370 17th Street, Suite 2500
Denver, Colorado 80202
303-605-1893 – main
303-605-1957 – fax

February 13, 2012

UPS Tracking #1ZF469150291353885

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

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

Dear Mr. von Gonten:

DCP Midstream, LP (DCP) is pleased to submit for your review one copy of the Site Assessment Report for the DCP Burton Flats Booster Station located in Eddy County, New Mexico.

The assessment activities occurred from November 30 through December 2, 2011. In the first quarter of 2012, the new wells will be surveyed and the groundwater sampled. The results of these activities will be reported in the First Quarter 2012 Groundwater Monitoring Report submittal.

If you have any questions regarding the report, please call at 303-605-1695 or e-mail me CECole@dcpmidstream.com .

Sincerely,

DCP Midstream, LP

Chandler E. Cole
Senior Environmental Specialist

Enclosure

cc: Mr. Mike Bratcher - EMNRD
Mr. Jim Amos – BLM Carlsbad
Mr. Jon Bebbington – DCP
Environmental Files

SITE ASSESSMENT REPORT

BURTON FLATS BOOSTER STATION
EDDY COUNTY, NEW MEXICO

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

Nicole Taylor
Project Geologist

For: Nicole Taylor

John Riggi, P.G.
Senior Project Geologist

Prepared by:
Conestoga-Rovers & Associates

2420 West 26th Ave, Suite 450-D
Denver, CO 80211

Office: 720-975-9120
Fax: 720-975-9150

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CONESTOGA-ROVERS
& ASSOCIATES

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CONESTOGA-ROVERS
& ASSOCIATES

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1.0 INTRODUCTION

Conestoga-Rovers & Associates (CRA) is submitting this *Site Assessment Report* to DCP Midstream (DCP) for the Burton Flats Booster Station in Eddy County, New Mexico. Previous investigations identified soil and groundwater impact near the former aboveground storage tank (AST) area, southwest of the site compressors. CRA recommended advancement of six soil borings and completing four as groundwater monitoring wells to delineate the magnitude and extent of soil and groundwater impact in a DCP March 10, 2010 Site Assessment Workplan and subsequent July 11, 2011 Site Assessment Workplan Addendum. CRA prepared this report detailing the 2011 site assessment. The regulatory framework, site background, investigation details, and conclusions and recommendations are presented below.

2.0 REGULATORY FRAMEWORK

The New Mexico Oil Conservation Division (NMOCD) has regulatory jurisdiction over oil and gas production operations including hydrocarbon spill/closure 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 depth to groundwater is approximately 20 feet (ft) below ground surface (bgs). The ranking score is a minimum of 20 without evaluating surrounding domestic wells and surface waters near the site.

3.0 SITE BACKGROUND

3.1 SITE DESCRIPTION

The site is a booster station located in Eddy County, New Mexico. The legal description of the site is Lots 4 and 5, Section 1, Township 21 South (T21S), Range 27 East (R27E) (Figure 1). Soil staining was observed near the former AST location. DCP submitted an initial C-141 report to the District 2, NMOCD to notify the agency of the subject release and corrective actions performed. Previous investigations conducted in 2009 and 2010 identified petroleum hydrocarbons in soil above RRALs. The Siteplan is presented as Figure 2. Site photographs are presented as Appendix A.

4.0 SITE ASSESSMENT

4.1 INVESTIGATION RATIONALE

Previous investigations did not adequately define the extent of impact at the site. Boring BH-5 was advanced in 2009 to investigate the former AST area southwest of the compressor station. Soil samples collected from boring BH-5 contained total petroleum hydrocarbons (TPH) and total benzene, toluene, ethylbenzene, and xylenes (BTEX) above the NMOCD RRALs from approximately 5 to 20 ft bgs. Chlorides were detected above 250 milligrams per kilogram (mg/kg) in soil samples collected from borings BH-1 through BH-5. Groundwater samples collected from soil boring BH-2 contained benzene, toluene, ethylbenzene, and total xylenes above the New Mexico Water Quality Control Commission (NMWQCC) standards. Historical soil analytical data is presented as Appendix B. Historical groundwater analytical data is presented as Appendix C.

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, sub-contractor, 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. The boreholes were cleared to 5 ft bgs with an air knife prior to drilling.

4.3 SOIL BORINGS AND SAMPLING

Soil borings were advanced by Straub Drilling, a New Mexico State licensed water well driller, on November 30 through December 2, 2011. CRA supervised the investigation and performed all field sampling. All activities were conducted in accordance with the NMOCD *Guidelines for Remediation of Spills, Leaks, and Releases* and CRA's *Health and Safety Plan.*

Soil borings and monitoring wells were advanced using an air rotary drill rig. A trained geologist logged soil from each boring using the Unified Soil Classification System. Soil samples were screened for volatile organic compounds (VOCs) using a GasAlertMicro 5 photoionization detector. Field screening results are presented on the soil boring logs. 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-1 through MW-4 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 hydrated bentonite to 1 ft bgs. The wells were completed with above ground surface outer casings and set in concrete pads. Field notes are presented as Appendix D. CRA soil boring logs are presented as Appendix E. The NMOSE application and permit to drill the water wells is presented as Appendix F.

4.4 SITE LITHOLOGY AND HYDROGEOLOGY

Site subsurface sediments consist primarily of poorly graded sand and silt underlain by silt and clay to the total explored depth of 35 ft bgs. Static groundwater depths ranged from 21.17 to 23.02 ft bgs during the December 2011 monitoring event. The newly installed groundwater wells will be surveyed during the first quarter 2012. Groundwater flow direction and gradient will be presented in the First Quarter 2012 Groundwater Monitoring Report. North-south and east-west geologic cross-sections are presented as Figure 3 and Figure 4, respectively.

4.5 WELL DEVELOPMENT

Groundwater monitoring wells MW-1 through MW-3 were developed on December 2, 2011. The monitoring wells were 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-4 was not developed due to hydrogen sulfide (H_2S) and VOC detections above 5 parts per million (ppm) in the ambient air surrounding the well.

4.6 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 until final transport and disposal.

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 8021B, and
- Chlorides by Environmental Protection Agency (EPA) Method 9056.

5.2 SOIL ANALYTICAL RESULTS

No toluene was detected in any collected soil sample above method detection limits (MDL). The maximum TPHd concentration was 1,730 mg/kg in sample MW-4 at 17 ft bgs. The maximum benzene concentration was 1.14 mg/kg in sample MW-1 at 20 ft bgs. Soil sample MW-1 at 20 ft bgs contained the maximum ethylbenzene (7.46 mg/kg), xylenes (3.93 mg/kg), and TPHg (985 mg/kg). Chlorides were detected above 250 mg/kg in sample MW-2 at 10 ft bgs (561 mg/kg) and sample SB11-2 at 10 ft bgs (392 mg/kg). The Accutest laboratory analytical report for BTEX and TPHg is presented as Appendix G. The Accutest laboratory analytical report for TPHd and chloride is presented as Appendix H. Soil analytical results for BTEX and TPHg are presented on Table 1. Soil analytical results for TPHd and chloride are presented on Table 2. Petroleum hydrocarbon concentration map is presented as Figure 5.

5.3 QUALITY ASSURANCE/QUALITY CONTROL EVALUATION

In an effort to measure field-related components of quality and reproducibility, two field duplicate (DUP-1 and DUP-2) samples were collected from MW-3 at 20 ft bgs and SB11-2 at 20 ft bgs, respectively. Duplicate samples were analyzed for the identical analyses (BTEX, TPHg, TPHd, and chloride). Duplicate constituents were detected without any significant deviations with the exception of the TPHd result for DUP-1. Quality Assurance/Quality Control (QA/QC) results are included with the laboratory reports.

6.0 CONCLUSIONS AND RECOMMENDATIONS

- Site subsurface sediments consist primarily of poorly graded sand and silt underlain by silt and clay which is consistent with local geology. Static groundwater depths at the site range from approximately 21 to 23 ft bgs. CRA will survey the newly installed wells with a licensed New Mexico Surveyor and confirm groundwater flow direction.

- Soil samples collected from MW-2, MW-3, and SB11-1 contained no TPHd, TPHg, benzene, ethylbenzene, or xylenes above NMOCD RRALs.

- Maximum detections of TPHg, benzene, ethylbenzene, and xylenes were found in samples collected from MW-1.

- Chloride concentrations above 250 mg/kg were detected in MW-2 and SB11-2.

- CRA recommends completing the well casing elevation surveys and determining the groundwater flow direction during the first quarter 2012. CRA recommends advancing additional soil borings/wells near the former excavation and north of MW-1 to define the lateral extent of hydrocarbon contamination once groundwater flow direction is determined. CRA will continue to monitor groundwater quality in 2012.

FIGURES

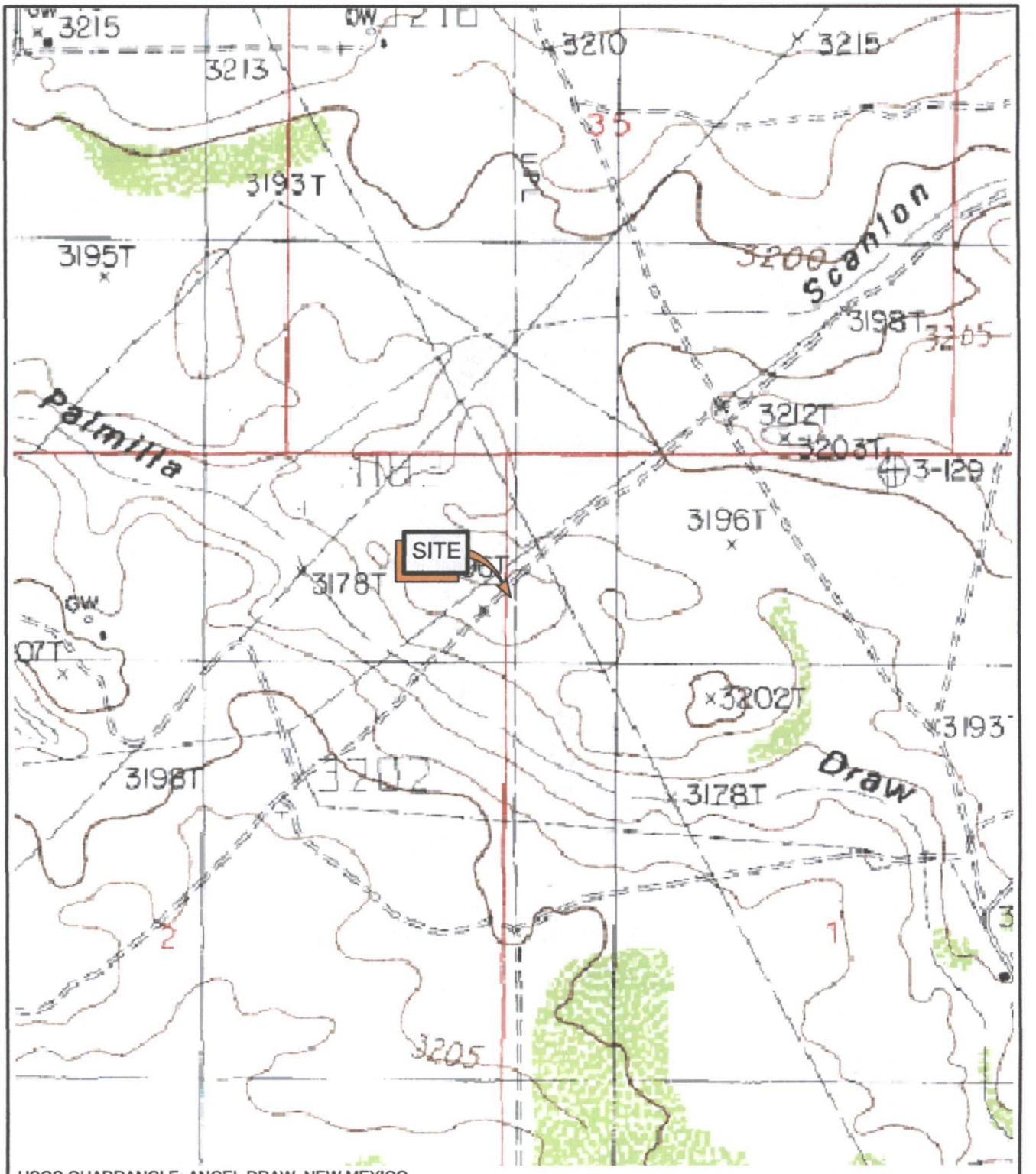
FIGURE 1: VICINITY MAP

FIGURE 2: SITE PLAN

FIGURE 3: GEOLOGIC CROSS SECTION A-A'

FIGURE 4: GEOLOGIC CROSS SECTION B-B'

FIGURE 5: PETROLEUM HYDROCARBON CONCENTRATIONS IN SOIL



USGS QUADRANGLE: ANGEL DRAW, NEW MEXICO
N 32.51969 W 104.15140

0 500 1500ft

figure 1

VICINITY MAP
BURTON FLATS
EDDY COUNTY, NEW MEXICO
DCP Midstream

070537-10(001)GN-MD001 MAR 04/2010

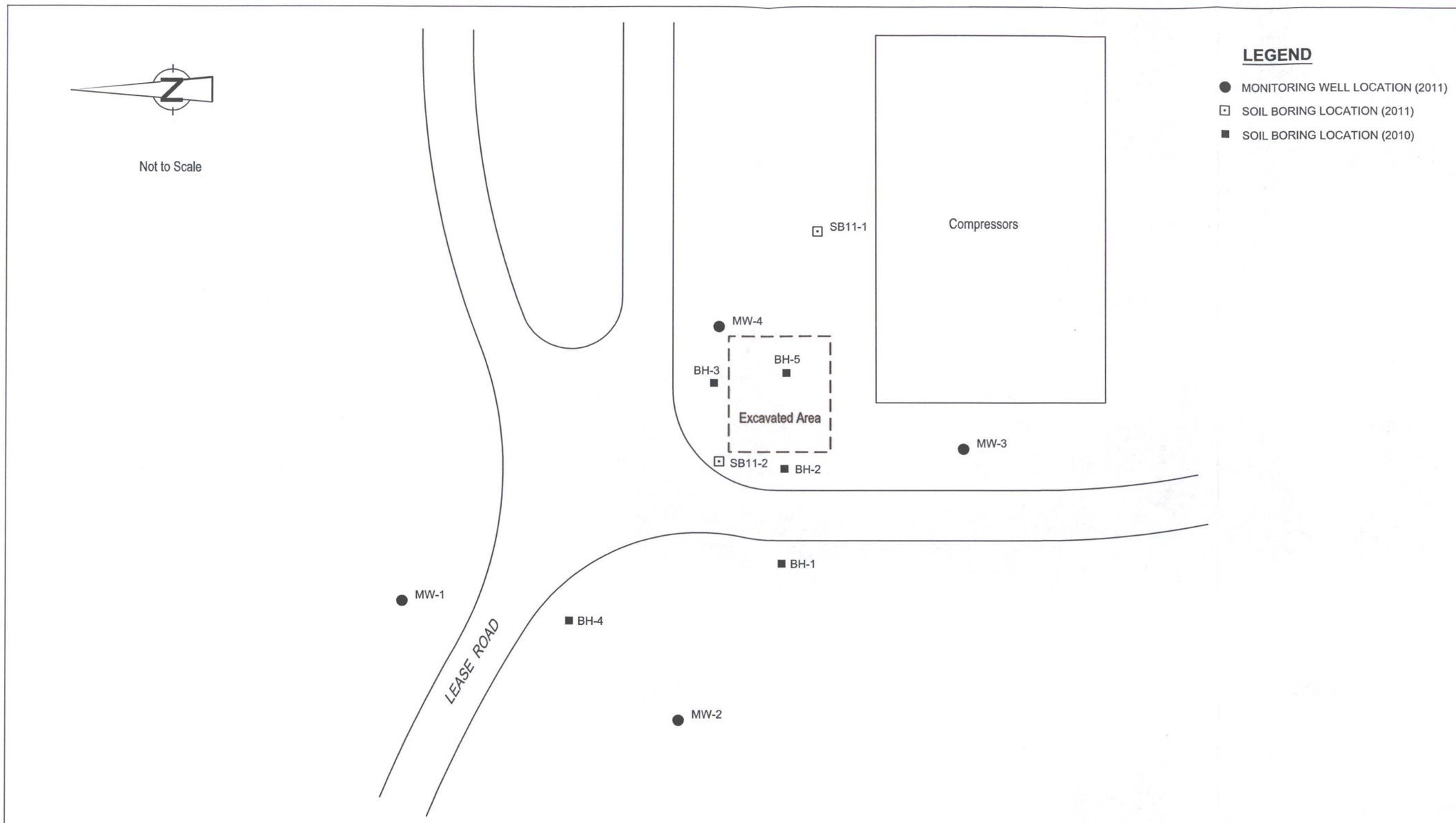
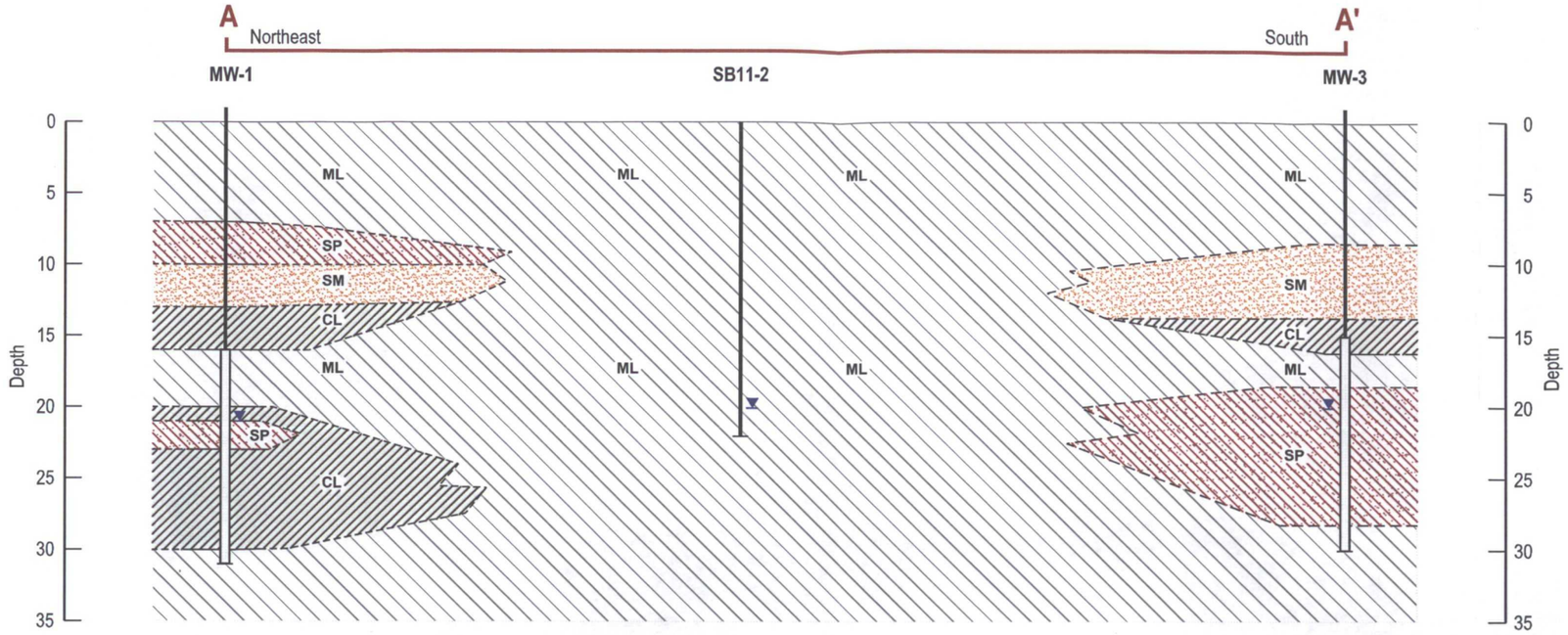
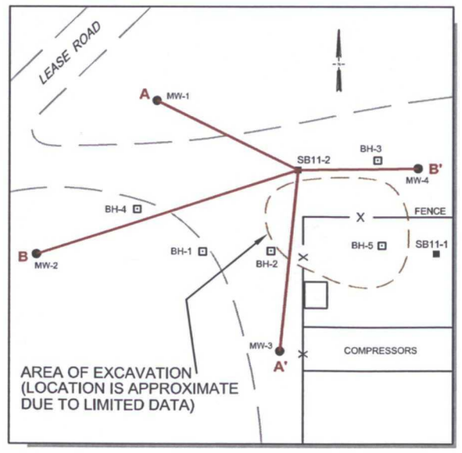


Figure 2

SITE PLAN
BURTON FLATS BOOSTER STATION
LOTS 4 AND 5, SECTION 1, T21S, R27E
Eddy County, New Mexico

070537-2012(001)GN-DN002 JAN 17/2012





EXPLANATION

- CL - Clay
- ML - Silt
- SM - Poorly graded sand with silt
- SP - Poorly Graded Sand

Well ID — Well Designation
Groundwater Monitoring Well
Well Screen Interval
Bottom of boring
Depth of Groundwater

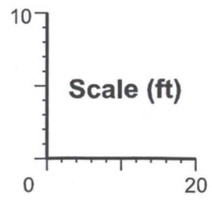
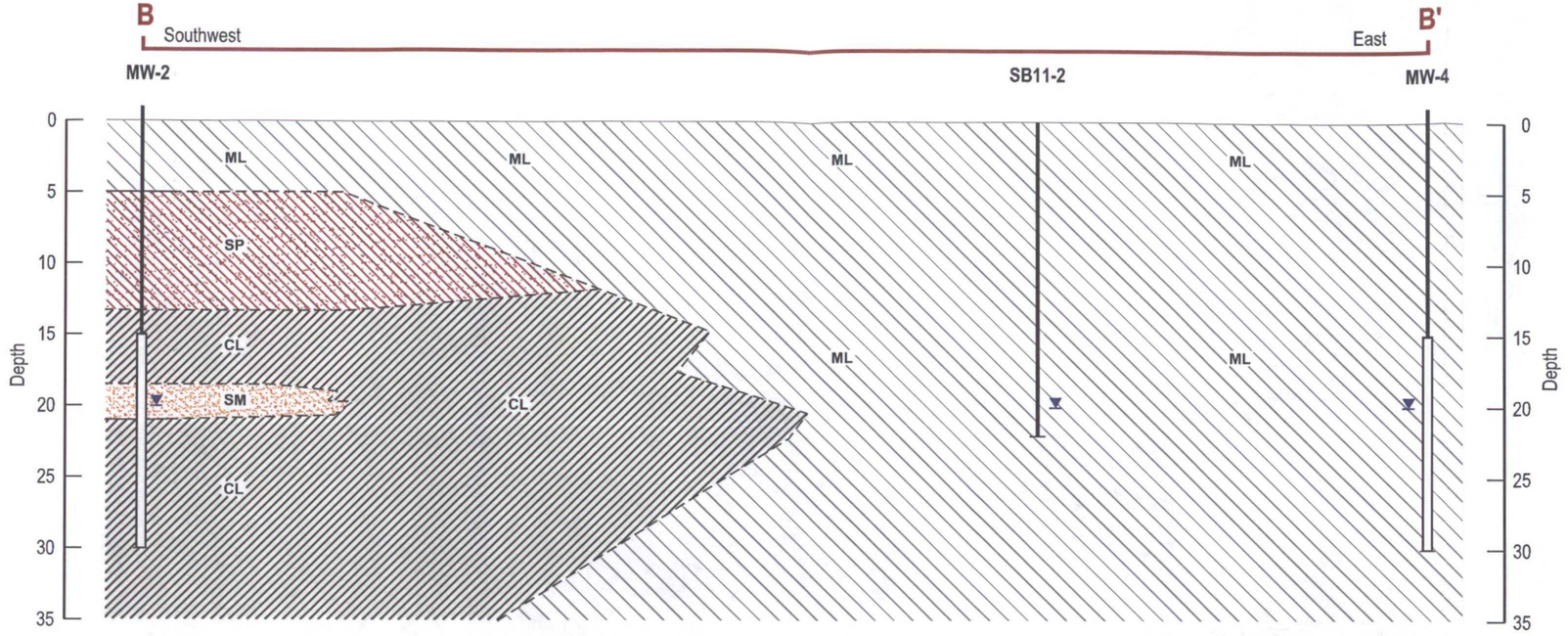
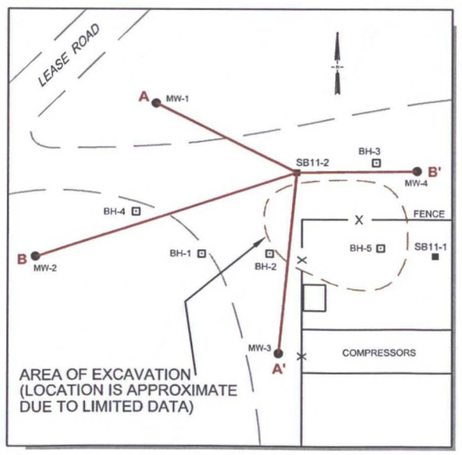


Figure 3

GEOLOGIC CROSS SECTION A-A'
BURTON FLATS BOOSTER STATION
LOTS 4 AND 5, SECTION 1, T21S, R27E
Eddy County, New Mexico





EXPLANATION

- CL - Clay
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Well ID — Well Designation
Groundwater Monitoring Well
Well Screen Interval
Bottom of boring
Depth of Groundwater

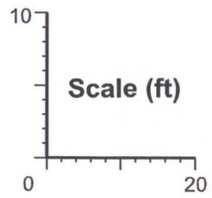
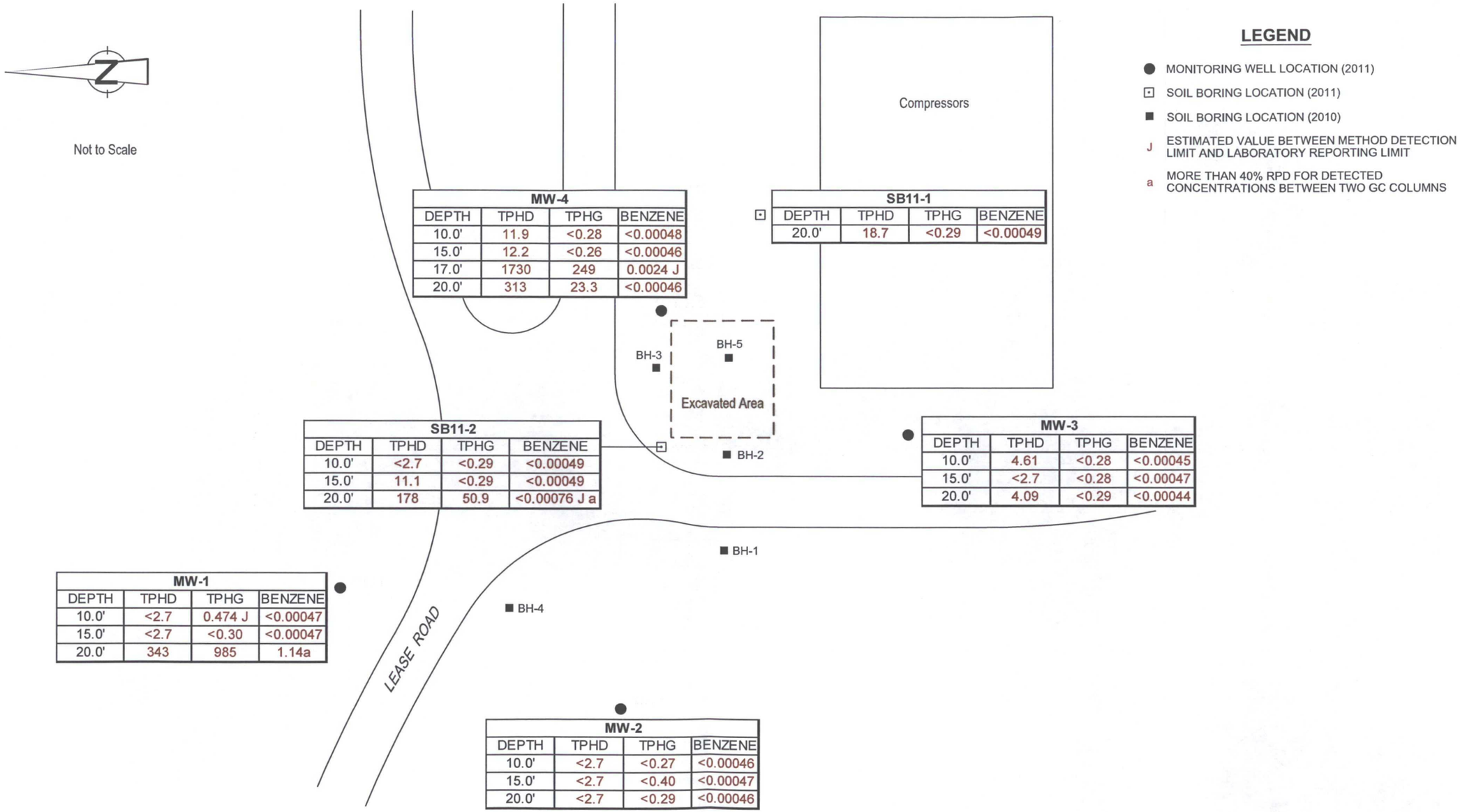


Figure 4

GEOLOGIC CROSS SECTION B-B'
BURTON FLATS BOOSTER STATION
LOTS 4 AND 5, SECTION 1, T21S, R27E
Eddy County, New Mexico

Not to Scale



MW-4

DEPTH	TPHD	TPHG	BENZENE
10.0'	11.9	<0.28	<0.00048
15.0'	12.2	<0.26	<0.00046
17.0'	1730	249	0.0024 J
20.0'	313	23.3	<0.00046

SB11-1

DEPTH	TPHD	TPHG	BENZENE
20.0'	18.7	<0.29	<0.00049

SB11-2

DEPTH	TPHD	TPHG	BENZENE
10.0'	<2.7	<0.29	<0.00049
15.0'	11.1	<0.29	<0.00049
20.0'	178	50.9	<0.00076 J a

MW-3

DEPTH	TPHD	TPHG	BENZENE
10.0'	4.61	<0.28	<0.00045
15.0'	<2.7	<0.28	<0.00047
20.0'	4.09	<0.29	<0.00044

MW-1

DEPTH	TPHD	TPHG	BENZENE
10.0'	<2.7	0.474 J	<0.00047
15.0'	<2.7	<0.30	<0.00047
20.0'	343	985	1.14a

MW-2

DEPTH	TPHD	TPHG	BENZENE
10.0'	<2.7	<0.27	<0.00046
15.0'	<2.7	<0.40	<0.00047
20.0'	<2.7	<0.29	<0.00046

LEGEND

- MONITORING WELL LOCATION (2011)
- SOIL BORING LOCATION (2011)
- SOIL BORING LOCATION (2010)
- J — ESTIMATED VALUE BETWEEN METHOD DETECTION LIMIT AND LABORATORY REPORTING LIMIT
- a — MORE THAN 40% RPD FOR DETECTED CONCENTRATIONS BETWEEN TWO GC COLUMNS

Figure 5

PETROLEUM HYDROCARBON CONCENTRATIONS IN SOIL
BURTON FLATS BOOSTER STATION
LOTS 4 AND 5, SECTION 1, T21S, R27E
Eddy County, New Mexico

070537-2012(001)GN-DN005 JAN 17/2012

TABLES

TABLE 1: SOIL ANALYTICAL RESULTS-BTEX AND TPHG

TABLE 2: SOIL ANALYTICAL RESULTS-TPHD AND CHLORIDE

Table 1. **Soil Analytical Results for BTEX and TPHg**
DCP Burton Flats Booster Station, Eddy County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft bgs)	TPHg	Benzene	Toluene	Ethylbenzene	Xylenes (Total)
			◄		mg/kg		►
MW-1-113011-10.0	11/30/2011	10	0.474 J	<0.00047	<0.00063	<0.00064	<0.0017
MW-1-113011-15.0	11/30/2011	15	<0.30	<0.00047	<0.00063	<0.00064	<0.0017
MW-1-113011-20.0	11/30/2011	20	**985**	**1.14**[a]	<0.033	**7.46**	**3.93**[a]
MW-2-113011-10.0	11/30/2011	10	<0.27	<0.00046	<0.00061	<0.00063	<0.0016
MW-2-113011-15.0	11/30/2011	15	<0.40	<0.00047	<0.00063	<0.00065	<0.0017
MW-2-113011-20.0	11/30/2011	20	<0.29	<0.00046	<0.00061	<0.00063	<0.0016
MW-3-120111-10.0	12/01/2011	10	<0.28	<0.00045	<0.00060	<0.00062	<0.0016
MW-3-120111-15.0	12/01/2011	15	<0.28	<0.00047	<0.00062	<0.00064	<0.0016
MW-3-120111-20.0	12/01/2011	20	<0.29	<0.00044	<0.00059	<0.00060	<0.0016
DUP-1-120111	12/01/2011	20	<0.30	<0.00043	<0.00057	<0.00059	<0.0015
MW-4-120211-10.0	12/02/2011	10	<0.28	<0.00048	<0.00064	<0.00065	<0.0017
MW-4-120211-15.0	12/02/2011	15	<0.26	<0.00046	<0.00062	<0.00064	<0.0016
MW-4-120211-17.0	12/02/2011	17	**249**	**0.0024 J**	<0.00059	**1.30**	**0.227**
MW-4-120211-20.0	12/02/2011	20	23.3	<0.00046	<0.00062	0.0114	0.0157
SB11-1-120111-20.0	12/01/2011	20	<0.29	<0.00049	<0.00065	<0.00067	<0.0017
SB11-2-120111-10.0	12/01/2011	10	<0.29	<0.00049	<0.00065	<0.00067	<0.0017
SB11-2-120111-15.0	12/01/2011	15	<0.29	<0.00049	<0.00065	<0.00067	<0.0017
SB11-2-120111-20.0	12/01/2011	20	50.9	0.00076 J[a]	<0.00065	**0.0159**[a]	0.0120[a]
DUP-2-120111	12/01/2011	20	53.6	0.0013 J[a]	<0.00063	**0.0187**	0.0146[a]
Recommended Remediation Action Levels*			**100**	**10**	--	--	--
NMED Soil Screening Levels DAF 1**			--	**0.00185**	**1.38**	**0.0146**	**0.176**
NMED Soil Screening Levels DAF 20**			--	**0.0370**	**27.7**	**0.291**	**3.52**

Abbreviations and Methods:

BTEX = Benzene, toluene, ethylbenzene, and xylenes by Method SW-846 8021B
TPHg = Total petroleum hydrocarbons as gasoline by Method SW-846 8015
ft bgs = Feet below ground surface
mg/kg = Milligrams per kilogram
J = Estimated value
<x = Constituent not detected above x milligrams per kilogram
[a] = More than 40% RPD for detected concentrations between two GC columns.
* = Levels established in New Mexico Oil Conservation Division Guidelins for Remediation of Leaks, Spills, and Releases, August, 1993
-- = 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

Table 2. **Soil Analytical Results for TPHd and Chloride**
DCP Burton Flats Booster Station, Eddy County, New Mexico

Sample ID	Date Sampled	Sample Depth (ft bgs)	TPHd	Chloride
			mg/kg	
MW-1-113011-10.0	11/30/2011	10	<2.7	50.6
MW-1-113011-15.0	11/30/2011	15	<2.7	65.4
MW-1-113011-20.0	11/30/2011	20	**343**	49.1
MW-2-113011-10.0	11/30/2011	10	<2.7	**561**
MW-2-113011-15.0	11/30/2011	15	<2.7	**250**
MW-2-113011-20.0	11/30/2011	20	<2.7	159
MW-3-120111-10.0	12/01/2011	10	4.61	65.4
MW-3-120111-15.0	12/01/2011	15	<2.7	105
MW-3-120111-20.0	12/01/2011	20	4.09	49.4
DUP-1-120111	12/01/2011	20	<2.7	44.7
MW-4-120211-10.0	12/02/2011	10	11.9	108
MW-4-120211-15.0	12/02/2011	15	12.2	135
MW-4-120211-17.0	12/02/2011	17	**1,730**	115
MW-4-120211-20.0	12/02/2011	20	**313**	164
SB11-1-120111-20.0	12/01/2011	20	18.7	185
SB11-2-120111-10.0	12/01/2011	10	<2.7	**392**
SB11-2-120111-15.0	12/01/2011	15	11.1	58.5
SB11-2-120111-20.0	12/01/2011	20	**178**	217
DUP-2-120111	12/01/2011	20	**190**	228
Recommended Remediation Action Levels*			**100**	**250**
NMED TPH Screening Guidelines Table 2a**			**1,120**	--
NMED TPH Screening Guidelines Table 2b***			**2,200**	--

Abbreviations and Methods:

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

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 established

NMED = New Mexico Environment Department

** = Levels established in NMED TPH Screening Guidelines, October, 2006, for potable groundwater or potential ingestion or contact with contaminated soil and/or groundwater. Industrial direct exposure level for #2

*** = Levels established in NMED TPH Screening Guidelines, October, 2006, for vapor migration and inhalation of groundwater. Industrial direct exposure level for #2 diesel.

APPENDIX A

SITE PHOTOGRAPHS

1. Site Layout From NW Looking SE

2. Site Layout From SW Looking NE

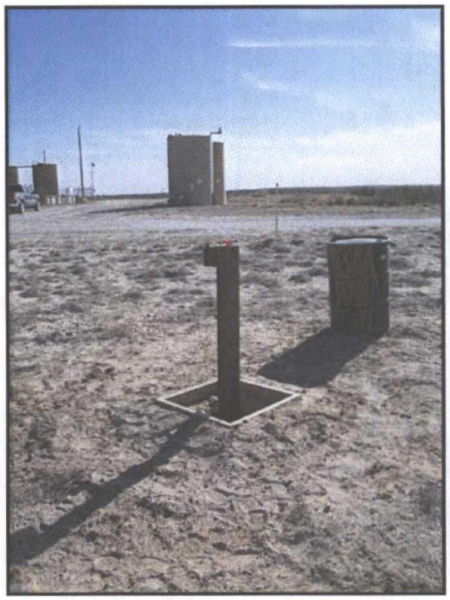
3. Site Layout From SE Looking NW

4. Site Layout From NE Looking SW

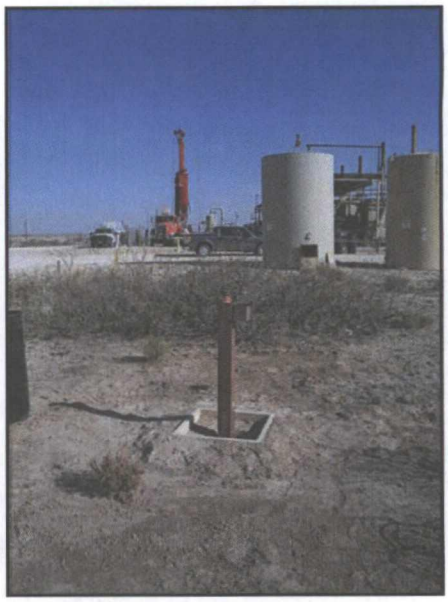
Appendix A

SITE PHOTOGRAPHS
BURTON FLATS BOOSTER STATION

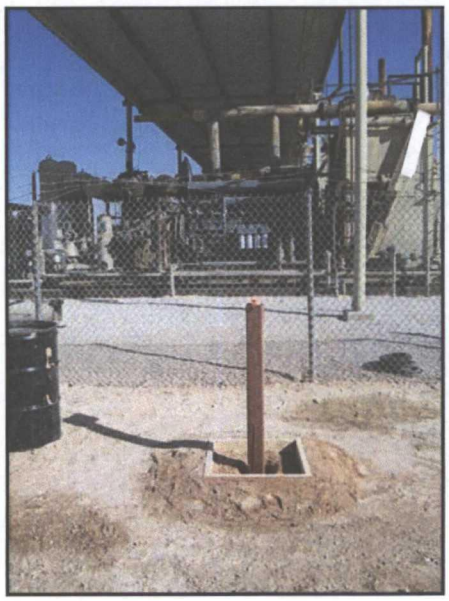
Eddy County, New Mexico



1. MW-1 Looking South



2. MW-2 Looking East



3. MW-3 Looking East

4. MW-4 Looking South

Appendix A

SITE PHOTOGRAPHS
BURTON FLATS BOOSTER STATION

Eddy County, New Mexico

APPENDIX B

HISTORICAL SOIL ANALYTICAL DATA

Table 1: Summary of Laboratory Analysis of Soil Samples from Excavation With Backhoe
DCP Midstream, Burton Flats Booster
Lots 4 and 5, Section 1, T21S, R27E
Eddy County, New Mexico

Sample Date	Soil Sample Number	Sample Depth (feet BGS)	TPH C6-C12 (mg/kg)	TPH C12-C28 (mg/kg)	TPH C28-C35 (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)	Benzene (mg/kg)	Total BTEX (mg/kg)
Standard (WQCC)						100	250	10	50
11/11/09	BH-5	5	9,410	5,550	<376	14,960	3,050	1.885	231.675
11/11/09		10	11,600	6,320	424	18,344	5,160	2.618	273.428
11/11/09		15	3,480	2,120	<362	5,600	3,960	0.911	128.911
11/11/09		20	3,940	2,390	<185	6,330	4,640	1.113	122.063

Notes: Samples Analyzed by Xenco Laboratories, Odessa, TX
1. BGS: Depth in feet below ground surface
2. mg/kg: Milligrams per kilogram
3. ---: No data available
4. <: Below method detection limit

Table 2: Summary of Laboratory Analysis of Soil Samples from Soil Borings
DCP Midstream, Burton Flats Booster
Lots 4 and 5, Section 1, T21S, R27E
Eddy County, New Mexico

Sample Date	Soil Sample Number	Sample Depth (feet BGS)	PID	TPH C6-C10 (mg/kg)	TPH >C10-C28 (mg/kg)	Total TPH (mg/kg)	Field Chloride (mg/kg)	Chloride (mg/kg)	Benzene (mg/kg)	Total BTEX (mg/kg)
Standard (WQCC)						100		250	10	50
1/14/10	BH-1	0-2	120	<10.0	461	461	---	<16		
1/14/10		5-7	140				---	256		
1/14/10		10-12	170	<10.0	53	53	49	112		
1/14/10		15-17	300				55	96	<0.050	0.954
1/14/10		20-22	798	<10.0	15.1	15.1	35	144	<0.050	<0.45
1/14/10	BH-2	0-2	314	<10.0	1,150	1,150	---	64	<0.050	0.057
1/14/10		5-7	114				---	96		
1/14/10		10-12	48.6				28	48		
1/14/10		15-17	257	208	1,070	1,278	114	48		
1/14/10		20-22	965	4,070	9,150	13,220	152	624	0.833	48.263
1/14/10		25-27	340	184	942	1,126	456	1,490	0.091	9.776
1/14/10	BH-3	0-2	112	16.1	190	206.1	---	1,390		
1/14/10		5-7	32.8				---	176		
1/14/10		10-12	104	<10.0	78.4	78.4	37	48	<0.050	2.293
1/14/10		15-17	40	<10.0	79.6	79.6	252	336	<0.050	<0.45
1/14/10		20-22	2.6				112	128		
1/14/10		25-27	13.9	<10.0	43	43	786	3,040		
1/14/10	BH-4	0-2	3.7	<10.0	23.1	23.1	---	<16		
1/14/10		5-7	9.3	<10.0	10.9	10.9	---	96		
1/14/10		10-12	2.1				68	80		
1/14/10		15-17	1.6				320	352		
1/14/10		20-22	1.9	<10.0	<10.0	<20.0	212	240		
1/14/10	BH-5	25-27	989	1,810	8,760	10,570	773	1,020	0.551	17.951

Notes:
1. BGS: Depth in feet below ground surface
2. mg/kg: Milligrams per kilogram
3. ---: No data available
4. <: Below method detection limit

Samples Analyzed by Cardinal Laboratories, Hobbs, NM

APPENDIX C

HISTORICAL GROUNDWATER ANALYTICAL DATA

Table 3: Summary of Laboratory Analysis of Groundwater from Soil Boring
DCP Midstream, Burton Flats Booster
Lots 4 and 5, Section 1, T21S, R27E
Eddy County, New Mexico

Sample Date	Sample Number	Depth to Groundwater (feet bgs)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Total Xylenes (mg/L)	Total BTEX (mg/L)
Standard (WQCC)			0.01	0.75	0.75	0.62	
1/14/10	BH-1	18.6	---	---	---	---	---
1/14/10	BH-2	16.1	2.35	16.2	12.8	70.9	102.25
1/14/10	BH-3	20.6	---	---	---	---	---

Notes: Sample Analyzed by Cardinal Laboratories, Hobbs, NM
Depth to groundwater measured approximately 2 hours after soil boring installation

1. bgs: Below ground surface
2. mg/L: Milligrams per liter

APPENDIX D

FIELD NOTES

CONTENTS

PAGE	REFERENCE	DATE

Location EDDY COUNTY, NM Date 11/30/11

Project / Client DCP BURTON FLATS

25°, CLEAR

0640	DEPART HQ FOR DCP CARLSBAD OFFICE
0654	ARRIVE AT SITE OFFICE FOR SITE SPECIFIC TRAINING.
0700	STRAUB ARRIVES AT DCP SITE OFFICE
0730	BEGIN SITE SPECIFIC TRAINING ORIENTATION
0840	TRAINING COMPLETE
0900	DEPART FOR SITE
0925	ARRIVE ON SITE CONDUCT TAILGATE SAFETY MEETING AND PERFORM SITE WALK TO CHECK MARKOUTS AND BORING LOCATIONS.
1015	ALL UTILITIES EITHER MARKED OR NOTIFIED OF NO CONFLICT DCP REQUIRES A

Location EDDY COUNTY, NM Date 11/30/11

Project / Client DCP BURTON FLATS

HOT WORK PERMIT FOR MW-3 AND MW-4 DUE TO PROXIMITY TO THE COMPRESSORS. JC CUNNINGHAM WILL BRING REQUIRED PERMIT PAPER-WORK TO SITE TOMORROW

1020 SETUP ON MW-1

1050 BEGIN AIR KNIFING MW-1

1125 FINISH AIR KNIFING MW-1 TO 5'bg. BEGIN DRILLING

1145 COLLECT MW-1-113011-5.0

1200 COLLECT MW-1-113011-10.0

1215 COLLECT MW-1-113011-15.0

1225 COLLECT MW-1-113011-20.0

1235 COLLECT MW-1-113011-21.0

1255 FINISH DRILLING AND SAMPLING, BEGIN SETTING MW-1.

~~1410 JC CUNN~~

1345 JON BEBBINGTON WITH

Location EDDY COUNTY, NM Date 11/30/11

Project / Client DCP BURTON FLATS

DCP ONSITE.

1410 JC CUNNINGHAM OFFSITE

1415 FINISH SETTING MW-1 CASING. WILL CEMENT STICK-UP AT JOBS END

1425 BEGIN SETUP ON MW-2

1429 ~~JC CUNNINGHAM~~ JON BEBBINGTON OFFSITE

1438 BEGIN AIR KNIFING MW-2

1456 FINISH AIR KNIFING MW-2 TO 5'bg. BEGIN DRILLING

1510 COLLECT MW-2-113011-5.0

1525 COLLECT MW-2-113011-10.0

1535 COLLECT MW-2-113011-15.0

1545 COLLECT MW-2-113011-20.0

1600 FINISH DRILLING AND SAMPLING, BEGIN SETTING MW-2

1635 FINISH SETTING MW-2 BEGIN PACKING UP SITE FOR DE-MOB

Location EDDY COUNTY, NM Date 11/30/11

Project / Client DCP BURTON FLATS

1708	~~DC~~ DEPART SITE FOR HQ
1740	ARRIVE AT HQ, SECURE VEHICLE

Location EDDY COUNTY, NM Date 12/1/11

Project / Client DCP BURTON FLATS

29°, PARTLY CLOUDY

0630	DEPART HQ FOR SITE
0700	ARRIVE ON SITE
0712	JC CUNNINGHAM WITH DCP ONSITE.
0733	STRAUB DRILLING ONSITE
0785	CONDUCT TAILGATE SAFETY MEETING
0815	SETUP ON MW-3
0835	BEGIN AIR KNIFING ON MW-3
0908	FINISH AIR KNIFING MW-3. BEGIN DRILLING
0916	SWA - TANK TRUCK ONSITE TO EMPTY CONTAINMENT TANKS.
0925	RESUME DRILLING
0945	COLLECT MW-3-120111-5.0
0955	COLLECT MW-3-120111-10.0
1005	COLLECT MW3-120111-15.0
1015	COLLECT MW-3-120111-20.0
	COLLECT DUP-1-120111

Location EDDY COUNTY, NM Date 12/1/11
Project / Client DCP BURTON FLATS

1030 FINISH DRILLING AND SAMPLING, BEGIN SETTING MW-3
1100 FINISH SETTING MW-3.
1105 SETUP ON MW-4
1120 BEGIN CLEARING MW-4 WITH AIR KNIFE.
1155 FINISH CLEARING MW-4. BEGIN DRILLING
1155 COLLECT MW-4-120111-5.0
1205 COLLECT MW-4-120111-10.0
1215 COLLECT MW-4-120111-15.0
1225 COLLECT MW-4-120111-20.0
1235 COLLECT MW-4-120111-25.0
~~COLLECT DUP-2 120111~~
1240 FINISH DRILLING MW-4 BEGIN SETTING MW-4
1330 HEAVING SANDS AND SILTS PREVENTING CASING INSTALLATION BEYOND 22 ftbg. WILL TRY TO

Location EDDY COUNTY, NM Date 12/1/11
Project / Client DCP BURTON FLATS

SPIN OUT HOLE ONE MORE TIME.
1356 STILL UNABLE TO SET CASING AT PROPER DEPTH.
1359 CALL D RICCI TO DISCUSS - RICCI TO CALL CHANDLER COLE WILL SUGGEST COMPLETING THE HOLE AS A BORING RATHER THAN A WELL
1426 WILL BACKFILL MW-4 AS A BORING. SAMPLES WILL BE RENAMED AS:
SB11-1-120111-5.0
SB11-1-120111-10.0
SB11-1-120111-15.0
SB11-1-120111-20.0
SB11-1-120111-25.0
~~DUP-2-120111~~

Location EDDY COUNTY, NM Date 12/1/11

Project / Client DCP BURTON FLATS

1430 BEGIN BACKFILLING SB11-1

1432 SETUP ON SB11-2

1439 BEGIN CLEARING SB11-2

1458 FINISH BACKFILLING SB11-1

1500 BEGIN DRILLING SB11-2

1515 COLLECT SB11-2-120111-10.0

1525 COLLECT SB11-2-120111-15.0

1535 COLLECT SB11-2-120111-20.0
COLLECT DUP-2-120111

1540 FINISH DRILLING SB11-2 AND BEGIN ~~PACKING~~ ~~SITE~~ BACKFILLING

1547 JC CUNNINGHAM OFFSITE

1502 FINISH BACKFILLING SB11-2.

1553 SPOKE WITH J. RIGGI PER DCP PMS REQUEST, ONLY THE 20ft SAMPLE FROM SB11-1 WILL BE

Location EDDY COUNTY, NM Date 12/1/11

Project / Client DCP BURTON FLATS

SUBMITTED FOR ANALYSIS SAMPLES FROM 10ft, 15ft, AND 20ft AT ALL OTHER DRILL LOCATIONS WILL BE ANALYZED

1055 BEGIN PACKING UP SITE

1630 DEPART SITE FOR HQ

1700 ARRIVE AT HQ, SECURE VEHICLE

12

Location EDDY COUNTY, NM Date 12/2/11

Project / Client DCP BURTON FLATS

0635 DEPART HQ FOR SITE
0701 ARRIVE ON SITE.
0730 STRAUB DRILLING ON SITE
0740 CONDUCT TAILGATE SAFETY MEETING
0753 JC CUNNINGHAM ONSITE
0801 SETUP ON MW-4
0809 BEGIN CLEARING ON MW-4 W/ AIR KNIFE
0830 MW-4 CLEARED. JC CUNNINGHAM OFFSITE
0840 BEGIN DRILLING MW-4
0850 COLLECT MW-4-120211-10.0
0900 COLLECT MW-4-120211-15.0
0901 SWA - DRILLERS H_2S ALARM SET OFF AT 21. DRILLERS STEP BACK FROM RIG. USE 5 GAS METER TO COLLECT READINGS & AT FROM

13

Location EDDY COUNTY, NM Date 12/2/11

Project / Client DCP BURTON FLATS

BOREHOLE:
PID: 189
H_2S: 12
CO: -7
FREE PRODUCT COMING UP TO GROUND SURFACE THROUGH BOREHOLE WHEN PUSHING AIR THROUGH RODS. MOVE UPWIND.
0905 CALL J. RIGGI TO DISCUSS LEFT A MESSAGE.
0910 ~~COLLECT MW-4-120211-20.0~~
COLLECT MW-4-120211-17.0 DUE TO ODOR AND PID READING
0920 COLLECT MW-4-120211-20.0
0926 NO WORD FROM J RIGGI. CALL CHANDLER COLE TO DISCUSS - CHANDLER TO GET BACK TO ME
CHANDLER ADVISES

Location _____ Date _____

Project / Client _____

WAITING A HALF HOUR AND THEN READING THE AREA WITH THE FIVE-GAS METER. WE WILL PROCEED WHEN LEVELS ARE SAFE.

1010 START-UP DRILL RIG AGAIN AND COLLECT READINGS NEAR BOREHOLE:
PID :18
H2S :0
CO :0
WILL CONTINUE TO PUSH TO 30ftbg AND SET WELL WHILE MONITORING THE AREA WITH THE 5-GAS METER.

1020 RESUME DRILLING

Location _____ Date _____

Project / Client _____

1028 DRILLER'S PERSONAL H2S MONITOR SET OFF AT 10. STOP WORK

1032 5-GAS METER READING 0 FOR H2S. RESUME WORK.

1042 FINISH DRILLING MW-4. BEGIN SETTING WELL.

1110 MATT DOWNING- REGIONAL H+S OFFICER CALLS TO DISCUSS INCIDENT. WILL REPORT INCIDENT AS A NEAR LOSS

1131 CALL INCIDENT HOTLINE.

1132 FINISH SETTING MW-4

1135 BEGIN DEVELOPING MW-4
PRE WL: 21.19 TD: 34.12
POST WL: 21.36 TD: 34.12

1140 JC CUNNINGHAM ONSITE

Location _____ Date _____

Project / Client _____

1155 COLLECT WS-1-120211 WHICH IS A COMPOSITE SAMPLE OF THE FOLLOWING DRUMS:
- MW-2 - 2 DRUMS
- MW-3 - 2 DRUMS
- SB11-1 - ~~5~~ 4 DRUMS

1215 FINISH DEVELOPING MW-1
1220 SETUP ON MW-2 FOR DEVELOPMENT
1225 BEGIN DEVELOPING MW-2
PRE WL: 22.25 TD: 32.91
POST WL: 22.76 TD: 32.91
1235 COLLECT WS-2-120211 WHICH IS A COMPOSITE OF THE FOLLOWING:
- MW-1 - 1 DRUM
- SB11-2 - 1 DRUM

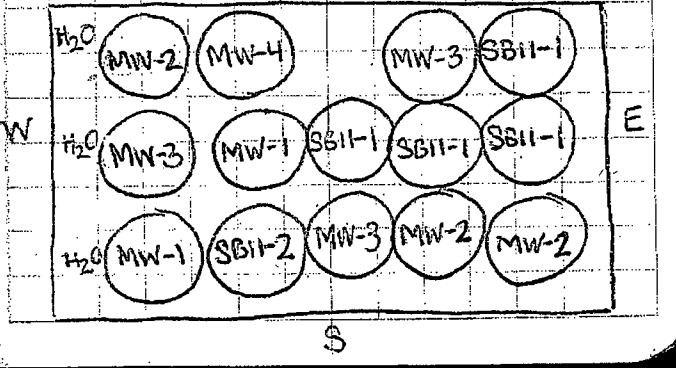
1240 JC CUNNINGHAM OFFSITE
1319 FINISH DEVELOPING MW-2
1326 SETUP ON MW-3 FOR DEVELOPMENT.

Location _____ Date _____

Project / Client _____

1334 BEGIN DEVELOPING MW-3
PRE WL: 22.91 TD 34.09
POST WL: 29.20 TD 34.33
1345 COLLECT WS-3-120211 FROM THE MW-4 DRUM (1 DRUM)
1351 BEGIN PLACING DRUMS IN THE SECONDARY CONTAINMENT ~~WITH~~
1452 JC CUNNINGHAM ONSITE.

SECONDARY CONTAINMENT LAYOUT



19

Location _____ Date _____

Project / Client _____

1500 FINISH DEVELOPING MW-3
1550 FINISH LOADING DRUMS INTO SECONDARY CONTAINMENT BEGIN LOADING EQUIPMENT AND CLEANING SITE
1615 DEPART SITE FOR HQ
1650 ARRIVE AT HQ, SECURE VEHICLE

19

Location _____ Date _____

Project / Client _____

APPENDIX E

SOIL BORING LOGS

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Burton Flats
PROJECT NUMBER: 070537
CLIENT: DCP Midstream
LOCATION: Eddy County, New Mexico
STRAUB CORP: Edward

HOLE DESIGNATION: MW-1
DATE COMPLETED: November 30, 2011
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Nicole Taylor

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	Air Knife	
5.00	**SILT:** tan, dry.	5.00
7.00	**poorly graded SAND:** fine grained, yellowish orange, dry.	7.00
10.00	**poorly graded SAND with silt:** fine grained sand, tan, dry.	10.00
11.00	**poorly graded SAND with silt:** fine grained sand, light brown, dry.	11.00
13.00	**silty CLAY:** reddish brown, dry.	13.00
16.00	**SILT:** reddish brown, dry.	16.00
20.00	**CLAY:** reddish brown, moist.	20.00
21.00	**poorly graded SAND with silt:** fine grained sand, light brown, wet.	21.00
23.00	**silty CLAY:** reddish brown, wet.	23.00
30.00	**SILT:** reddish brown, wet.	30.00
31.00	END OF BOREHOLE @ 31.0ft BGS	31.00

WELL CONSTRUCTION: Cement; Hydrated bentonite chips; 2" Diameter sch. 40 PVC; 20/40 Silica sand; 0.010 Slotted PVC

SAMPLE				
DEPTH (ft)	INTERVAL	REC (%)	PP (tsf)	PID
	AK			0.0
MW-1 113011-10.0				0.0
MW-1 113011-15.0				0.0
MW-1 113011-20.0				772
				178
				111
				80

NOTES:
WATER FOUND ▽ 11/30/2011
LABORATORY ANALYSIS

OVERBURDEN LOG 070537-2012.GPJ CRA_CORP.GDT 1/26/12

This log should not be used separately from the original report.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Burton Flats
PROJECT NUMBER: 070537
CLIENT: DCP Midstream
LOCATION: Eddy County, New Mexico
STRAUB CORP: Edward

HOLE DESIGNATION: MW-2
DATE COMPLETED: November 30, 2011
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Nicole Taylor

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	Air Knife	
5	**poorly graded SAND:** fine grained, tan, dry.	5.00
7		7.00
10	**poorly graned SAND:** fine grained, tan, dry.	10.00
12		12.00
15	**silty CLAY:** reddish brown, dry.	15.00
17		17.00
20	**silty SAND:** fine grained sand, reddish brown, moist.	20.00
21	**silty CLAY:** reddish brown, wet.	21.00
22		22.00
25	**Silty CLAY:** reddish brown, wet.	25.00
27		27.00
30	END OF BOREHOLE @ 30.0ft BGS	30.00

WELL CONSTRUCTION: Cement; Hydrated bentonite chips 2" Diameter sch. 40 PVC; 20/40 Silica sand 0.010 Slotted PVC

SAMPLE DEPTH (ft)	INTERVAL	REC (%)	PP (tsf)	PID
	AK			
				1.0
MW-2 113011-10.0				0.0
MW-2 113011-15.0				0.0
MW-2 113011-20.0				0.0
				0.0

NOTES:
WATER FOUND ▽ 11/30/2011
LABORATORY ANALYSIS ◯

OVERBURDEN LOG 070537-2012.GPJ CRA_CORP.GDT 1/26/12

This log should not be used separately from the original report.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Burton Flats
PROJECT NUMBER: 070537
CLIENT: DCP Midstream
LOCATION: Eddy County, New Mexico
STRAUB CORP: Edward

HOLE DESIGNATION: MW-3
DATE COMPLETED: December 1, 2011
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Nicole Taylor

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	Air Knife	
5	**SILT:** tan, dry.	5.00
7		7.00
10	**silty SAND:** fine to medium grained sand, light brown, dry.	10.00
12		12.00
15	**CLAY:** reddish brown, dry.	15.00
16	**SILT:** reddish brown, dry.	16.00
17		17.00
20	**poorly graded SAND:** fine grained, reddish brown, moist.	20.00
21	**poorly graded SAND:** fine grained, reddish brown, wet.	21.00
22		22.00
25	**poorly graded SAND:** fine grained reddish brown, wet.	25.00
27		27.00
30	**SILT:** reddish brown, wet. END OF BOREHOLE @ 30.0ft BGS	30.00

WELL CONSTRUCTION: Cement; Hydrated bentonite chips 2" Diameter sch. 40 PVC; 20/40 Silica sand; 0.010 Slotted PVC; ▽

SAMPLE	DEPTH (ft)	INTERVAL	REC (%)	PP (tsf)	PID
		AK			
					0.0
MW-3 120111-10.0					0.0
MW-3 120111-15.0					0.0
MW-3 120111-20.0					0.0
					0.0
					0.0

NOTES:
WATER FOUND ▽ 12/1/2011
LABORATORY ANALYSIS ( )

OVERBURDEN LOG 070537-2012.GPJ CRA_CORP.GDT 1/26/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Burton Flats
PROJECT NUMBER: 070537
CLIENT: DCP Midstream
LOCATION: Eddy County, New Mexico
STRAUB CORP: Edward

HOLE DESIGNATION: MW-4
DATE COMPLETED: December 2, 2011
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Nicole Taylor

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS
	Air Knife	
5	**SILT:** tan, dry.	5.00
7		7.00
10	**SILT:** light brown, dry.	10.00
12		12.00
15	**SILT:** light brown, dry.	15.00
16	**SILT:** dark gray, dry.	16.00
17		17.00
20	**SILT:** light brown, moist.	20.00
21	**SILT:** light brown, wet.	21.00
22		22.00
25	**SILT:** reddish brown, wet.	25.00
27		27.00
30	**SILT:** reddish brown, wet. END OF BOREHOLE @ 30.0ft BGS	30.00

WELL CONSTRUCTION: Cement; Hydrated bentonite chips 2" Diameter sch. 40 PVC; 20/40 Silica sand; 0.010 Slotted PVC

SAMPLE DEPTH (ft)	INTERVAL	REC (%)	PP (tsf)	PID
	AK			
				0.0
MW-4 120211-10.0				0.0
MW-4 120211-15.0				2.0
MW-4 120211-17.0				158
MW-4 120211-20.0				15

NOTES:
WATER FOUND ▽ 12/2/2011
LABORATORY ANALYSIS

OVERBURDEN LOG 070537-2012.GPJ CRA_CORP.GDT 1/26/12

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Burton Flats
PROJECT NUMBER: 070537
CLIENT: DCP Midstream
LOCATION: Eddy County, New Mexico
STRAUB CORP: Edward

HOLE DESIGNATION: SB11-1
DATE COMPLETED: December 1, 2011
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Nicole Taylor

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	WELL CONSTRUCTION	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PP (tsf)	SAMPLE PID
0	Air Knife				AK			
5	**SILT:** light brown, dry.	5.00						1.0
7		7.00						
10	**SILT:** light brown, dry.	10.00						1.0
11	**silty SAND:** fine grained sand, tan, dry.	11.00						
12		12.00						
15	**SILT:** light brown, dry.	15.00						1.0
17		17.00	Hydrated bentonite chips					
20	**silty SAND:** fine grained sand, light brown, dry.	20.00		SB11-1-120111-20.0				0.0
22		22.00						
25	**SILT:** reddish brown, moist.	25.00	▽					1.0
26	**SILT:** reddish brown, wet.	26.00						
27		27.00						
30	**SILT:** reddish brown, wet.	30.00						0.0
32		32.00						
35	**SILT:** reddish brown, wet.	35.00						
36	END OF BOREHOLE @ 35.0ft BGS							

NOTES:
WATER FOUND ▽ 12/1/2011
LABORATORY ANALYSIS ( )

OVERBURDEN LOG 070537-2012.GPJ CRA_CORP.GDT 1/26/12

This log should not be used separately from the original report.

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: Burton Flats
PROJECT NUMBER: 070537
CLIENT: DCP Midstream
LOCATION: Eddy County, New Mexico
STRAUB CORP: Edward

HOLE DESIGNATION: SB11-2
DATE COMPLETED: December 1, 2011
DRILLING METHOD: Air Rotary
FIELD PERSONNEL: Nicole Taylor

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	WELL CONSTRUCTION	SAMPLE DEPTH (ft)	SAMPLE INTERVAL	SAMPLE REC (%)	SAMPLE PP (tsf)	SAMPLE PID
	Air Knife				AK			
6	**SILT:** tan, dry.	5.00 – 7.00						0.0
10	**SILT:** tan, dry.	10.00 – 11.00	Hydrated bentonite chips	SB11-2-120111-10.0				0.0
12	**SILT:** light brown, dry.	11.00 – 12.00						
16	**SILT:** light brown, dry.	15.00 – 17.00		SB11-2-120111-15.0				0.0
20	**SILT:** light brown, moist.	20.00 – 21.00	▽					
22	**SILT:** light brown, wet.	21.00 – 22.00		SB11-2-120111-20.0				47
	END OF BOREHOLE @ 22.0ft BGS							

NOTES:

WATER FOUND ▽ 12/1/2011

LABORATORY ANALYSIS ( )

OVERBURDEN LOG 070537-2012.GPJ CRA_CORP.GDT 1/26/12

This log should not be used separately from the original report.

APPENDIX F

NMOSE WELL PERMIT APPROVAL AND APPLICATION

NEW MEXICO STATE ENGINEER OFFICE
PERMIT TO EXPLORE /MONITOR

ACTION OF STATE ENGINEER

Notice of Intention Rcvd:	Date Rcvd. Corrected:
Formal Application Rcvd: 11/22/2011	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 29 day of Nov A.D., 2011

Estevan R. Lopez, P.E., Acting State Engineer

By: [signature]
Bill Duemling, Basin Supv.

Trn Desc: C 03525 (FOUR MONITOR WELLS)

File Number: C 03525
Trn Number: 490031

Estevan R. Lopez, P.E.
Acting State Engineer

Roswell Office
1900 WEST SECOND STREET
ROSWELL, NM 88201

STATE OF NEW MEXICO
OFFICE OF THE STATE ENGINEER

Trn Nbr: 490031
File Nbr: C 03525

Nov. 29, 2011

STEVE DALY
U.S. DEPT. OF INTERIOR-- BLM
620 EAST GREENE STREET
CARLSBAD, NM 88220

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 11/30/2012, 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 11/30/2012.

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

Sincerely,

Bill Duemling
(575)622-6521

Enclosure

explore/monitor
cc: Nicole Taylor for DCP Midstream (CRA, Inc.)

OFFICE OF THE STATE ENGINEER/INTERSTATE STREAM COMMISSION – ROSWELL OFFICE

OFFICIAL RECEIPT NUMBER: 2-30628 DATE: 11-22-11 FILE NO.: C Monitoring

TOTAL: 20.00 RECEIVED: Twenty DOLLARS CHECK NO.: 1247 CASH: ____

PAYOR: Conestoga Rovers Assoc Inc ADDRESS: 5900 Hollis St Ste CITY: Emeryville STATE: Ca

ZIP: 94608-2008 RECEIVED BY: ej

INSTRUCTIONS: Indicate the number of actions to the left of the appropriate type of filing. Complete the receipt information. **Original** to payor; **pink** copy to Program Support/ASD; **yellow** copy remains in district office, and **goldenrod** copy to accompany application being filed. If you make an error, void original and all copies and submit to Program Support/ASD along with other valid receipts.

A. Ground Water Rights Filing Fees

Count	No.	Filing	Fee
___	1.	Declaration of Water Right	$ 1.00
___	2.	Application to Appropriate or Supplement Domestic 72-12-1 Well	$125.00
___	3.	Application for Stock Well	$ 5.00
___	4.	Application to Repair or Deepen 72-12-1 Well	$ 75.00
___	5.	Application for Replacement 72-12-1 Well	$ 75.00
___	6.	Application to Change Purpose of Use 72-12-1 Well	$ 75.00
___	7.	Application to Appropriate Irrig., Mun., or Comm. Use	$ 25.00
___	8.	Application for Supplemental Non 72-12-1 Well	$ 25.00
___	9.	Application to Change Location of Non 72-12-1 Well	$ 25.00
___	10.	Application to Change Place or Purpose of Use Non 72-12-1 Well	$ 25.00
___	11.	Application to Change Location of Well and Place and/or Purpose of Use	$ 50.00
___	12.	Application for Extension of Time	$ 25.00
___	13.	Proof of Application to Beneficial Use	$ 25.00
___	14.	Application to Change Point of Diversion and Place and/or Purpose of Use from Surface Water to Ground Water	$ 50.00
4@X	15.	Application for Test, Expl. Observ. Well	$ 5.00
___	16.	Change of Ownership of Water Right	$ 2.00
___	17.	Application to Repair or Deepen Non 72-12-1 Well	$ 5.00

B. Surface Water Rights Filing Fees

Count	No.	Filing	Fee
___	1.	Declaration of Water Right	$ 10.00
___	2.	Amended Declaration	$ 25.00
___	3.	Declaration of Livestock Water Impoundment	$ 10.00
___	4.	Application for Livestock Water Impoundment	$ 10.00
___	5.	Application to Appropriate	$ 25.00
___	6.	Notice of Intent to Appropriate	$ 25.00
___	7.	Application to Change Point of Diversion	$100.00
___	8.	Application to Change Place and/or Purpose of Use	$100.00
___	9.	Application to Change Point of Diversion and Place and/or Purpose of Use	$200.00
___	10.	Application to Change Point of Diversion and Place and/or Purpose of Use from Ground Water to Surface Water	$200.00
___	11.	Application for Extension of Time	$ 50.00
___	12.	Supplemental Well to a Surface Right	$100.00
___	13.	Return Flow Credit	$100.00
___	14.	Proof of Completion of Works	$ 25.00
___	15.	Proof of Application of Water to Beneficial Use	$ 25.00
___	16.	Water Development Plan	$100.00
___	17.	Change of Ownership of Water Right	$ 5.00

C. Miscellaneous Fees

Count	No.	Filing	Fee
___	1.	Application for Well Driller's License	$50.00
___	2.	Application for Renewal of Well Driller's License	$50.00
___	3.	Application to Amend Well Driller's License	$50.00

D. Reproduction of Documents

________ @ 0.20¢/copy $______

________ Map(s) $______

E. Certification $______

E. Other $______

G. Comments:

____

____

____

____

____

____

File No: C-3525

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/ 2-30628 @ 20

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 - Chandler Cole, PM**	Name: Bureau of Land Management
Contact or Agent: check here if Agent ☒ **Conestoga-Rovers & Associates, Inc. - Nicole Taylor, PM**	Contact or Agent: Steve Daly check here if Agent ☐
Mailing Address: **2420 W. 26th Ave Suite 450D**	Mailing Address: 620 East Greene St.
City: **Denver**	City: Carlsbad
State: **CO** Zip Code: **80203**	State: NM Zip Code: 88220
Phone: **(720) 975-9127 (office)** ☐ Home ☒ Cell Phone (Work): **(303) 944-8831 (cell)**	Phone: ☐ Home ☐ Cell Phone (Work): 575-234-5972
E-mail (optional): **ntaylor@craworld.com**	E-mail (optional):

2011 NOV 23 PM 3:51 STATE ENGINEER ROSWELL, NEW MEXICO

FOR OSE INTERNAL USE	Application for Permit, Form wr-07, Rev 8/25/11
File Number: C-3525	Trn Number: 490031
Trans Description (optional): Four Monitor Wells	
Sub-Basin: C	
PCW/LOG Due Date: 11/30/2012	

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

Location Required: Coordinate location must be reported in NM State Plane (NAD 83), UTM (NAD 83), or Latitude/Longitude (Lat/Long - WGS84)

☐ 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 Latitude:	Y or Northing or Longitude:	Optional: Complete boxes labeled "Other" below with PLSS (Public Land Survey System, i.e. Quarters, Section, Township, Range); Hydrographic Survey Map & Tract; Lot, Block & Subdivision; OR Land Grant Name if known.
MW-1 C-03525-POD1	104°9'4.99"w	32°31'11.41"n	NW Quarter of Lot 5, Section 1, Township 21 South, Range 27 East
MW-2 C-03525-POD2	104°9'5.29"w	32°31'10.87"n	NW Quarter of Lot 5, Section 1, Township 21 South, Range 27 East
MW-3 C-03525-POD3	104°9'4.52"w	32°31'10.32"n	NW Quarter of Lot 5, Section 1, Township 21 South, Range 27 East
MW-4 C-03525-POD4	104°9'3.36"w	32°31'10.64"n	NW Quarter of Lot 5, Section 1, Township 21 South, Range 27 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: Bureau Of Land Management

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): 35.00	Outside diameter of well casing (inches): 2.00
Driller Name: Straub Drilling	Driller License Number: 1478

STATE ENGINEER OFFICE ROSWELL, NEW MEXICO 2011 NOV 2 PM 1 35

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 0.020-inch slotted screen. All wells are for monitoring groundwater quality. Drilling is planned for November 30th, 2011 to December 2nd, 2011. 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: C-3525	Trn Number: 490031

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:

Exploratory:	**Pollution Control and/or Recovery:**	**Construction De-Watering:**	**Mine De-Watering:**
☐ Include a description of any proposed pump test, if applicable. **Monitoring:** ☒ Include the reason for the monitoring well, and, ☒ The duration of the planned monitoring.	☐ 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. ☐ 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.	☐ 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. **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.	☐ 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.

STATE ENGINEER OFFICE ROSWELL, NEW MEXICO 2011 NOV 2 PM 1 36

ACKNOWLEDGEMENT

I, We (name of applicant(s)), **Nicole Taylor for Conestoga-Rovers & Associates, Inc.** STEVE DALY - BLM CARLSBAD FIELD OFFICE
Print Name(s)

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

[signature] Applicant Signature — [signature: Steve Daly] 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 29th day of November 20 11, for the State Engineer,

Estevan R. Lopez, P.E., Acting State Engineer

By: [signature] Signature — Bill Duemling Print

Title: Carlsbad Basin Supervisor
Print

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

File Number: C-3525	Trn Number: 490031

APPENDIX G

ACCUTEST LABORATORY ANALYICAL REPORT
BTEX AND TPHG