
28								0.7
30								
32	SP-SAND, dense, fine grained, poorly graded, 5YR 6/4 light reddish brown, dry	32.00						3.3
34	CALICHE	33.00						
36								
38	SP-SAND, dense, fine grained, poorly graded, 5YR 6/4 light reddish brown, moist	38.00						3.4
40								
42								2.8
44								

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ( )

OVERBURDEN LOG 059097-WI.GPJ CRA_CORP.GDT 11/7/13

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: HOBBS GAS PLANT (DCP)
PROJECT NUMBER: 059097
CLIENT: DCP MIDSTREAM
LOCATION: LEA COUNTY, NEW MEXICO

HOLE DESIGNATION: MW-G
DATE COMPLETED: June 26, 2013
DRILLING METHOD: AIR ROTARY
FIELD PERSONNEL: J. COVEY

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	MONITORING WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE BLOW COUNTS	SAMPLE PID (ppm)
46				MW-G-45				3.9
48								
50			BENTONITE CHIPS					
52								3.3
54								
56	SM-SILTY SAND	55.00		MW-G-55				1.5
58			2" PVC WELL SCREEN					
60	- wet at 60.0ft BGS		SAND PACK					
62								
64								
66								
68								
70								
72								
74	END OF BOREHOLE @ 73.0ft BGS	73.00						
76								
78								
80								
82								
84								
86								
88								

WELL DETAILS
Screened interval:
55.00 to 70.00ft BGS
Length: 15ft
Diameter: 2in
Slot Size: 0.010
Material: PVC
Seal:
48.50 to 51.50ft BGS
Material: BENTONITE CHIPS
Sand Pack:
51.50 to 73.00ft BGS
Material: SAND

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ◯

Appendix C

NMOSE Well Permit Approval and Application and Well Record Log

Scott A. Verhines, P.E.
State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 529289
File Nbr: L 13357 POD1,2 MONITOR

Jun. 19, 2013

SIOBHAN PRITCHARD, PM
CONESTOGA-ROVERS & ASSOCIATES
DCP MIDSTREAM-STEVE WEATHERS, PM
14998 W 6TH AVE
SUITE 800
GOLDEN, CO 80401

Greetings:

Enclosed is your copy of the above numbered permit that has been approved subject to the conditions set forth on the approval page. In accordance with the conditions of approval, the well can only be tested for 10 cumulative days, and the well is to be plugged on or before 06/30/2013, unless a permit to use the water is acquired from this office.

A Well Record & Log (OSE Form wr-20) shall be filed in this office within twenty (20) days after completion of drilling, but no later than 06/30/2013.

Appropriate forms can be downloaded from the OSE website www.ose.state.nm.us or will be mailed upon request.

Sincerely,

Andy Morley
(575)622-6521

Enclosure

File No. L-13357

NEW MEXICO OFFICE OF THE STATE ENGINEER

APPLICATION FOR PERMIT TO DRILL A WELL WITH NO CONSUMPTIVE USE OF WATER

(check applicable box):

For fees, see State Engineer website: http://www.ose.state.nm.us/ 2-33207

Purpose:	☐ Pollution Control And / Or Recovery	☐ Geo-Thermal
☐ Exploratory	☐ Construction Site De-Watering	☐ Other (Describe):
☒ Monitoring	☐ Mineral De-Watering	

A separate permit will be required to apply water to beneficial use.

☐ Temporary Request - Requested Start Date: Requested End Date:

Plugging Plan of Operations Submitted? ☐ Yes ☐ No

1. APPLICANT(S)

Name: **DCP Midstream - Steve Weathers, PM**	Name:
Contact or Agent: check here if Agent ☒ **Conestoga-Rovers & Associates-Siobhan Pritchard, PM**	Contact or Agent: check here if Agent ☐
Mailing Address: **14998 W. 6th Ave. Suite 800**	Mailing Address:
City: **Golden**	City:
State: **CO** Zip Code: **80401**	State: Zip Code:
Phone: **(303) 304-8309** ☐ Home ☒ Cell Phone (Work): **(720)974-0963**	Phone: ☐ Home ☐ Cell Phone (Work):
E-mail (optional): **spritchard@craworld.com**	E-mail (optional):

FOR OSE INTERNAL USE Application for Permit, Form wr-07, Rev 4/12/12

File Number: L-13357	Trn Number: 529289
Trans Description (optional): POD 1, 2	
Sub-Basin:	
PCW/LOG Due Date: 6-30-14	

2. **WELL(S)** Describe the well(s) applicable to this application. 2-33207

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84).
District II (Roswell) and District VII (Cimarron) customers, provide a PLSS location in addition to above.

☐ NM State Plane (NAD83) (Feet)
☐ NM West Zone
☐ NM East Zone
☐ NM Central Zone

☐ UTM (NAD83) (Meters)
☐ Zone 12N
☐ Zone 13N

☒ Lat/Long (WGS84) (to the nearest 1/10th of second)

Well Number (If known):	X or Easting or Longitude:	Y or Northing or Latitude:	Provide if known: -Public Land Survey System (PLSS) (*Quarters or Halves , Section, Township, Range*) OR - Hydrographic Survey Map & Tract; OR - Lot, Block & Subdivision; OR - Land Grant Name
MW-AR L-13357 POD1	w103 18'27.7"	n32 42'22.5"	SW 1/4 of NE 1/4 of Section 36, Township 18 South, Range 36 East
MW-G L-13357 POD2	w103 18'25.09"	n32 42'20.62"	SW 1/4 of NE 1/4 of Section 36, Township 18 South, Range 36 East

NOTE: If more well locations need to be described, complete form WR-08 (Attachment 1 – POD Descriptions)
Additional well descriptions are attached: ☐ Yes ☒ No **If yes, how many**_____

Other description relating well to common landmarks, streets, or other:

Well is on land owned by: **Dcp Midstream**

Well Information: NOTE: If more than one (1) well needs to be described, provide attachment. Attached? ☐ Yes ☒ No
If yes, how many_____

Approximate depth of well (feet): **70.00**	Outside diameter of well casing (inches): **2.00**
Driller Name: **Hungry Horse**	Driller License Number: **1682**

3. **ADDITIONAL STATEMENTS OR EXPLANATIONS**

All monitoring wells will be drilled to approximately 35 feet below ground surface and be constructed of 2-inch diameter schedule 40 PVC with a 15-foot 0.010 slotted screen. All wells are for monitoring groundwater quality. Drilling is planned for June 2013. A plan for monitoring duration will be developed once initial soil and groundwater results are obtained.

FOR OSE INTERNAL USE — Application for Permit, Form wr-07

File Number: L-13357	Trn Number: 529289

4. SPECIFIC REQUIREMENTS: The applicant must include the following, as applicable to each well type. Please check the appropriate boxes, to indicate the information has been included and/or attached to this application:

2-33807

Exploratory: ☐ Include a description of any proposed pump test, if applicable.	**Pollution Control and/or Recovery:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for the pollution control or recovery operation. ☐ The estimated maximum period of time for completion of the operation. ☐ The annual diversion amount. ☐ The annual consumptive use amount. ☐ The maximum amount of water to be diverted and injected for the duration of the operation. ☐ The method and place of discharge.	**Construction De-Watering:** ☐ Include a description of the proposed dewatering operation, ☐ The estimated duration of the operation, ☐ The maximum amount of water to be diverted, ☐ A description of the need for the dewatering operation, and, ☐ A description of how the diverted water will be disposed of.	**Mine De-Watering:** ☐ Include a plan for pollution control/recovery, that includes the following: ☐ A description of the need for mine dewatering. ☐ The estimated maximum period of time for completion of the operation. ☐ The source(s) of the water to be diverted. ☐ The geohydrologic characteristics of the aquifer(s). ☐ The maximum amount of water to be diverted per annum. ☐ The maximum amount of water to be diverted for the duration of the operation. ☐ The quality of the water. ☐ The method of measurement of water diverted. ☐ The recharge of water to the aquifer. ☐ Description of the estimated area of hydrologic effect of the project. ☐ The method and place of discharge. ☐ An estimation of the effects on surface water rights and underground water rights from the mine dewatering project. ☐ A description of the methods employed to estimate effects on surface water rights and underground water rights. ☐ Information on existing wells, rivers, springs, and wetlands within the area of hydrologic effect.
Monitoring: ☒ Include the reason for the monitoring well, and, ☒ The duration of the planned monitoring.	☐ The method of measurement of water produced and discharged. ☐ The source of water to be injected. ☐ The method of measurement of water injected. ☐ The characteristics of the aquifer. ☐ The method of determining the resulting annual consumptive use of water and depletion from any related stream system. ☐ Proof of any permit required from the New Mexico Environment Department. ☐ An access agreement if the applicant is not the owner of the land on which the pollution plume control or recovery well is to be located.	**Geo-Thermal:** ☐ Include a description of the geothermal heat exchange project, ☐ The amount of water to be diverted and re-injected for the project, ☐ The time frame for constructing the geothermal heat exchange project, and, ☐ The duration of the project. ☐ Preliminary surveys, design data, and additional information shall be included to provide all essential facts relating to the request.	

ACKNOWLEDGEMENT

I, We (name of applicant(s)), Siobhan Pritchard
Print Name(s)

affirm that the foregoing statements are true to the best of (my, our) knowledge and belief.

Applicant Signature

Applicant Signature

ACTION OF THE STATE ENGINEER

This application is:

☒ approved ☐ partially approved ☐ denied

provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare and further subject to the attached conditions of approval.

Witness my hand and seal this 21st day of June 20 13, for the State Engineer,

Scott A Verhines, P.E., State Engineer

By: Rachel Garcia
Signature Print

Title: for Andy Morley, District II Manager
Print

FOR OSE INTERNAL USE

Application for Permit, Form wr-07

File Number: L-13357 Trn Number: 529289

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

SPECIFIC CONDITIONS OF APPROVAL

1B Depth of the well shall not exceed the thickness of the Ogallala formation.

4 No water shall be appropriated and beneficially used under this permit.

6 The well shall be plugged upon completion of the permitted use, and a plugging report shall be filed with the State Engineer within 10 days.

7 The Permittee shall utilize the highest and best technology available to ensure conservation of water to the maximum extent practical.

B The well shall be drilled by a driller licensed in the State of New Mexico in accordance with Section 72-12-12 New Mexico Statutes Annotated.

C Driller's well record must be filed with the State Engineer within 20 days after the well is drilled or driven. Well record forms will be provided by the State Engineer upon request.

P The well shall be constructed, maintained, and operated to prevent inter-aquifer exchange of water and to prevent loss of hydraulic head between geologic zones.

LOG The Point of Diversion L 13357 POD1 must be completed and the Well Log filed on or before 06/30/2013.

LOG The Point of Diversion L 13357 POD2 must be completed and the Well Log filed on or before 06/30/2013.

Trn Desc: L-13357 POD1,2 MONITOR

File Number: L 13357
Trn Number: 529289

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 06/14/2013	Pub. of Notice Ordered:
Date Returned - Correction:	Affidavit of Pub. Filed:

This application is approved provided it is not exercised to the detriment of any others having existing rights, and is not contrary to the conservation of water in New Mexico nor detrimental to the public welfare of the state; and further subject to the specific conditions listed previously.

Witness my hand and seal this 21st day of Jun A.D., 2013

Scott A. Verhines, P.E., State Engineer

By: _____
Andy Morley

Trn Desc: L-13357 POD1,2 MONITOR

File Number: L 13357
Trn Number: 529289

WELL PLUGGING PLAN OF OPERATIONS

NOTE: A Well Plugging Plan of Operations shall be filed with and accepted by the Office of the State Engineer prior to plugging.

I. FILING FEE: There is no filing fee for this form.

II. GENERAL / WELL OWNERSHIP:

Existing Office of the State Engineer POD Number (Well Number) for well to be plugged: _____

Name of well owner: DCP Midstream

Mailing address: 370 17th Street, Suite 2500

City: Denver State: Colorado Zip code: 80202

Phone number: (303) 605-1718 E-mail: swweathers@dcpmidstream.com

III. WELL DRILLER INFORMATION:

Well Driller contracted to provide plugging services: Hungry Horse

New Mexico Well Driller License No.: 1682 Expiration Date: 05/31/2014

IV. WELL INFORMATION:

Note: A copy of the existing Well Record for the well to be plugged should be attached to this plan.

1) GPS Well Location: Latitude: 32 deg, 42 min, 22.5 sec
Longitude: 103 deg, 18 min, 27.7 sec, NAD 83

2) Reason(s) for plugging well: Well was damaged during site development

3) Was well used for any type of monitoring program? yes If yes, please use section VII of this form to detail what hydrogeologic parameters were monitored. If the well was used to monitor contaminated or poor quality water, authorization from the New Mexico Environment Department may be required prior to plugging.

4) Does the well tap brackish, saline, or otherwise poor quality water? no If yes, provide additional detail, including analytical results and/or laboratory report(s): see attached table with historical sample results

5) Static water level: 61.91 feet below land surface / feet above land surface (circle one)

6) Depth of the well: 70.61 feet

7) Inside diameter of innermost casing: 2.00 inches.

8) Casing material: polyvinyl chloride

9) The well was constructed with:

_____ an open-hole production interval, state the open interval: _____

X_____ a well screen or perforated pipe, state the screened interval(s): N/A

10) What annular interval surrounding the artesian casing of this well is cement-grouted? N/A

11) Was the well built with surface casing? yes_____ If yes, is the annulus surrounding the surface casing grouted or otherwise sealed? ____yes____ If yes, please describe: PVC surrounded with an outer metal casing (flush mount) and a well pad was constructed with concrete to seal the well in place.

12) Has all pumping equipment and associated piping been removed from the well? yes_____ If not, describe remaining equipment and intentions to remove prior to plugging in Section VII of this form.

V. DESCRIPTION OF PLANNED WELL PLUGGING:

Note: If this plan proposes to plug an artesian well in a way other than with cement grout, placed bottom to top with a tremie pipe, a detailed diagram of the well showing proposed final plugged configuration shall be attached, as well as any additional technical information, such as geophysical logs, that are necessary to adequately describe the proposal.

1) Describe the method by which cement grout shall be placed in the well, or describe requested plugging methodology proposed for the well: Due to the well damage, the PVC casing will be overdrilled and the remaining borehole filled with pressure grouted bentonite to within 1 ft bgs. The top ft will be covered in clean fill to match the existing grade.

2) Will well head be cut-off below land surface after plugging? Damaged has already cut-off the well head below land surface.

VI. PLUGGING AND SEALING MATERIALS:

Note: The plugging of a well that taps poor quality water may require the use of a specialty cement or specialty sealant

1) For plugging intervals that employ cement grout, complete and attach Table A.

2) For plugging intervals that will employ approved non-cement based sealant(s), complete and attach Table B.

3) Theoretical volume of grout required to plug the well to land surface: 50 gallons

4) Type of Cement proposed: hydrated bentonite chips

5) Proposed cement grout mix: N/A gallons of water per 94 pound sack of Portland cement.

6) Will the grout be:_____ batch-mixed and delivered to the site

X_____ mixed on site

7) Grout additives requested, and percent by dry weight relative to cement: N/A

8) Additional notes and calculations:

VII. ADDITIONAL INFORMATION: List additional information below, or on separate sheet(s):

VIII. SIGNATURE:

I, Stephen Pritchard, say that I have carefully read the foregoing Well Plugging Plan of Operations and any attachments, which are a part hereof; that I am familiar with the rules and regulations of the State Engineer pertaining to the plugging of wells and will comply with them, and that each and all of the statements in the Well Plugging Plan of Operations and attachments are true to the best of my knowledge and belief.

Signature of Applicant — Date: 6/19/13

IX. ACTION OF THE STATE ENGINEER:

This Well Plugging Plan of Operations is:

X Approved subject to the attached conditions. see below

____ Not approved for the reasons provided on the attached letter.

Witness my hand and official seal this 21 day of June, 2013

Scott A. Verhines, State Engineer

By: CATHERINE GUTIERREZ for ANDY MORLEY
DISTRICT II SUPERVISOR

STATE ENGINEER OFFICE
ROSWELL
2013 JUN 19 P 1:49

Plugging operations will also be:
1) Conducted in accordance with NMED, NMOCD, or other State or Federal agency having oversight for the above described project; and,
2) conducted in accordance to Revisions to Plugging Plan as described in attached email from Conestoga-Rovers & Associates

Goetz, Catherine, OSE

From: Pritchard, Siobhan [spritchard@craworld.com]
Sent: Thursday, June 20, 2013 10:16 AM
To: Goetz, Catherine, OSE
Cc: Covey, Justin
Subject: updated FW: CRA Hobbs, NM Drill Permits
Attachments: MW-A boring log and well construction.pdf

Catherine-

I just received your voicemail and have updated the email below. Please let me know if you need anything else.

Thanks
Siobhan

siobhan pritchard, P.G

From: Pritchard, Siobhan
Sent: Thursday, June 20, 2013 10:14 AM
To: 'catherine.goetz@state.nm.us'
Cc: Covey, Justin
Subject: CRA Hobbs, NM Drill Permits

Catherine-

In regards to our earlier phone conversation:

- Re: #3 The well depth should read 70 fbgs not 35 fbgs
- The borehole diameter is approximately 7 7/8"
- Centralizers will be used to install both monitoring wells
- For the P&A Plan the estimated borehole volume is 180 gallons
- The well will be sealed using a tremmie pipe to pump a blend at a minimum of 20% active solid bentonite grout from the bottom up
- I have attached a copy of the boring log and well construction log for the well being abandoned. The well was installed in 2004 prior to regulations requiring an install permit; therefore there is no well permit number and a permit was never pulled for this well.

Please let me know if you have any other questions.

Thanks,
Siobhan

Siobhan Pritchard, P.G.
Conestoga-Rovers & Associates (CRA)

14998 west 6th avenue suite 800 | golden co
direct: 720.974.0963 | cell: 303.304.8309
alaska cell: 907.244.8967
spritchard@craworld.com

TABLE A - For plugging intervals that employ cement grout. Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of grout placement (ft bgl)			
Bottom of proposed interval of grout placement (ft bgl)			
Theoretical volume of grout required per interval (gallons)			
Proposed cement grout mix gallons of water per 94-lb. sack of Portland cement			
Mixed on-site or batch-mixed and delivered?			
Grout additive 1 requested			
Additive 1 percent by dry weight relative to cement			
Grout additive 2 requested			
Additive 2 percent by dry weight relative to cement			

TABLE B - For plugging intervals that will employ approved non-cement based sealant(s). Start with deepest interval.

	Interval 1 – deepest	Interval 2	Interval 3 – most shallow
			Note: if the well is non-artesian and breaches only one aquifer, use only this column.
Top of proposed interval of sealant placement (ft bgl)			1 ft bgs
Bottom of proposed sealant of grout placement (ft bgl)			71 ft bgs
Theoretical volume of sealant required per interval (gallons)			50 gallons
Proposed abandonment sealant (manufacturer and trade name)			

ARCADIS GERAGHTY & MILLER

Well No.: MW-[illegible] Sheet 1 of 1
Client Name: DUKE ENERGY
Project No.: CO.000882.2801 Logger:
Beginning Date: 3/22/04 Ending Date: 3/22/04
Hole Size: 5" Bit Type: Button
Drilling Co.: HARRISON & COOPER Driller: KEN COOPER

Sample/Core Interval			P.I.D. (PPM)		Sample Analysis	U.S.C.S. Class	Description Depth (ft)		DESCRIPTION
Device	Depth (ft)	Recovery (ft.)	Depth (ft)	Reading			from	to	(Lithology, Munsell Color, Grain Size w/percentages (most to least), Roundness, Sorting, Consistency, Moisture Content, Additional Remarks)
							0	1'	FILL - BUFF COLORED CALICHE NODULES, ROCK, BRICK, METAL TYPE SOIL
							1'	3'	BUFF
			10'	4.0			3'	12'	BUFF/LIGHT TAN FINE GRAINED SAND - DRY
							12'	14'	BUFF CALICHE
							14'	18'	BUFF/TAN FINE SILTY GRAINED SAND W/ SMALL HARD BUFF CALICHE NODULES
			20'	3.9			18	32'	HARD WELL CEMENTED BUFF SANDSTONE
			30'	5.9			32'	71'	MOIST BUFF/LIGHT BROWN VERY FINE GRAINED SAND UNCONSOLIDATED W/ FEW SMALL ANGULAR PEBBLES (SANDSTONE?) BUFF WELL CEMENTED FINE GRAINED)
			40'	5.7					
			50'	4.4					
			60'	4.3					

BORING/MONITOR/WELL LOG

Well No.: MW-A File Name:
Client Name: DUKE ENERGY
Site Location: HOBBS GAS PLANT
Project No.: CO 00.882.2801 Drilling Method:
Logged By: R. WINN Sample Method: GRAB
Drilling Co.: HARRISON & COOPER Driller: KEN COOPER
Date Drilled: 3/22/04 Date Surveyed:
Surface Elev.: ☐ Surveyed ☐ Estimated
Top of Casing Elev.: ☐ Surveyed ☐ Estimated
Permit No.: Drilling Fluid:
Development Technique(s) and Date(s):

	Measuring Point:	Date:
Static Water Level:		
Pumping Water Level:		

Yield: gpm Date:
Well Purpose:

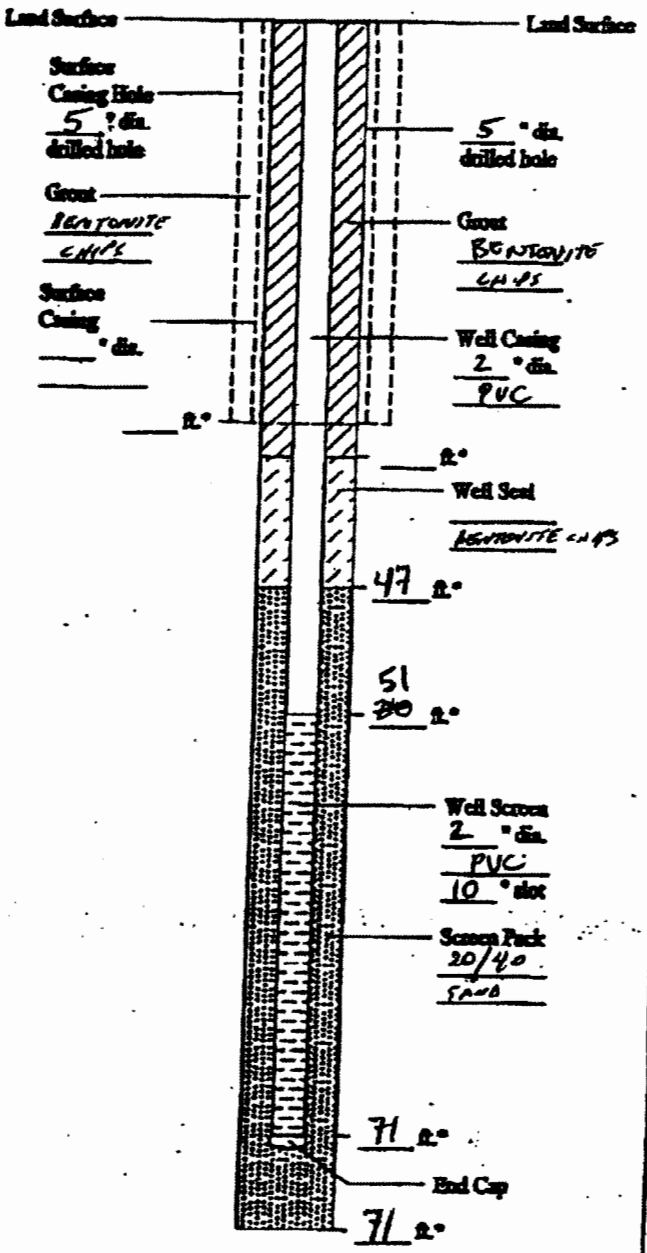
Remarks: 0820 - BEGIN DRILLING
0955 - FINISHED DRILLING TD - 71'
1030 - COMPLETION OF WELL

Hole Size: 5" Grout Type: BENTONITE
Seal Type: BENTONITE Screen Pack: 20/40 SAND
Casing Type: 2" PVC Casing Size:
Screen Type: 10 SLOT Screen/Slot Size: 10 SLOT
Drilled Depth: 71' Plug-Back Depth:

Surface Completion Diagram

Land Surface

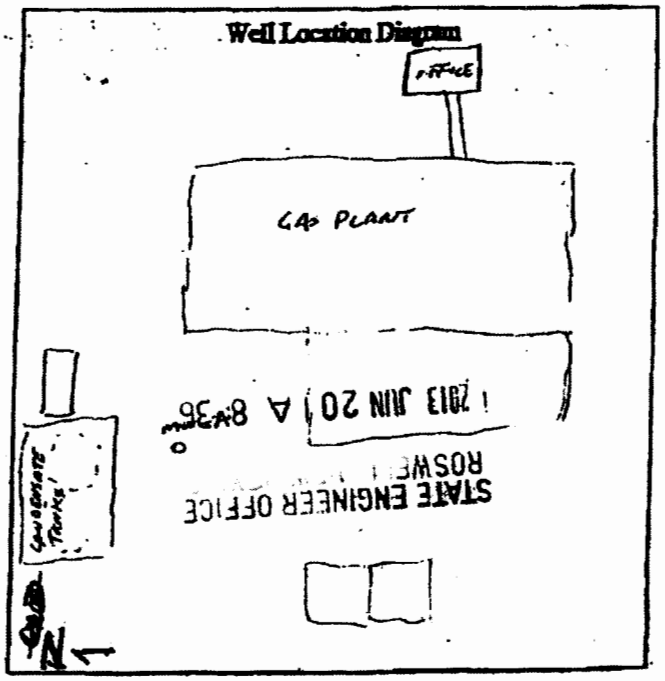
Well Construction Diagram



* Depth Below Land Surface

Measuring Point is Land Surface Unless Otherwise Noted.

Well Location Diagram



GERAGHTY & MILLER, INC.
Environmental Services
A Baidemj Company

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
L-13357 Pod 2	L-13357
WELL OWNER NAME(S)	PHONE (OPTIONAL)
Conestoga Rovers & Ass. - Siobhan Pritchard, PM	720-974-0963
WELL OWNER MAILING ADDRESS	CITY / STATE / ZIP
14998 W. 6th Ave. Suite 800	Golden CO 80401

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	42	20.62	N
	LONGITUDE	103	18	25.09	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NUMBER	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
WD 1682	JOHN NORRIS	HUNGRY HORSE LLC

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
7-10-2013	7-10-2013	70	70	

COMPLETED WELL IS: ( ) ARTESIAN ( ) DRY HOLE (•) SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT):

DRILLING FLUID: (•) AIR ( ) MUD ADDITIVES – SPECIFY:

DRILLING METHOD: (•) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER – SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	70	8 3/4	PVC	GLUED	2	3/8	1/8

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
			4" monitor well		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER		POD NUMBER	TRN NUMBER	
LOCATION				PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	32	32	CALICHE AND ROCK	○ Y ◉ N	
32	36	4	SAND	◉ Y ○ N	
36	43	7	ROCK	○ Y ◉ N	
43	70	27	SAND	◉ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY: n/A

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Jacob Knutson

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER / PRINT SIGNEE NAME

8-27-13
DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	POD NUMBER	TRN NUMBER
LOCATION		PAGE 2 OF 2

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NUMBER (WELL NUMBER)	OSE FILE NUMBER(S)
L-13357 Pod 2	L-13357
WELL OWNER NAME(S)	PHONE (OPTIONAL)
Conestoga Rovers & Ass. - Siobhan Pritchard, PM	720-974-0963
WELL OWNER MAILING ADDRESS	CITY / STATE / ZIP
14998 W. 6th Ave. Suite 800	Golden CO 80401

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	42	20.62	N
	LONGITUDE	103	18	25.09	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

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7-10-2013	7-10-2013	70	70	

COMPLETED WELL IS: ( ) ARTESIAN ( ) DRY HOLE (•) SHALLOW (UNCONFINED) — STATIC WATER LEVEL IN COMPLETED WELL (FT):

DRILLING FLUID: (•) AIR ( ) MUD — ADDITIVES - SPECIFY:

DRILLING METHOD: (•) ROTARY ( ) HAMMER ( ) CABLE TOOL ( ) OTHER - SPECIFY:

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	70	8 3/4	PVC	GLUED	2	3/8	1/8

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
			monitor well		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER		POD NUMBER	TRN NUMBER
LOCATION			PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	32	32	CALICHE AND ROCK	○ Y ◉ N	
32	36	4	SAND	◉ Y ○ N	
36	43	7	ROCK	○ Y ◉ N	
43	70	27	SAND	◉ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
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				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	
				○ Y ○ N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: ○ PUMP ○ AIR LIFT ○ BAILER ○ OTHER – SPECIFY: n/A

TOTAL ESTIMATED WELL YIELD (gpm):

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Jacob Knelson

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:

SIGNATURE OF DRILLER / PRINT SIGNEE NAME

8-27-13
DATE

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER		POD NUMBER	TRN NUMBER	
LOCATION				PAGE 2 OF 2

Appendix D

Well Survey Results

SHEET No. 1 OF 1
DATE: 09/25/2013

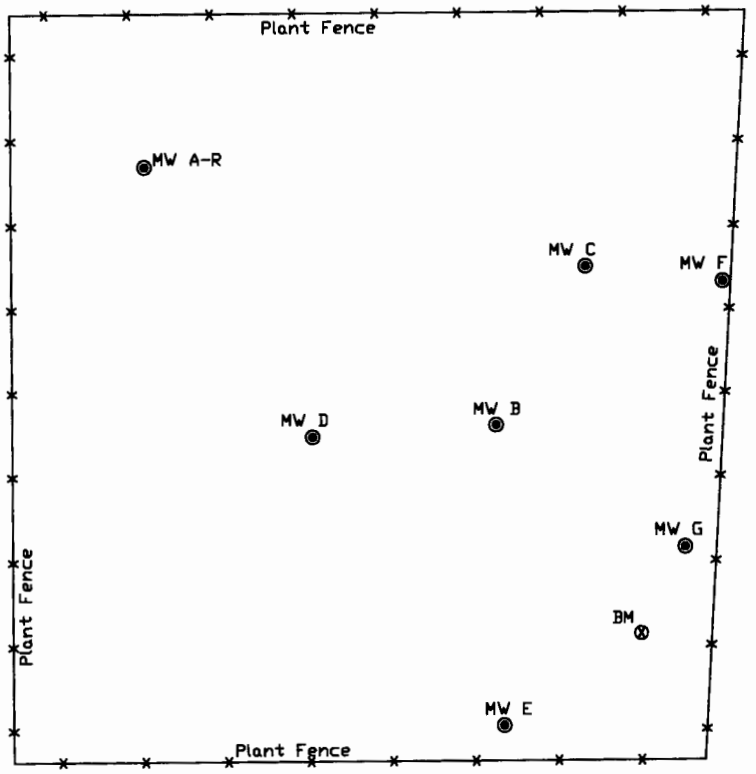
NATURE OF WORK
SURVEY THE MONITOR WELLS FOR THE HOBBS GAS PLANT

LINE No.

DISTRICT WEST PERMIAN PLANT OR STATION HOBBS JOB OR AFE No. 390560101

SECTION 36 TOWNSHIP 18-S RANGE 37-E SURVEY N.M.P.M. COUNTY LEA STATE N.M.

STUDY No. RELEASE No. 1 RC: GNOO



SCALE: 1" = 100'

☐ STAKING ☒ RESURVEY

NEW MEXICO STATE PLANE COORDINATES (NAD83)

WELL	NORTHING	EASTING	LATITUDE	LONGITUDE	ELEV. GRND	ELEV. CON.	ELEV. PVC
MW-B	622014.450	857057.036	N 32°42'20.4"	W 103°18'25.6"	3755.92'	3756.11'	3755.70'
MW-C	622100.040	857105.492	N 32°42'21.2"	W 103°18'25.1"	3755.49'	3755.64'	3755.35'
MW-D	622007.501	856956.991	N 32°42'20.3"	W 103°18'26.8"	3755.44'	3755.49'	3755.19'
MW-E	621854.371	857061.924	N 32°42'18.8"	W 103°18'25.6"	3754.17'	3754.39'	3754.11'
MW-F	622092.238	857179.761	N 32°42'21.1"	W 103°18'24.2"	3755.93'	3756.15'	3755.88'
MW-G	621949.925	857159.761	N 32°42'19.7"	W 103°18'24.4"	3754.86'	3754.95'	3754.67'
MW-A-R	622151.911	856865.099	N 32°42'21.7"	W 103°18'27.9"	3755.74'	3755.93'	3755.73'
B.M.	621903.912	857136.161	N 32°42'19.3"	W 103°18'24.7"	3754.68'		

SIGNED GROUP OR CORP. STAFF COMMERCIAL

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM FIELD NOTES OF AN ACTUAL SURVEY AND MEETS OR EXCEEDS ALL REQUIREMENTS FOR LAND SURVEYS AS SPECIFIED BY THIS STATE.

GARY L. JONES, N.M.P.S. No. 7977
N.M.P.E. No. 5074

PTRE&C No.:

BASIN SURVEYS
P.O. BOX 1786 – HOBBS, NEW MEXICO
W.O. Number: 29394 KJG – 29394MW.DWG

Appendix E

Accutest Laboratory Analytical Report

Gulf Coast ACCUTEST LABORATORIES

07/26/13

Technical Report for

DCP Midstream, LLC

CRA: DCP Midstream-Hobbs

Accutest Job Number: TC33720

Sampling Dates: 07/10/13 - 07/11/13

Report to:

DCP Midstream, L.P.
370 17th Street Suite 2500
Denver, CO 80202
SWWeathers@dcpmidstream.com; jornelas@craworld.com;
ntaylor@craworld.com; jcloud@craworld.com;
ATTN: Mr. Steve Weathers

Total number of pages in report: **44**

ACCREDITED IN ACCORDANCE WITH nelac

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.

Richard Rodriguez
Laboratory Director

Client Service contact: Sylvia Garza 713-271-4700

Certifications: TX (T104704220-13-10) AR (12-029-0) AZ (AZ0769) FL (E87628) KS (E-10366) LA (85695/04004) OK (2012-059)

Sections: 1 2 3 4 5 6 7

Table of Contents

Sample Summary

DCP Midstream, LLC

Job No: TC33720

CRA: DCP Midstream-Hobbs

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
TC33720-1	07/10/13	16:30		07/13/13	SO	Soil	MW-G-40
TC33720-2	07/10/13	16:55		07/13/13	SO	Soil	MW-G-55
TC33720-3	07/11/13	10:45		07/13/13	SO	Soil	MW-AR-55
TC33720-4	07/11/13	10:15		07/13/13	SO	Soil	MW-AR-45
TC33720-5	07/11/13	13:00		07/13/13	SO	Soil	WASTECHAR-1
TC33720-6	07/10/13	00:00		07/13/13	AQ	Trip Blank Water	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: TC33720
Account: DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs
Collected: 07/10/13 thru 07/11/13

Lab Sample ID Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
TC33720-1	**MW-G-40**					
TPH (C10-C28)		12.0	3.4	1.2	mg/kg	SW846 8015 M
TC33720-2	**MW-G-55**					
TPH (C10-C28)		11.2	3.5	1.2	mg/kg	SW846 8015 M
TC33720-3	**MW-AR-55**					
TPH (C10-C28)		5.42	3.5	1.2	mg/kg	SW846 8015 M
TC33720-4	**MW-AR-45**					
TPH (C10-C28)		6.57	3.9	1.3	mg/kg	SW846 8015 M
TC33720-5	**WASTECHAR-1**					
TPH (C10-C28)		12.6	3.4	1.1	mg/kg	SW846 8015 M
TC33720-6	**TRIP BLANK**					

No hits reported in this sample.

Gulf Coast ACCUTEST LABORATORIES

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	MW-G-40		
Lab Sample ID:	TC33720-1	**Date Sampled:**	07/10/13
Matrix:	SO - Soil	**Date Received:**	07/13/13
Method:	SW846 8260B	**Percent Solids:**	96.7
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R016407.D	1	07/17/13	CF	n/a	n/a	VR478
Run #2							

	Initial Weight	Final Volume
Run #1	5.03 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0041	0.00069	mg/kg	
108-88-3	Toluene	ND	0.0041	0.0010	mg/kg	
100-41-4	Ethylbenzene	ND	0.0041	0.0010	mg/kg	
1330-20-7	Xylene (total)	ND	0.012	0.0029	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		59-126%
2037-26-5	Toluene-D8	102%		70-139%
460-00-4	4-Bromofluorobenzene	106%		63-138%
17060-07-0	1,2-Dichloroethane-D4	120%		54-123%

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

Client Sample ID:	MW-G-40		
Lab Sample ID:	TC33720-1	**Date Sampled:**	07/10/13
Matrix:	SO - Soil	**Date Received:**	07/13/13
Method:	SW846 8015	**Percent Solids:**	96.7
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0015506.D	1	07/16/13	LT	n/a	n/a	GBB798
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.00 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.3	1.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		53-130%
98-08-8	aaa-Trifluorotoluene	99%		67-126%

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

Client Sample ID: MW-G-40
Lab Sample ID: TC33720-1
Matrix: SO - Soil
Method: SW846 8015 M SW846 3550B
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/10/13
Date Received: 07/13/13
Percent Solids: 96.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF224513.D	1	07/16/13	CF	07/16/13	OP29075	GIF1598
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	12.0	3.4	1.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		41-123%

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

Client Sample ID: MW-G-55
Lab Sample ID: TC33720-2
Matrix: SO - Soil
Method: SW846 8260B
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/10/13
Date Received: 07/13/13
Percent Solids: 95.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	R016408.D	1	07/17/13	CF	n/a	n/a	VR478
Run #2							

	Initial Weight	Final Volume
Run #1	4.30 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0049	0.00083	mg/kg	
108-88-3	Toluene	ND	0.0049	0.0012	mg/kg	
100-41-4	Ethylbenzene	ND	0.0049	0.0012	mg/kg	
1330-20-7	Xylene (total)	ND	0.015	0.0034	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		59-126%
2037-26-5	Toluene-D8	102%		70-139%
460-00-4	4-Bromofluorobenzene	102%		63-138%
17060-07-0	1,2-Dichloroethane-D4	119%		54-123%

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

Client Sample ID: MW-G-55
Lab Sample ID: TC33720-2
Matrix: SO - Soil
Method: SW846 8015
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/10/13
Date Received: 07/13/13
Percent Solids: 95.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0015510.D	1	07/16/13	LT	n/a	n/a	GBB798
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.06 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.5	1.0	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		53-130%
98-08-8	aaa-Trifluorotoluene	100%		67-126%

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

Client Sample ID: MW-G-55
Lab Sample ID: TC33720-2
Matrix: SO - Soil
Method: SW846 8015 M SW846 3550B
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/10/13
Date Received: 07/13/13
Percent Solids: 95.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IB224514.D	1	07/16/13	CF	07/16/13	OP29075	GIB1598
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	11.2	3.5	1.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	78%		41-123%

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

Client Sample ID:	MW-AR-55		
Lab Sample ID:	TC33720-3	**Date Sampled:**	07/11/13
Matrix:	SO - Soil	**Date Received:**	07/13/13
Method:	SW846 8260B	**Percent Solids:**	95.0
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0048759.D	1	07/17/13	CF	n/a	n/a	VM1941
Run #2							

	Initial Weight	Final Volume
Run #1	4.90 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0043	0.00073	mg/kg	
108-88-3	Toluene	ND	0.0043	0.0011	mg/kg	
100-41-4	Ethylbenzene	ND	0.0043	0.0010	mg/kg	
1330-20-7	Xylene (total)	ND	0.013	0.0030	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	71%		59-126%
2037-26-5	Toluene-D8	74%		70-139%
460-00-4	4-Bromofluorobenzene	75%		63-138%
17060-07-0	1,2-Dichloroethane-D4	69%		54-123%

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

Client Sample ID: MW-AR-55
Lab Sample ID: TC33720-3
Matrix: SO - Soil
Method: SW846 8015
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/11/13
Date Received: 07/13/13
Percent Solids: 95.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0015511.D	1	07/16/13	LT	n/a	n/a	GBB798
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.30 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.4	1.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		53-130%
98-08-8	aaa-Trifluorotoluene	99%		67-126%

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

Client Sample ID: MW-AR-55
Lab Sample ID: TC33720-3
Matrix: SO - Soil
Method: SW846 8015 M SW846 3550B
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/11/13
Date Received: 07/13/13
Percent Solids: 95.0

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF224515.D	1	07/16/13	CF	07/16/13	OP29075	GIF1598
Run #2							

	Initial Weight	Final Volume
Run #1	30.0 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	5.42	3.5	1.2	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	74%		41-123%

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

Client Sample ID:	MW-AR-45		
Lab Sample ID:	TC33720-4	**Date Sampled:**	07/11/13
Matrix:	SO - Soil	**Date Received:**	07/13/13
Method:	SW846 8260B	**Percent Solids:**	86.2
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0048760.D	1	07/17/13	CF	n/a	n/a	VM1941
Run #2							

	Initial Weight	Final Volume
Run #1	4.84 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0048	0.00081	mg/kg	
108-88-3	Toluene	ND	0.0048	0.0012	mg/kg	
100-41-4	Ethylbenzene	ND	0.0048	0.0012	mg/kg	
1330-20-7	Xylene (total)	ND	0.014	0.0034	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	71%		59-126%
2037-26-5	Toluene-D8	74%		70-139%
460-00-4	4-Bromofluorobenzene	74%		63-138%
17060-07-0	1,2-Dichloroethane-D4	68%		54-123%

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

Client Sample ID: MW-AR-45
Lab Sample ID: TC33720-4
Matrix: SO - Soil
Method: SW846 8015
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/11/13
Date Received: 07/13/13
Percent Solids: 86.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0015512.D	1	07/16/13	LT	n/a	n/a	GBB798
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.75 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	1.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	91%		53-130%
98-08-8	aaa-Trifluorotoluene	99%		67-126%

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

Client Sample ID: MW-AR-45
Lab Sample ID: TC33720-4
Matrix: SO - Soil
Method: SW846 8015 M SW846 3550B
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/11/13
Date Received: 07/13/13
Percent Solids: 86.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IB224516.D	1	07/16/13	CF	07/16/13	OP29075	GIB1598
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	6.57	3.9	1.3	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	85%		41-123%

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

Client Sample ID:	WASTECHAR-1		
Lab Sample ID:	TC33720-5	**Date Sampled:**	07/11/13
Matrix:	SO - Soil	**Date Received:**	07/13/13
Method:	SW846 8260B	**Percent Solids:**	96.6
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	M0048755.D	1	07/17/13	CF	n/a	n/a	VM1941
Run #2							

	Initial Weight	Final Volume
Run #1	5.44 g	5.0 ml
Run #2		

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	0.0038	0.00064	mg/kg	
108-88-3	Toluene	ND	0.0038	0.00097	mg/kg	
100-41-4	Ethylbenzene	ND	0.0038	0.00092	mg/kg	
1330-20-7	Xylene (total)	ND	0.011	0.0027	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	73%		59-126%
2037-26-5	Toluene-D8	75%		70-139%
460-00-4	4-Bromofluorobenzene	73%		63-138%
17060-07-0	1,2-Dichloroethane-D4	65%		54-123%

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

Client Sample ID:	WASTECHAR-1		
Lab Sample ID:	TC33720-5	**Date Sampled:**	07/11/13
Matrix:	SO - Soil	**Date Received:**	07/13/13
Method:	SW846 8015	**Percent Solids:**	96.6
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BB0015515.D	1	07/16/13	LT	n/a	n/a	GBB798
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	5.25 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.1	0.98	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	92%		53-130%
98-08-8	aaa-Trifluorotoluene	99%		67-126%

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

Client Sample ID: WASTECHAR-1
Lab Sample ID: TC33720-5
Matrix: SO - Soil
Method: SW846 8015 M SW846 3550B
Project: CRA: DCP Midstream-Hobbs

Date Sampled: 07/11/13
Date Received: 07/13/13
Percent Solids: 96.6

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	IF224517.D	1	07/16/13	CF	07/16/13	OP29075	GIF1598
Run #2							

	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	12.6	3.4	1.1	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	79%		41-123%

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

Client Sample ID:	TRIP BLANK		
Lab Sample ID:	TC33720-6	**Date Sampled:**	07/10/13
Matrix:	AQ - Trip Blank Water	**Date Received:**	07/13/13
Method:	SW846 8260B	**Percent Solids:**	n/a
Project:	CRA: DCP Midstream-Hobbs		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X0093084.D	1	07/16/13	AK	n/a	n/a	VX1955
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	0.00034	mg/l	
108-88-3	Toluene	ND	0.0010	0.00033	mg/l	
100-41-4	Ethylbenzene	ND	0.0010	0.00032	mg/l	
1330-20-7	Xylene (total)	ND	0.0030	0.00087	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		72-122%
17060-07-0	1,2-Dichloroethane-D4	93%		68-124%
2037-26-5	Toluene-D8	96%		80-119%
460-00-4	4-Bromofluorobenzene	101%		72-126%

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

Gulf Coast ACCUTEST LABORATORIES

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

CHAIN OF CUSTODY

ACCUTEST Laboratories

10165 Harwin, Suite 150 - Houston, TX 77036 - 713-271-4700 fax: 713-271-4770

FED-EX Tracking #	Bottle Order Control #
Accutest Quote #	Accutest Job # TC33720

Client / Reporting Information

Company Name	Project Name / No.
Conestoga Rovers and Associates	DCP Midstream-Hobbs 059097-2012-04
Project Contact / E-Mail: Jeffrey Cloud	**Bill to**: DCP Midstream-Hobbs / **Invoice Attn.**: Steve Weathers
Address: 2135 South Loop 250 W	**Address**
City: Midland / **State**: Texas / **Zip**: 79703	**City** / **State** / **Zip**
Phone No.: 432 686-0086 / **Fax No.**	**Phone No.** / **Fax No.**
Samplers's Name: Justin Covey	**Client Purchase Order #**

Requested Analyses

Matrix Codes: DW - Drinking Water; GW - Ground Water; WW - Wastewater; SO - Soil; SL - Sludge; OI - Oil; LIQ - Liquid; SOL - Other Solid

Accutest Sample #	Field ID / Point of Collection	Collection: Date	Collection: Time	Matrix	# of bottles	Number of preserved bottles: HCl	NaOH	HNO3	H2SO4	ENCORE	NaHSO4	MEOH	NONE	BTEX - 8260B	GRO 8015	DRO 8015	LAB USE ONLY
1	MW-G-40	7.10.13	1650	SO	5				X			X	X	X	X	X	
2	MW-G-55	↓	1655														
3	MW-AR-55	7.11.13	1045														
4	MW-AR-45		1015														
5	WASTECHAR-1		1300	↓	2				X					↓	↓	↓	
6	Trip Blank				2	X								X	VOA		

Turnaround Time (Business days)

- [X] 10 Day *STANDARD* — Approved By:/ Date:
- [ ] 7 Day
- [ ] 4 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*
- [ ] Other — 10 calendar day

Real time analytical data available via Lablink

Data Deliverable Information

- [ ] Commercial "A"
- [X] Commercial "B"
- [ ] Reduced Tier 1
- [ ] Full Data Package
- [ ] TRRP-13
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only

Commercial "B" = Results & Standard QC

Comments / Remarks

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1		7.12.13/1700	FedEx	FEDEX	7/13/13	
2						
3						
4						
5						

Custody Seal # — Preserved where applicable ☐ — On Ice ☐ — Cooler Temp.

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: TC33720 **Client:** CONESTOGA ROVERS & ASSOCIATES **Project:** DCP MIDSTREAM HOBBS 059097-2012-04

Date / Time Received: 7/13/2013 **Delivery Method:** **Airbill #'s:** 566735478937

No. Coolers: 1 **Therm ID:** IR-5; **Temp Adjustment Factor:** 0;

Cooler Temps (Initial/Adjusted): #1: (0.8/0.8);

Cooler Security	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Cooler temp verification:			
3. Cooler media:	Ice (Bag)		

Quality Control Preservation	Y	or	N	N/A	WTB	STB
1. Trip Blank present / cooler:	☑		☐	☐	☑	☐
2. Trip Blank listed on COC:	☑		☐	☐		
3. Samples preserved properly:	☑		☐			
4. VOCs headspace free:	☑		☐	☐		

Sample Integrity - Documentation	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:713.271.4700
10165 Harwin Drive
F: 713.271.4770
Houston, TX 77036
www/accutest.com

TC33720: Chain of Custody
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Sample Receipt Log

Job #: TC33720 **Date / Time Received:** 7/13/2013 9:30:00 AM **Initials:** EC

Client: CONESTOGA ROVERS & ASSOCIATES

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC33720-1	8oz	1	2-52	N/P	Note #2 - Preservative check not applicable.	IR-5	0.8	0	0.8
1	TC33720-1	40ml	2	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-1	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-1	40ml	4	VR	NaHSO4	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-1	40ml	5	VR	NaHSO4	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-2	8oz	1	2-52	N/P	Note #2 - Preservative check not applicable.	IR-5	0.8	0	0.8
1	TC33720-2	40ml	2	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-2	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-2	40ml	4	VR	NaHSO4	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-2	40ml	5	VR	NaHSO4	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-3	8oz	1	2-52	N/P	Note #2 - Preservative check not applicable.	IR-5	0.8	0	0.8
1	TC33720-3	40ml	2	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-3	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-3	40ml	4	VR	NaHSO4	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-3	40ml	5	VR	NaHSO4	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-4	8oz	1	2-52	N/P	Note #2 - Preservative check not applicable.	IR-5	0.8	0	0.8
1	TC33720-4	40ml	2	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-4	40ml	3	VR	MeOH	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-4	40ml	4	VR	NaHSO4	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-4	40ml	5	VR	NaHSO4	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8
1	TC33720-5	8oz	1	2-52	N/P	Note #2 - Preservative check not applicable.	IR-5	0.8	0	0.8
1	TC33720-5	8oz	2	VR	N/P	Note #2 - Preservative check not applicable.	IR-5	0.8	0	0.8
1	TC33720-6	40ml	1	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8

TC33720: Chain of Custody
Page 3 of 4

Sample Receipt Log

Job #: TC33720 **Date / Time Received:** 7/13/2013 9:30:00 AM **Initials:** EC

Client: CONESTOGA ROVERS & ASSOCIATES

Cooler #	Sample ID:	Vol	Bot #	Location	Pres	pH	Therm ID	Initial Temp	Therm CF	Corrected Temp
1	TC33720-6	40ml	2	VR	HCL	Note #1 - Preservative to be checked by analyst at the instrument.	IR-5	0.8	0	0.8

TC33720: Chain of Custody
Page 4 of 4

Gulf Coast ACCUTEST LABORATORIES

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX1955-MB	X0093074.D	1	07/16/13	AK	n/a	n/a	VX1955

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-6

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.34	ug/l	
100-41-4	Ethylbenzene	ND	1.0	0.32	ug/l	
108-88-3	Toluene	ND	1.0	0.33	ug/l	
1330-20-7	Xylene (total)	ND	3.0	0.87	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	104%	72-122%
17060-07-0	1,2-Dichloroethane-D4	91%	68-124%
2037-26-5	Toluene-D8	93%	80-119%
460-00-4	4-Bromofluorobenzene	98%	72-126%

Method Blank Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR478-MB	R016394.D	1	07/17/13	CF	n/a	n/a	VR478

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-1, TC33720-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	3.9	0.65	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.93	ug/kg	
108-88-3	Toluene	ND	3.9	0.98	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.7	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	59-126%
2037-26-5	Toluene-D8	103%	70-139%
460-00-4	4-Bromofluorobenzene	102%	63-138%
17060-07-0	1,2-Dichloroethane-D4	114%	54-123%

Method Blank Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1941-MB	M0048754.D	1	07/17/13	CF	n/a	n/a	VM1941

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	3.9	0.66	ug/kg	
100-41-4	Ethylbenzene	ND	3.9	0.94	ug/kg	
108-88-3	Toluene	ND	3.9	0.99	ug/kg	
1330-20-7	Xylene (total)	ND	12	2.7	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	74%	59-126%
2037-26-5	Toluene-D8	75%	70-139%
460-00-4	4-Bromofluorobenzene	73%	63-138%
17060-07-0	1,2-Dichloroethane-D4	67%	54-123%

Blank Spike Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VX1955-BS	X0093072.D	1	07/16/13	AK	n/a	n/a	VX1955

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-6

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	20.6	82	68-119
100-41-4	Ethylbenzene	25	21.6	86	71-117
108-88-3	Toluene	25	21.3	85	73-119
1330-20-7	Xylene (total)	75	68.3	91	74-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	101%	72-122%
17060-07-0	1,2-Dichloroethane-D4	89%	68-124%
2037-26-5	Toluene-D8	97%	80-119%
460-00-4	4-Bromofluorobenzene	97%	72-126%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VR478-BS	R016392.D	1	07/16/13	CF	n/a	n/a	VR478

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-1, TC33720-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	48.4	45.0	93	58-124
100-41-4	Ethylbenzene	48.4	47.3	98	57-124
108-88-3	Toluene	48.4	45.7	95	67-119
1330-20-7	Xylene (total)	145	148	102	62-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	104%	59-126%
2037-26-5	Toluene-D8	104%	70-139%
460-00-4	4-Bromofluorobenzene	105%	63-138%
17060-07-0	1,2-Dichloroethane-D4	117%	54-123%

* = Outside of Control Limits.

Blank Spike Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VM1941-BS	M0048752.D	1	07/17/13	CF	n/a	n/a	VM1941

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	47.8	43.6	91	58-124
100-41-4	Ethylbenzene	47.8	45.2	95	57-124
108-88-3	Toluene	47.8	44.8	94	67-119
1330-20-7	Xylene (total)	143	143	100	62-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	74%	59-126%
2037-26-5	Toluene-D8	78%	70-139%
460-00-4	4-Bromofluorobenzene	74%	63-138%
17060-07-0	1,2-Dichloroethane-D4	66%	54-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC33683-1MS	X0093081.D	1	07/16/13	AK	n/a	n/a	VX1955
TC33683-1MSD	X0093082.D	1	07/16/13	AK	n/a	n/a	VX1955
TC33683-1	X0093080.D	1	07/16/13	AK	n/a	n/a	VX1955

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-6

CAS No.	Compound	TC33683-1 ug/l	Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		25	21.6	86	21.3	85	1	68-119/12
100-41-4	Ethylbenzene	ND		25	21.9	88	21.8	87	0	71-117/12
108-88-3	Toluene	ND		25	22.4	90	22.1	88	1	73-119/13
1330-20-7	Xylene (total)	ND		75	70.1	93	69.8	93	0	74-119/13

CAS No.	Surrogate Recoveries	MS	MSD	TC33683-1	Limits
1868-53-7	Dibromofluoromethane	101%	102%	106%	72-122%
17060-07-0	1,2-Dichloroethane-D4	90%	90%	93%	68-124%
2037-26-5	Toluene-D8	96%	96%	97%	80-119%
460-00-4	4-Bromofluorobenzene	97%	98%	101%	72-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC33568-1MS	R016412.D	1	07/17/13	CF	n/a	n/a	VR478
TC33568-1MSD	R016413.D	1	07/17/13	CF	n/a	n/a	VR478
TC33568-1 [a]	R016411.D	1	07/17/13	CF	n/a	n/a	VR478

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-1, TC33720-2

CAS No.	Compound	TC33568-1 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		10900	9490	87	8740	80	8	58-124/26
100-41-4	Ethylbenzene	686	J	10900	11100	96	10400	89	7	57-124/29
108-88-3	Toluene	818	J	10900	10800	92	10200	86	6	67-119/28
1330-20-7	Xylene (total)	4970		32700	38300	102	36500	97	5	62-120/27

CAS No.	Surrogate Recoveries	MS	MSD	TC33568-1	Limits
1868-53-7	Dibromofluoromethane	95%	94%		59-126%
2037-26-5	Toluene-D8	100%	100%		70-139%
460-00-4	4-Bromofluorobenzene	101%	102%		63-138%
17060-07-0	1,2-Dichloroethane-D4	106%	106%		54-123%

(a) Sample used for QC purposes only.

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC33720-5MS	M0048756.D	1	07/17/13	CF	n/a	n/a	VM1941
TC33720-5MSD	M0048757.D	1	07/17/13	CF	n/a	n/a	VM1941
TC33720-5	M0048755.D	1	07/17/13	CF	n/a	n/a	VM1941

The QC reported here applies to the following samples: **Method:** SW846 8260B

TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	TC33720-5 ug/kg	Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND		49.7	47.9	96	44.5	91	7	58-124/26
100-41-4	Ethylbenzene	ND		49.7	50.2	101	46.9	96	7	57-124/29
108-88-3	Toluene	ND		49.7	49.5	100	45.8	94	8	67-119/28
1330-20-7	Xylene (total)	ND		149	157	105	147	101	7	62-120/27

CAS No.	Surrogate Recoveries	MS	MSD	TC33720-5	Limits
1868-53-7	Dibromofluoromethane	71%	72%	73%	59-126%
2037-26-5	Toluene-D8	77%	78%	75%	70-139%
460-00-4	4-Bromofluorobenzene	74%	75%	73%	63-138%
17060-07-0	1,2-Dichloroethane-D4	64%	65%	65%	54-123%

* = Outside of Control Limits.

Gulf Coast ACCUTEST LABORATORIES

GC Volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB798-MB	BB0015505.D	1	07/16/13	LT	n/a	n/a	GBB798

The QC reported here applies to the following samples: **Method:** SW846 8015

TC33720-1, TC33720-2, TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	0.96	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	91%	53-130%
98-08-8	aaa-Trifluorotoluene	100%	67-126%

Blank Spike Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GBB798-BS	BB0015503.D	1	07/16/13	LT	n/a	n/a	GBB798

The QC reported here applies to the following samples: **Method:** SW846 8015

TC33720-1, TC33720-2, TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.405	101	72-120

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	101%	53-130%
98-08-8	aaa-Trifluorotoluene	110%	67-126%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
TC33720-1MS	BB0015507.D	1	07/16/13	LT	n/a	n/a	GBB798
TC33720-1MSD	BB0015508.D	1	07/16/13	LT	n/a	n/a	GBB798
TC33720-1	BB0015506.D	1	07/16/13	LT	n/a	n/a	GBB798

The QC reported here applies to the following samples: **Method:** SW846 8015

TC33720-1, TC33720-2, TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	TC33720-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND		21.4	23.9	112	25.1	117	5	72-120/13

CAS No.	Surrogate Recoveries	MS	MSD	TC33720-1	Limits
460-00-4	4-Bromofluorobenzene	96%	97%	91%	53-130%
98-08-8	aaa-Trifluorotoluene	106%	107%	99%	67-126%

* = Outside of Control Limits.

Gulf Coast ACCUTEST LABORATORIES

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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

Method Blank Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29075-MB	IB224510.D	1	07/16/13	CF	07/16/13	OP29075	GIB1598

The QC reported here applies to the following samples: **Method:** SW846 8015 M

TC33720-1, TC33720-2, TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	Result	RL	MDL	Units	Q
	TPH (C10-C28)	ND	3.3	1.1	mg/kg	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	74%	41-123%

Blank Spike Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29075-BS	IB224512.D	1	07/16/13	CF	07/16/13	OP29075	GIB1598

The QC reported here applies to the following samples: **Method:** SW846 8015 M

TC33720-1, TC33720-2, TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.2	23.9	72	52-113

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	70%	41-123%

* = Outside of Control Limits.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: TC33720
Account: DUKE DCP Midstream, LLC
Project: CRA: DCP Midstream-Hobbs

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP29075-MS	IB224522.D	1	07/16/13	CF	07/16/13	OP29075	GIB1598
OP29075-MSD	IF224523.D	1	07/16/13	CF	07/16/13	OP29075	GIF1598
TC33730-1	IB224518.D	1	07/16/13	CF	07/16/13	OP29075	GIB1598

The QC reported here applies to the following samples: **Method:** SW846 8015 M

TC33720-1, TC33720-2, TC33720-3, TC33720-4, TC33720-5

CAS No.	Compound	TC33730-1 mg/kg	Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	16.9		33.2	49.8	99	49.1	97	1	52-113/34

CAS No.	Surrogate Recoveries	MS	MSD	TC33730-1	Limits
84-15-1	o-Terphenyl	94%	75%	86%	41-123%

* = Outside of Control Limits.