

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

NOV 02 2012

INMOCD ARTESIA

FORM APPROVED
OMB No 1004-0137
Expires October 31, 2014

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-0560289 & NM-0560290	
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name TCS 11/8/2012	
2. Name of Operator Devon Energy Production Company, L.P.		7. If Unit or CA Agreement, Name and No. BFDU #14-08-0001-12391 NM 707918 X	
3a. Address 333 W. Sheridan Ave. Oklahoma City, OK 73102		8. Lease Name and Well No. Burton Flat Deep Unit 57H C3022097	
3b. Phone No. (include area code) 405-228-4248		9. API Well No. 30-015-40829	
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 1520' FSL & 50' FWL, Unit L, Sec 2-21S-27E At proposed prod. zone 1980' FSL & 330' FWL, Unit L, Sec 3-21S-27E		10. Field and Pool, or Exploratory Burton Flat, Bone Spring, EAST C37	
14. Distance in miles and direction from nearest town or post office* Approximately 4 miles north of Carlsbad, NM		11. Sec., T. R. M. or Blk. and Survey or Area Sec 2-21S-27E	
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig. unit line, if any) 330'		12. County or Parish Eddy	
16. No. of acres in lease NM-0560289-240 NM-0560290-360		13. State NM	
17. Spacing Unit dedicated to this well N/2 of south 1/3 of sec 3-21S-27E or 160 acres		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft See attached map	
19. Proposed Depth TVD: 6,457' MD: 11,369' max 6566		20. BLM/BIA Bond No. on file CO-1104 & NMB-000801	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3214.4' GL		22. Approximate date work will start*	
23. Estimated duration 45 days			

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office)
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM

25. Signature <i>Patti Riechers</i>	Name (Printed/Typed) Patti Riechers	Date 07/31/2012
Title Sr. Staff Operations Technician		
Approved by (Signature) <i>/s/ Don Peterson</i>	Name (Printed/Typed)	Date NOV 1 2012
Title FIELD MANAGER		Office CARLSBAD FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

APPROVAL FOR TWO YEARS

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

*(Instructions on page 2)

Capitan Controlled Water Basin

Approval Subject to General Requirements
& Special Stipulations Attached

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

District I
1625 N French Dr., Hobbs, NM 88240
Phone (575) 393-6161 Fax (575) 393-0720
District II
811 S First St. Artesia NM 88210
Phone (575) 748-1283 Fax (575) 748-9720
District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone (505) 334-6178 Fax (505) 334-6170
District IV
1220 S St. Francis Dr. Santa Fe NM 87505
Phone (505) 476-3460 Fax (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-015-40829	² Pool Code 3713	³ Pool Name AVALON: Burton Flat, Bone Spring, EAST
Property Code 302209	Property Name BURTON FLAT DEEP UNIT	
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY, L.P.	
		⁶ Well Number 57H
		⁹ Elevation 3214.4

¹⁰ Surface Location

U/L or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	2	21 S	27 E		1520	SOUTH	50	WEST	EDDY

¹¹ Bottom Hole Location If Different From Surface

U/L or lot no	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	3	21 S	27 E		1980	SOUTH	330	WEST	EDDY

¹² Dedicated Acres 160	¹³ Joint or Infill	¹⁴ Consolidation Code	¹⁵ Order No.
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No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.

<p>SEC 33</p> <p>S89 43°58'W S89 56°50'W 1746.51 FT S89 57°51'W S89 52°37'W 1745.12 FT S89 53°57'W S89 57°29'W 1739.81 FT S89 48°03'W S89 57°</p> <p>NW CORNER SEC 3 LAT = 32 52 26.99 N LONG = 104 18 56.11 W NMSP EAST (FT) N = 553913.11 E = 586790.93</p> <p>N O CORNER SEC 3 LAT = 32 52 26.85 N LONG = 104 17 72.92 W NMSP EAST (FT) N = 553918.89 E = 589431.86</p> <p>LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8 LOT 9 LOT 10 LOT 11 LOT 12 LOT 13 LOT 14 LOT 15 LOT 16</p> <p>W O CORNER SEC 3 LAT = 32 50 91.55 N LONG = 104 18 61.13 W NMSP EAST (FT) N = 548992.85 E = 586730.59</p> <p>SW CORNER SEC 3 LAT = 32 50 19.01 N LONG = 104 18 62.42 W NMSP EAST (FT) N = 546356.91 E = 586683.66</p> <p>SE CORNER SEC 3 LAT = 32 50 20.16 N LONG = 104 16 09.95 W NMSP EAST (FT) N = 546403.31 E = 592000.82</p> <p>SO CORNER SEC 3 LAT = 32 50 19.67 N LONG = 104 17 76.17 W NMSP EAST (FT) N = 546381.54 E = 589342.77</p> <p>SEC 34</p> <p>S89 53°57'W S89 57°29'W 1739.81 FT S89 48°03'W S89 57°</p> <p>NW CORNER SEC 2 LAT = 32 52 26.99 N LONG = 104 18 57.21 W NMSP EAST (FT) N = 553923.20 E = 592073.74</p> <p>N O CORNER SEC 2 LAT = 32 52 26.82 N LONG = 104 16 01.54 W NMSP EAST (FT) N = 553928.06 E = 594714.17</p> <p>LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8 LOT 9 LOT 10 LOT 11 LOT 12 LOT 13 LOT 14 LOT 15</p> <p>W O CORNER SEC 2 LAT = 32 50 92.40 N LONG = 104 16 09.25 W NMSP EAST (FT) N = 549031.63 E = 592025.38</p> <p>SW CORNER SEC 2 LAT = 32 50 20.16 N LONG = 104 16 09.95 W NMSP EAST (FT) N = 546403.31 E = 592000.82</p> <p>SE CORNER SEC 2 LAT = 32 50 20.16 N LONG = 104 16 09.95 W NMSP EAST (FT) N = 546403.31 E = 592000.82</p> <p>SO CORNER SEC 2 LAT = 32 50 19.67 N LONG = 104 17 76.17 W NMSP EAST (FT) N = 546381.54 E = 589342.77</p> <p>SEC 3</p> <p>SEC 2</p> <p>BOTTOM OF HOLE LAT = 32 50 73.59 N LONG = 104 18 50.73 W NMSP EAST (FT) N = 548339.83 E = 587041.39</p> <p>SURFACE LOCATION LAT = 32 50 73.59 N LONG = 104 18 50.73 W NMSP EAST (FT) N = 548339.83 E = 587041.39</p> <p>BURTON FLAT DEEP UNIT #57H ELEV = 3214.4 LAT = 32 50 61.94 N (NAD83) LONG = 104 16 07.79 W NMSP EAST (FT) N = 547923.27 E = 592065.06</p>		<p>17 OPERATOR CERTIFICATION</p> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or released mineral interest in the land including the proposed bottom hole location or has a right to drill this well in this location pursuant to a contract with an owner of such a mineral or working interest or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division</p> <p><i>Patti Riechers</i> 7/31/2012 Signature Date</p> <p>Patti Riechers, Sr. Staff Operations Tech Printed Name</p> <p>patti.riechers@dvn.com E-mail Address</p> <p>18 SURVEYOR CERTIFICATION</p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief</p> <p>JUNE 1 2012 Date of Survey</p> <p><i>William F. Jaramillo</i> Signature and Seal of Professional Surveyor</p> <p>Certificate Number: WILLIAM F. JARAMILLO, PLS 12797 SURVEY NO. 1058</p>
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Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road proposed herein; that I am familiar with the conditions that presently exist; that I have full knowledge of State and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or Devon Energy Production Company, L.P. am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

I hereby also certify that I, or Devon Energy Production Company, L.P. have made a good faith effort to provide the surface owner with a copy of the Surface Use Plan of Operations and any Conditions of Approval that are attached to the APD.

Executed this 9 day of July, 2012.

Printed Name: Melanie Crawford

Signed Name: Melanie Crawford

Position Title: Regulatory Analyst

Address: 333 W. Sheridan Avenue, OKC OK 73102-5010

Telephone: (405)-552-4524

Field Representative (if not above signatory):

Address (if different from above):

Telephone (if different from above):



1 Mile Radius Map

Burton Flat Deep Unit 57H



WELL SYMBOLS

- Oil Well
- Gas Well
- Dry Hole
- Abandoned Well
- Location Only
- Dry Hole, With Show of Oil
- Injection Well
- Dry Hole, With Show of Gas
- Junked
- Suspended Oil Well
- Service Well
- TD REACHED

WELCH ETAL #1 FEDERAL #6

WELCH ETAL #4

WELCH-FEDERAL #2

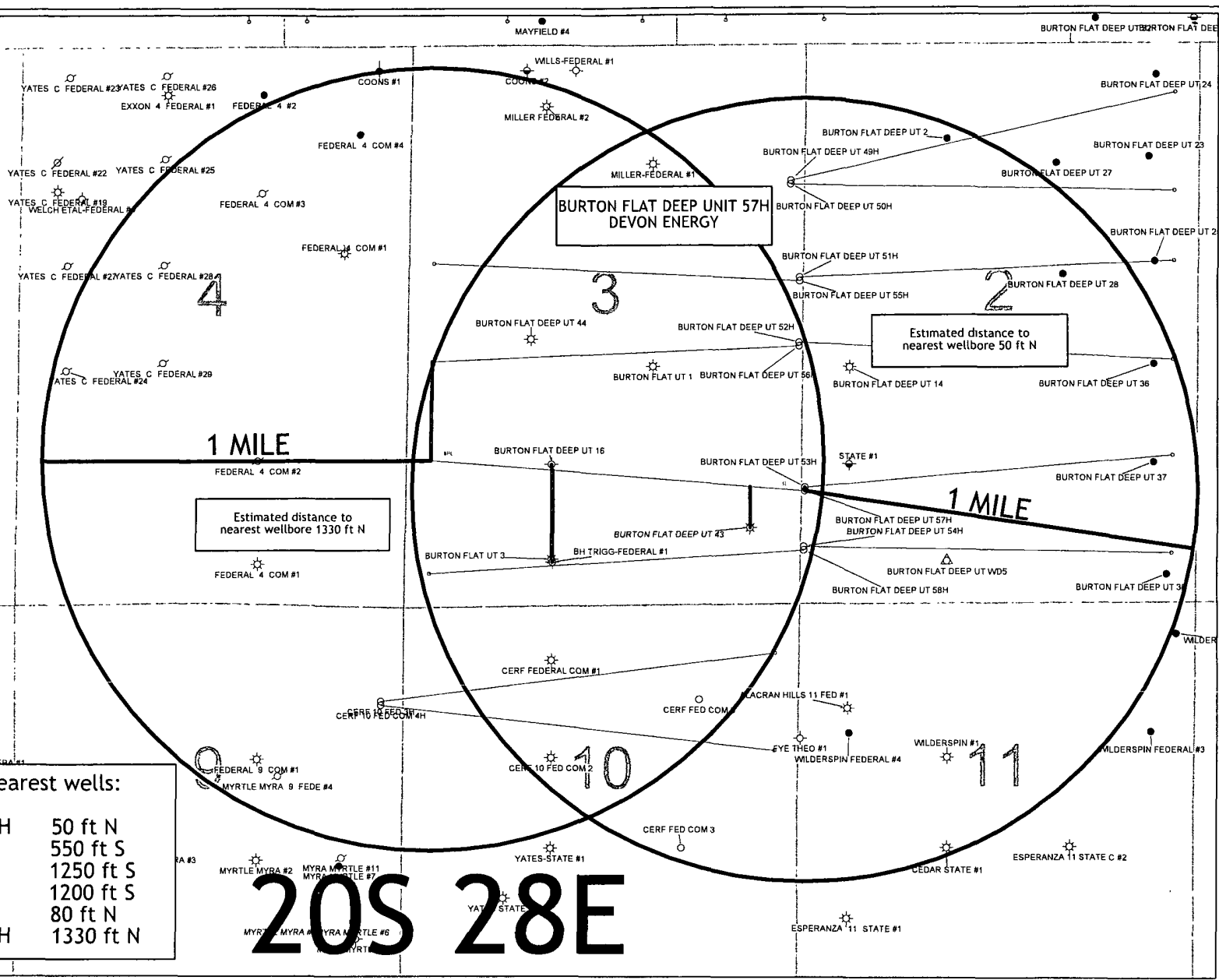
HANSOME BARNETT FEDERAL #2

RADKE FEDERAL #1

FOSTER-DRAMA FEDERAL #1

Estimated distances to nearest wells:

Burton Flat Deep Unit 53H	50 ft N
Burton Flat Deep Unit 43	550 ft S
BH Trigg-Federal 1	1250 ft S
Burton Flat Unit 3	1200 ft S
Burton Flat Deep Unit 16	80 ft N
Burton Flat Deep Unit 56H	1330 ft N



DRILLING PROGRAM
Devon Energy Production Company, LP
Burton Flat Deep Unit #57H

Surface Location: 1520' FSL & 50' FWL, Unit L, Sec 2 T21S R27E, Eddy, NM
Bottom Hole Location: 1980' FSL & 330' FWL, Unit L, Sec 3 T21S R27E, Eddy, NM

1. Geologic Name of Surface Formation

a. Quaternary

2. Estimated Tops of Geological Markers & Depths of Anticipated Fresh Water, Oil or Gas:

a. Fresh Water	15'	
b. Rustler	surface	
c. Salado	237'	Barren
d. Base of Salt	405'	Barren
e. Tansil	445'	Barren
f. Yates	535'	Barren
g. 7 Rivers	690'	Barren
h. Capitan	805'	Water
i. Capitan Base	2625'	Barren
j. Delaware	2784'	Oil
k. Bone Spring Lm	5234'	Oil
l. 1 st Bone Spring Ss	6489'	Oil

Total Depth 6,457'

3. Casing Program: (All casing is new and API approved.)

<u>Hole Size</u>	<u>Hole Interval</u>	<u>OD Csg</u>	<u>Casing Interval</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
26"	0' - 200'	20"	0' - 200' <i>SEL</i>	94#	BT&C	J/K-55
17 1/2"	0' - 750'	13 3/8"	0' - 750'	68#	BT&C	J/K-55
12 1/4"	750' - 2700'	9 5/8"	0 - 2700'	40#	LT&C	J-55
8 3/4"	2700' - 5800'	5 1/2"	0' - 5800'	17#	LT&C	HCP110
8 3/4"	5800' - 11369'	5 1/2"	5800' - 11369'	17#	LT&C	HCP110

Design Parameter Factors:

<u>Casing Size</u>	<u>Collapse Design</u>	<u>Burst Design</u>	<u>Tension Design</u>
	<u>Factor</u>	<u>Factor</u>	<u>Factor</u>
20"	5.55	22.5	7.46
13 3/8"	1.97	4.44	8.94
9 5/8"	2.03	3.13	4.81
5 1/2"	2.43	3.46	2.30
5 1/2"	2.75	3.92	6.96

4. Cement Program: (volumes based on at least 25% excess):

- a. 20" Surface **Lead** w/ 510 Cl C cmt + 2% bwoc Calcium Chloride + 0.125#/sx CF + 56.3% FW. 14.8 ppg. **Yield** 1.35 cf/sx. **TOC @** surface.
- b. 13 3/8" 1st Intermediate **Lead** w/ 415 sx Class C + 2% bwow Calcium Chloride + 0.125#/sx CF + 4% bwoc Bentonite + 81.4% FW, 13.5 ppg. **Yield** 1.75 cf/sx. **Tail** w/ 335 sx Class C + 2% bwow Calcium Chloride + 0.125#/sx CF + 56.3% FW, 14.8 ppg. **Yield** 1.35 cf/sx. **TOC @** surface.
- c. 9 5/8" 2nd Intermediate **Lead** w/ 700 sacks (60:40) Poz (Fly Ash):Class C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack CF + 3 lbs/sack LCM-1 + 1% bwoc Sodium Metasilicate + 89.7% FW. 12.6 ppg. **Yield** 1.73 cf/sx. **Tail** w/ 300 sx (60:40) Poz (Fly Ash):Cl C Cmt + 5% bwow Sodium Chloride + 0.125 lbs/sack CF + 0.4% bwoc Sodium Metasilicate + 4% bwoc (MPA-5, to enhance compressive, tensile, flexural strength development and reduce permeability) + 65.5% FW. 13.8 ppg. **Yield** 1.38 cf/sx. **TOC @** surface.
- d. 5 1/2" Production **1st Lead** w/ 615 sx 50:50 POZ (Fly Ash) Class H + 0.5% bwoc FL-52 + 0.15% bwoc (ASA-301, to reduce free water and settling in cmt slurries) + 10% bwoc Bentonite + 0.3% bwoc (R-21, temperature retarder) + 130.5% FW, 11.8 ppg. **Yield** 2.30 cf/sx. **2nd lead** w/415 sacks (35:65) Poz (Fly Ash):Cl H Cement + 3% bwow Sodium Chloride + 0.125 lbs/sack CF + 0.7% bwoc FL-52 + 6% bwoc Bentonite + 105.4% FW. 12.5 ppg. **Yield** 2.00 cf/sx. **Tail** w/ 1430 sacks (50:50) Poz (Fly Ash):Class H Cement + 5% bwow Sodium Chloride + 0.3% bwoc CD-32 + 0.5% bwoc FL-25 + 0.5% bwoc FL-52 + 0.5% bwoc Sodium Metasilicate + 57.3% FW, 14.2 ppg. **Yield** 1.28 cf/sx. **TOC @** 600'.

The above cement volumes could be revised pending the caliper measurement from the open hole logs.

5. Pressure Control Equipment

The BOP system used to drill the 17-1/2" hole will consist of a 20" 2M Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 2M system prior to drilling out the casing shoe.

The BOP system used to drill the 12-1/4" and 8-3/4" holes will consist of a 13-5/8" 3M Double Ram and Annular preventer. The BOP system will be tested as per BLM Onshore Oil and Gas Order No. 2 as a 3M system prior to drilling out the casing shoe.

The pipe rams will be operated and checked as per Onshore Order No 2. A 2" kill line and 3" choke line will be incorporated into the drilling spool below the ram BOP. In addition to the rams and annular preventer, additional BOP accessories include a kelly cock, floor safety valve, choke lines, and choke manifold rated at 3,000 psi WP.

Devon requests a variance to use a flexible line with flanged ends between the BOP and the choke manifold (choke line). The line will be kept as straight as possible with minimal turns.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - 200' ^{see con}	8.4-9.0	30-34	NC	FW
200' - 750'	9.8-10.0	28-32	NC	Brine
750' - 2,700'	8.4-9.0	28-30	NC	FW
2,700' - 11,369'	8.6-9.0	28-32	NC-12	FW

The necessary mud products for weight addition and fluid loss control will be on location at all times.

7. Auxiliary Well Control and Monitoring Equipment:

- A Kelly cock will be in the drill string at all times.
- A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- Hydrogen Sulfide detection equipment will be in operation after drilling out the 13 3/8" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 13 3/8" shoe until total depth is reached.

8. Logging, Coring, and Testing Program:

- Drill stem tests will be based on geological sample shows.
- If a drill stem test is anticipated; a procedure, equipment to be used and safety measures will be provided via sundry notice to the BLM.
- The open hole electrical logging program will be:
 - Total Depth to Intermediate Casing
Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
 - Total Depth to Surface
Compensated Neutron with Gamma Ray
 - No coring program is planned

- iv. Additional testing will be initiated subsequent to setting the 5 ½" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

9. Potential Hazards:

- a. No abnormal pressures or temperatures are expected. There is no known presence of H₂S in this area. If H₂S is encountered the operator will comply with the provisions of Onshore Oil and Gas Order No. 6. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used to drill this well. Estimated BHP 3600 psi and Estimated BHT 110°. No H₂S is anticipated to be encountered.

10. Anticipated Starting Date and Duration of Operations:

- a. Road and location construction will begin after the BLM has approved the APD. Anticipated spud date will be as soon after BLM approval and as soon as a rig will be available. Move in operations and drilling is expected to take 32 days. If production casing is run then an additional 30 days will be needed to complete well and construct surface facilities and/or lay flow lines in order to place well on production.

Devon Energy Corporation

Eddy County, NM (NAD 83)

Burton Flat Deep Unit

Burton Flat Deep Unit 57H

Wellbore #1

Plan: Plan #1

Sperry Drilling Services Proposal Report

20 June, 2012

Well Coordinates: 547,923.27 N, 592,065.06 E (32° 30' 22.30" N, 104° 10' 07.61" W)

Ground Level: 3,214.40 ft

Local Coordinate Origin

Centered on Well Burton Flat Deep Unit 57H

Viewing Datum.

GL 3214.4 + 25'KB @ 3239.40ft (TBD)

TVDs to System

N

North Reference

Grid

Unit System

API - US Survey Feet

Version: 2003.16 Build. 43I

HALLIBURTON

Devon Energy Corporation

HALLIBURTON | Sperry Drilling

Project: Eddy County, NM (NAD 83)
Site: Burton Flat Deep Unit
Well: Burton Flat Deep Unit 57H
Wellbore: Wellbore #1
Plan: Plan #1
Rig: TBD

devon

SURFACE LOCATION

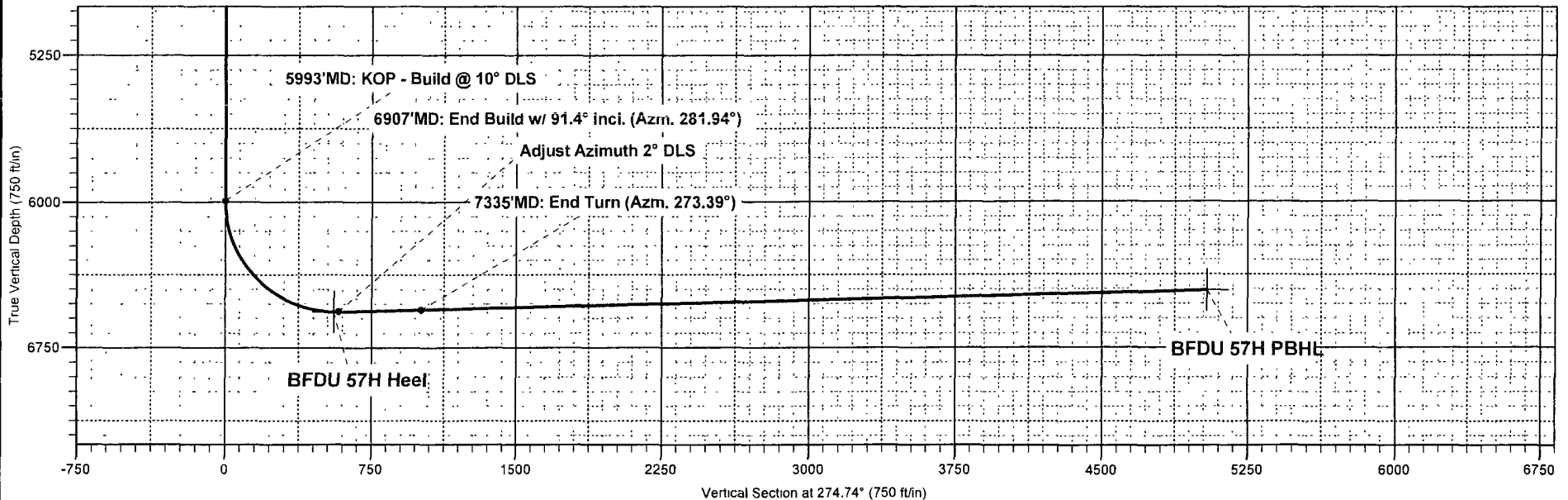
US State Plane 1983
New Mexico Eastern Zone
Elevation: GL 3214.4 + 25'KB @ 3239 40ft (TBD)
Northing: 547923.27 Easting: 592065.06 Latitude: 32° 30' 22 298 N Longitude: 104° 10' 7.606 W

WELLBORE TARGET DETAILS (MAP CO-ORDINATES)

Name	TVD	+N/-S	+E/-W	Northing	Easting	Shape
BFDU 57H PBHL	6457.00	416.56	-5023.67	548339.83	587041.39	Point
BFDU 57H Heel	6566.00	116.12	-548.97	548039.39	591516.09	Point

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0 00	0 00	0.00	0.00	0.00	0 00	0.00	0 00	0.00	
5993 21	0.00	0.00	5993 21	0.00	0.00	0.00	0 00	0.00	5993'MD KOP - Build @ 10° DLS
6907 21	91.40	281.94	6566 00	121.43	-574.26	10.00	281.94	582.33	6907'MD End Build w/ 91.4° Incl. (Azim. 281.94°)
7334 80	91.40	273.39	6555 53	178.38	-997.51	2.00	-89.90	1008.84	7335'MD: End Turn (Azim. 273.39°)
11369.20	91.40	273.39	6457.00	416.56	-5023.67	0.00	0 00	5040.91	11369'MD: PBHL



Date 15 04, June 20 2012

Devon Energy Corporation

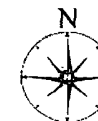
HALLIBURTON | Sperry Drilling

Project: Eddy County, NM (NAD 83)
Site: Burton Flat Deep Unit
Well: Burton Flat Deep Unit 57H
Wellbore: Wellbore #1
Plan: Plan #1
Rig: TBD

To convert a Magnetic Direction to a Grid Direction, Add 7.77°

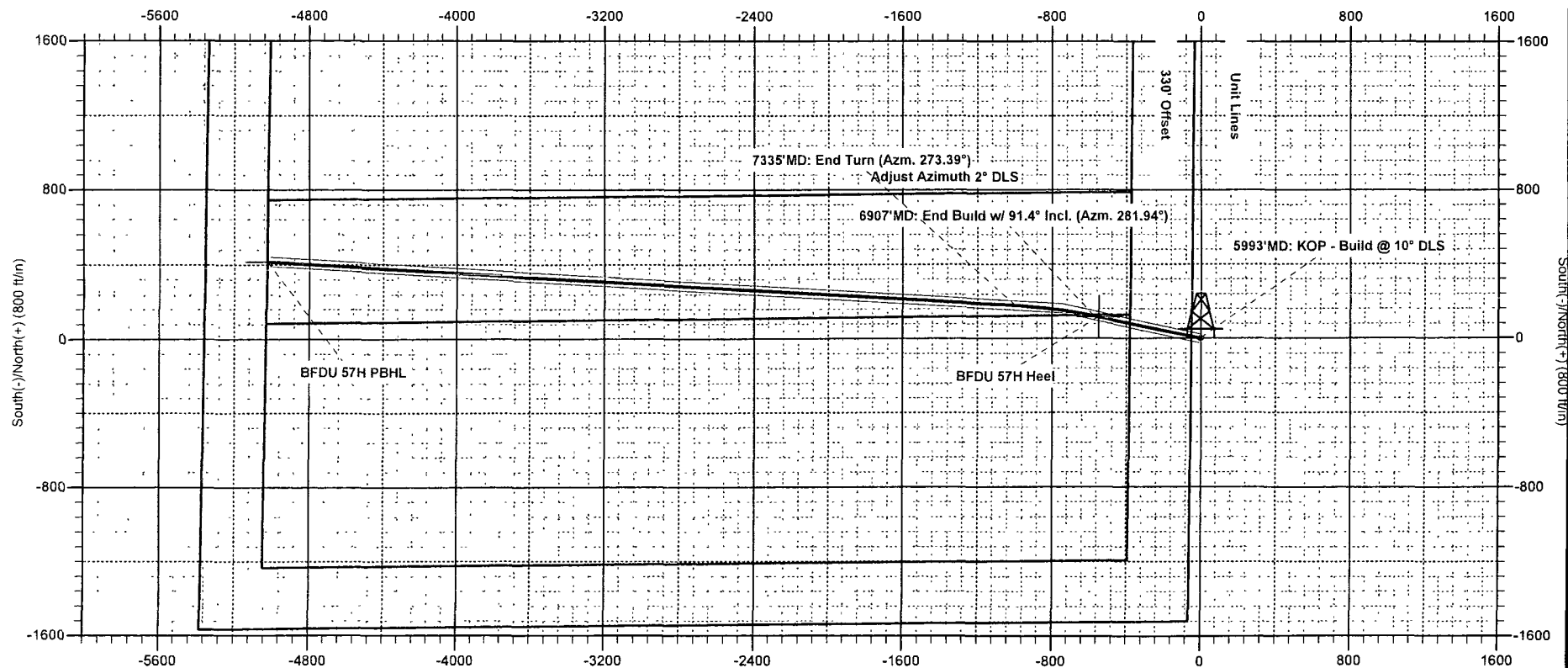
Magnetic Model BGGM2012 Date 20-Jun-12
 Azimuths to Grid North

devon



SURFACE LOCATION

US State Plane 1983
 New Mexico Eastern Zone
 Elevation GL 3214 4 + 25'KB @ 3239.40ft (TBD)
 Northing 547923.27 Easting 592065.06 Latitude 32° 30' 22.298 N Longitude 104° 10' 7.606 W



Plan Report for Burton Flat Deep Unit 57H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
0 00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0.00	0 00
100 00	0.00	0 00	100.00	0.00	0 00	0 00	0 00	0.00	0.00	0 00
200 00	0.00	0 00	200.00	0.00	0.00	0 00	0 00	0 00	0 00	0.00
300 00	0 00	0 00	300 00	0 00	0.00	0.00	0 00	0.00	0 00	0.00
400 00	0 00	0 00	400.00	0 00	0 00	0 00	0 00	0 00	0.00	0 00
500 00	0 00	0.00	500.00	0 00	0.00	0 00	0.00	0.00	0 00	0.00
600 00	0 00	0 00	600.00	0 00	0 00	0.00	0.00	0.00	0 00	0.00
700 00	0 00	0 00	700 00	0 00	0.00	0 00	0.00	0.00	0.00	0 00
800.00	0 00	0 00	800 00	0.00	0 00	0 00	0 00	0 00	0 00	0.00
900 00	0.00	0.00	900.00	0.00	0.00	0.00	0 00	0.00	0 00	0.00
1,000.00	0.00	0 00	1,000.00	0 00	0.00	0 00	0.00	0 00	0 00	0 00
1,100.00	0 00	0 00	1,100 00	0 00	0.00	0.00	0 00	0 00	0 00	0 00
1,200 00	0.00	0.00	1,200.00	0.00	0 00	0.00	0 00	0 00	0 00	0 00
1,300.00	0 00	0 00	1,300 00	0.00	0 00	0 00	0 00	0 00	0 00	0.00
1,400 00	0 00	0 00	1,400 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
1,500 00	0 00	0.00	1,500 00	0.00	0.00	0.00	0.00	0 00	0 00	0 00
1,600 00	0 00	0.00	1,600 00	0.00	0.00	0 00	0 00	0.00	0 00	0 00
1,700 00	0 00	0.00	1,700 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
1,800 00	0 00	0 00	1,800.00	0 00	0 00	0 00	0.00	0 00	0 00	0.00
1,900.00	0 00	0 00	1,900.00	0 00	0 00	0 00	0 00	0.00	0 00	0.00
2,000.00	0 00	0.00	2,000 00	0.00	0.00	0 00	0 00	0 00	0.00	0 00
2,100 00	0 00	0 00	2,100.00	0 00	0.00	0 00	0 00	0 00	0.00	0 00
2,200.00	0 00	0.00	2,200.00	0 00	0 00	0 00	0.00	0 00	0 00	0.00
2,300 00	0 00	0 00	2,300 00	0.00	0.00	0 00	0.00	0.00	0 00	0 00
2,400.00	0 00	0 00	2,400 00	0 00	0.00	0.00	0 00	0 00	0.00	0 00
2,500 00	0 00	0 00	2,500.00	0.00	0.00	0.00	0.00	0 00	0 00	0 00
2,600 00	0 00	0 00	2,600.00	0 00	0 00	0 00	0.00	0.00	0.00	0 00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0 00	0.00	0 00	0.00	0 00
2,800 00	0.00	0 00	2,800.00	0 00	0 00	0.00	0.00	0.00	0 00	0 00
2,900.00	0 00	0.00	2,900 00	0.00	0 00	0 00	0 00	0.00	0 00	0.00
3,000 00	0 00	0 00	3,000 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
3,100 00	0.00	0 00	3,100.00	0 00	0 00	0.00	0.00	0.00	0.00	0.00
3,200 00	0 00	0.00	3,200 00	0.00	0 00	0.00	0 00	0 00	0 00	0 00
3,300 00	0.00	0 00	3,300.00	0 00	0 00	0 00	0 00	0.00	0 00	0.00
3,400 00	0 00	0 00	3,400 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00
3,500.00	0 00	0.00	3,500 00	0.00	0 00	0 00	0 00	0.00	0 00	0 00
3,600.00	0 00	0.00	3,600.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
3,700 00	0 00	0 00	3,700 00	0.00	0 00	0.00	0.00	0.00	0 00	0 00
3,800 00	0 00	0.00	3,800.00	0.00	0 00	0 00	0 00	0.00	0 00	0 00
3,900 00	0 00	0 00	3,900 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
4,000 00	0 00	0 00	4,000 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00
4,100.00	0.00	0 00	4,100 00	0.00	0 00	0 00	0 00	0.00	0 00	0 00
4,200 00	0 00	0 00	4,200 00	0.00	0 00	0 00	0 00	0.00	0.00	0 00
4,300 00	0 00	0 00	4,300.00	0 00	0 00	0 00	0 00	0 00	0.00	0.00
4,400 00	0 00	0 00	4,400.00	0 00	0 00	0 00	0 00	0.00	0.00	0 00
4,500.00	0 00	0.00	4,500.00	0 00	0.00	0 00	0 00	0 00	0 00	0.00
4,600 00	0 00	0 00	4,600 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
4,700 00	0 00	0 00	4,700.00	0.00	0 00	0 00	0 00	0.00	0 00	0 00
4,800 00	0 00	0 00	4,800 00	0.00	0 00	0 00	0 00	0.00	0 00	0 00
4,900 00	0.00	0 00	4,900 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
5,000 00	0 00	0.00	5,000 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00
5,100 00	0.00	0 00	5,100 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00
5,200.00	0 00	0.00	5,200 00	0 00	0.00	0 00	0 00	0 00	0 00	0.00
5,300 00	0 00	0.00	5,300.00	0 00	0.00	0 00	0 00	0 00	0 00	0.00
5,400 00	0.00	0 00	5,400.00	0 00	0 00	0 00	0.00	0.00	0 00	0 00
5,500 00	0 00	0 00	5,500 00	0.00	0 00	0 00	0.00	0 00	0 00	0 00
5,600 00	0 00	0 00	5,600.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
5,700 00	0 00	0.00	5,700.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
5,800 00	0 00	0 00	5,800.00	0.00	0.00	0 00	0 00	0 00	0.00	0 00

Plan Report for Burton Flat Deep Unit 57H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
5,900.00	0.00	0.00	5,900.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5,993.21	0.00	0.00	5,993.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5993'MD: KOP - Build @ 10° DLS										
6,000.00	0.68	281.94	6,000.00	0.01	-0.04	0.04	10.00	10.00	0.00	281.94
6,100.00	10.68	281.94	6,099.38	2.05	-9.71	9.84	10.00	10.00	0.00	0.00
6,200.00	20.68	281.94	6,195.54	7.64	-36.12	36.62	10.00	10.00	0.00	0.00
6,300.00	30.68	281.94	6,285.55	16.59	-78.46	79.56	10.00	10.00	0.00	0.00
6,400.00	40.68	281.94	6,366.68	28.64	-135.45	137.35	10.00	10.00	0.00	0.00
6,500.00	50.68	281.94	6,436.45	43.42	-205.35	208.24	10.00	10.00	0.00	0.00
6,600.00	60.68	281.94	6,492.77	60.49	-286.05	290.07	10.00	10.00	0.00	0.00
6,700.00	70.68	281.94	6,533.90	79.32	-375.09	380.37	10.00	10.00	0.00	0.00
6,800.00	80.68	281.94	6,558.60	99.34	-469.77	476.37	10.00	10.00	0.00	0.00
6,881.39	88.82	281.94	6,566.05	116.09	-549.00	556.72	10.00	10.00	0.00	0.00
BFDU 57H Heel										
6,900.00	90.68	281.94	6,566.13	119.94	-567.20	575.18	10.00	10.00	0.00	0.00
6,907.21	91.40	281.94	6,566.00	121.43	-574.26	582.33	10.00	10.00	0.00	0.00
6907'MD: End Build w/ 91.4° Incl. (Az. 281.94°)										
6,917.00	91.40	281.74	6,565.76	123.44	-583.84	592.04	2.00	0.00	-2.00	-89.90
Adjust Azimuth 2° DLS										
7,000.00	91.40	280.08	6,563.73	139.15	-665.31	674.53	2.00	0.00	-2.00	-89.90
7,100.00	91.40	278.08	6,561.28	154.93	-764.02	774.21	2.00	0.00	-2.00	-89.94
7,200.00	91.40	276.08	6,558.83	167.26	-863.22	874.09	2.00	0.00	-2.00	-89.99
7,300.00	91.40	274.08	6,556.38	176.11	-962.79	974.05	2.00	0.00	-2.00	-90.04
7,334.80	91.40	273.39	6,555.53	178.38	-997.51	1,008.84	2.00	0.00	-2.00	-90.09
7335'MD: End Turn (Az. 273.39°)										
7,400.00	91.40	273.39	6,553.94	182.23	-1,062.58	1,074.00	0.00	0.00	0.00	-90.11
7,500.00	91.40	273.39	6,551.50	188.13	-1,162.37	1,173.94	0.00	0.00	0.00	0.00
7,600.00	91.40	273.39	6,549.06	194.04	-1,262.17	1,273.88	0.00	0.00	0.00	0.00
7,700.00	91.40	273.39	6,546.61	199.94	-1,361.96	1,373.83	0.00	0.00	0.00	0.00
7,800.00	91.40	273.39	6,544.17	205.84	-1,461.76	1,473.77	0.00	0.00	0.00	0.00
7,900.00	91.40	273.39	6,541.73	211.75	-1,561.55	1,573.71	0.00	0.00	0.00	0.00
8,000.00	91.40	273.39	6,539.29	217.65	-1,661.35	1,673.65	0.00	0.00	0.00	0.00
8,100.00	91.40	273.39	6,536.84	223.56	-1,761.15	1,773.60	0.00	0.00	0.00	0.00
8,200.00	91.40	273.39	6,534.40	229.46	-1,860.94	1,873.54	0.00	0.00	0.00	0.00
8,300.00	91.40	273.39	6,531.96	235.36	-1,960.74	1,973.48	0.00	0.00	0.00	0.00
8,400.00	91.40	273.39	6,529.52	241.27	-2,060.53	2,073.42	0.00	0.00	0.00	0.00
8,500.00	91.40	273.39	6,527.07	247.17	-2,160.33	2,173.36	0.00	0.00	0.00	0.00
8,600.00	91.40	273.39	6,524.63	253.07	-2,260.12	2,273.31	0.00	0.00	0.00	0.00
8,700.00	91.40	273.39	6,522.19	258.98	-2,359.92	2,373.25	0.00	0.00	0.00	0.00
8,800.00	91.40	273.39	6,519.75	264.88	-2,459.72	2,473.19	0.00	0.00	0.00	0.00
8,900.00	91.40	273.39	6,517.31	270.79	-2,559.51	2,573.13	0.00	0.00	0.00	0.00
9,000.00	91.40	273.39	6,514.86	276.69	-2,659.31	2,673.08	0.00	0.00	0.00	0.00
9,100.00	91.40	273.39	6,512.42	282.59	-2,759.10	2,773.02	0.00	0.00	0.00	0.00
9,200.00	91.40	273.39	6,509.98	288.50	-2,858.90	2,872.96	0.00	0.00	0.00	0.00
9,300.00	91.40	273.39	6,507.54	294.40	-2,958.69	2,972.90	0.00	0.00	0.00	0.00
9,400.00	91.40	273.39	6,505.09	300.30	-3,058.49	3,072.84	0.00	0.00	0.00	0.00
9,500.00	91.40	273.39	6,502.65	306.21	-3,158.29	3,172.79	0.00	0.00	0.00	0.00
9,600.00	91.40	273.39	6,500.21	312.11	-3,258.08	3,272.73	0.00	0.00	0.00	0.00
9,700.00	91.40	273.39	6,497.77	318.01	-3,357.88	3,372.67	0.00	0.00	0.00	0.00
9,800.00	91.40	273.39	6,495.32	323.92	-3,457.67	3,472.61	0.00	0.00	0.00	0.00
9,900.00	91.40	273.39	6,492.88	329.82	-3,557.47	3,572.56	0.00	0.00	0.00	0.00
10,000.00	91.40	273.39	6,490.44	335.73	-3,657.26	3,672.50	0.00	0.00	0.00	0.00
10,100.00	91.40	273.39	6,488.00	341.63	-3,757.06	3,772.44	0.00	0.00	0.00	0.00
10,200.00	91.40	273.39	6,485.56	347.53	-3,856.86	3,872.38	0.00	0.00	0.00	0.00
10,300.00	91.40	273.39	6,483.11	353.44	-3,956.65	3,972.32	0.00	0.00	0.00	0.00
10,400.00	91.40	273.39	6,480.67	359.34	-4,056.45	4,072.27	0.00	0.00	0.00	0.00
10,500.00	91.40	273.39	6,478.23	365.24	-4,156.24	4,172.21	0.00	0.00	0.00	0.00
10,600.00	91.40	273.39	6,475.79	371.15	-4,256.04	4,272.15	0.00	0.00	0.00	0.00
10,700.00	91.40	273.39	6,473.34	377.05	-4,355.83	4,372.09	0.00	0.00	0.00	0.00

Plan Report for Burton Flat Deep Unit 57H - Plan #1

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	Toolface Azimuth (°)
10,800.00	91.40	273.39	6,470.90	382.96	-4,455.63	4,472.04	0.00	0.00	0.00	0.00
10,900.00	91.40	273.39	6,468.46	388.86	-4,555.42	4,571.98	0.00	0.00	0.00	0.00
11,000.00	91.40	273.39	6,466.02	394.76	-4,655.22	4,671.92	0.00	0.00	0.00	0.00
11,100.00	91.40	273.39	6,463.57	400.67	-4,755.02	4,771.86	0.00	0.00	0.00	0.00
11,200.00	91.40	273.39	6,461.13	406.57	-4,854.81	4,871.81	0.00	0.00	0.00	0.00
11,300.00	91.40	273.39	6,458.69	412.47	-4,954.61	4,971.75	0.00	0.00	0.00	0.00
11,369.20	91.40	273.39	6,457.00	416.56	-5,023.67	5,040.91	0.00	0.00	0.00	0.00

11369'MD: PBHL - BFDU 57H PBHL

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	+E/-W (ft)	Comment
5,993.21	5,993.21	0.00	0.00	5993'MD: KOP - Build @ 10° DLS
6,907.21	6,566.00	121.43	-574.26	6907'MD: End Build w/ 91.4° Incl. (Azimuth 281.94°)
6,917.00	6,565.76	123.44	-583.84	Adjust Azimuth 2° DLS
7,334.80	6,555.53	178.38	-997.51	7335'MD: End Turn (Azimuth 273.39°)
11,369.20	6,457.00	416.56	-5,023.67	11369'MD: PBHL

Vertical Section Information

Angle Type	Target	Azimuth (°)	Origin Type	Origin +N/-S (ft)	+E/-W (ft)	Start TVD (ft)
User	No Target (Freehand)	274.74	Slot	0.00	0.00	0.00

Survey tool program

From (ft)	To (ft)	Survey/Plan	Survey Tool
0.00	11,369.20	Plan #1	MWD

Targets associated with this wellbore

Target Name	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Shape
BFDU 57H PBHL	6,457.00	416.56	-5,023.67	Point
BFDU 57H Heel	6,566.00	116.12	-548.97	Point

North Reference Sheet for Burton Flat Deep Unit - Burton Flat Deep Unit 57H - Wellbore #1

All data is in US Feet unless otherwise stated. Directions and Coordinates are relative to Grid North Reference.

Vertical Depths are relative to GL 3214 4 + 25'KB @ 3239 40ft (TBD). Northing and Easting are relative to Burton Flat Deep Unit 57H

Coordinate System is US State Plane 1983, New Mexico Eastern Zone using datum North American Datum 1983, ellipsoid GRS 1980

Projection method is Transverse Mercator (Gauss-Kruger)

Central Meridian is -104.33°, Longitude Origin 0° 0' 0.000 E°, Latitude Origin 0° 0' 0.000 N°

False Easting: 541,337 50ft, False Northing: 0.00ft, Scale Reduction: 0.99991204

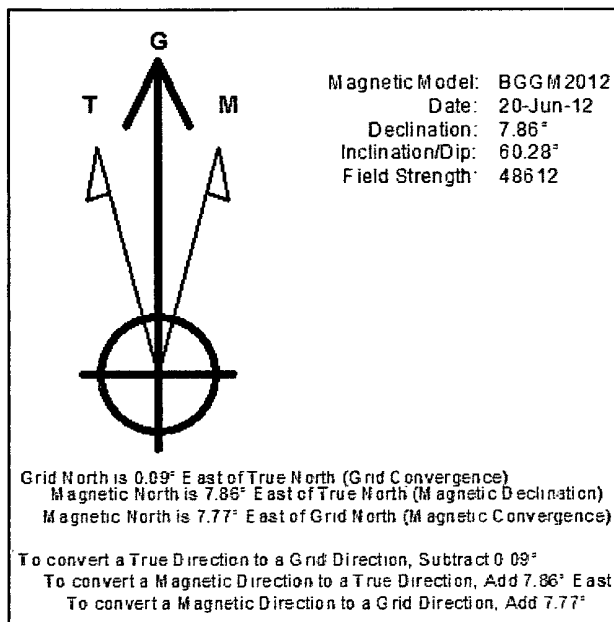
Grid Coordinates of Well: 547,923 27 ft N, 592,065 06 ft E

Geographical Coordinates of Well: 32° 30' 22 30" N, 104° 10' 07.61" W

Grid Convergence at Surface is 0.09°

Based upon Minimum Curvature type calculations, at a Measured Depth of 11,369 20ft
the Bottom Hole Displacement is 5,040 91ft in the Direction of 274 74° (Grid)

Magnetic Convergence at surface is: -7 77° (20 June 2012, , BGGM2012)



NOTES REGARDING BLOWOUT PREVENTERS

Devon Energy Production Company, LP

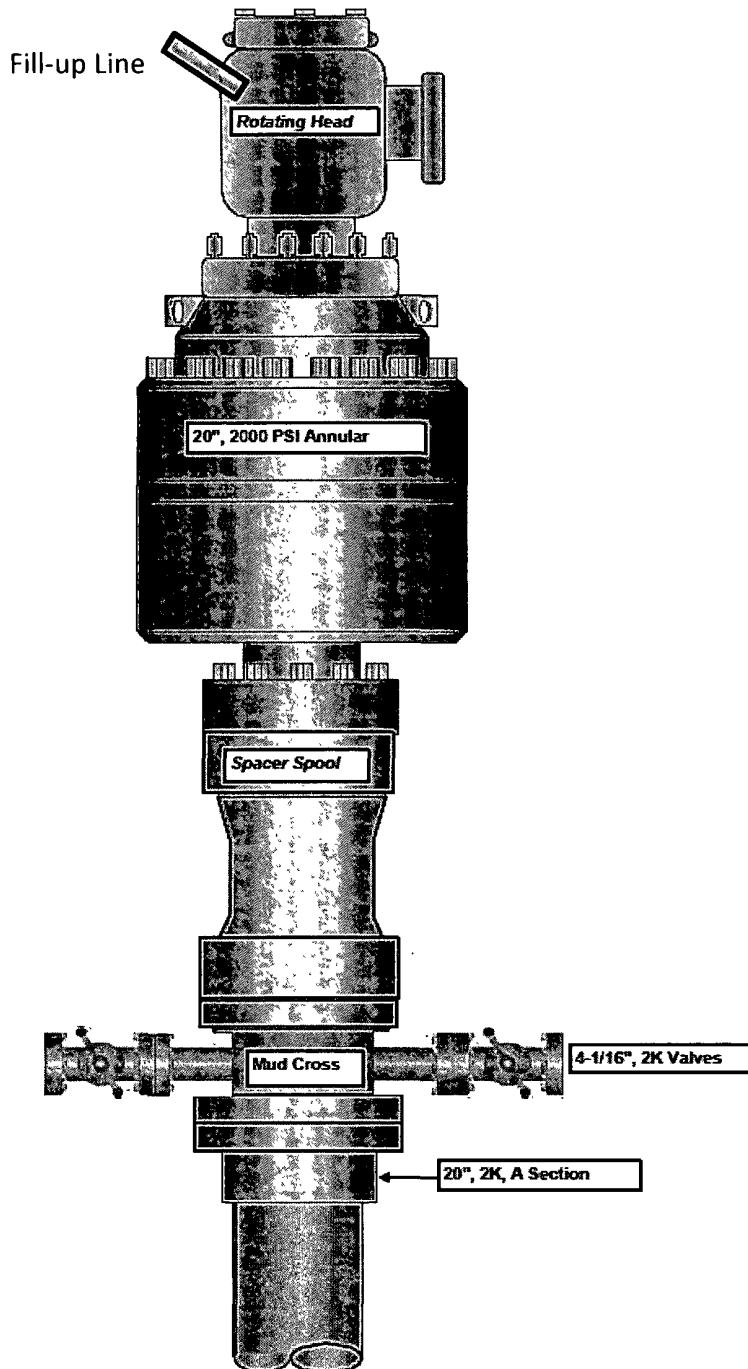
Burton Flat Deep Unit 57H

Surface Location: 1520' FSL & 50' FWL, Unit L, Sec 2 T21S R27E, Eddy, NM

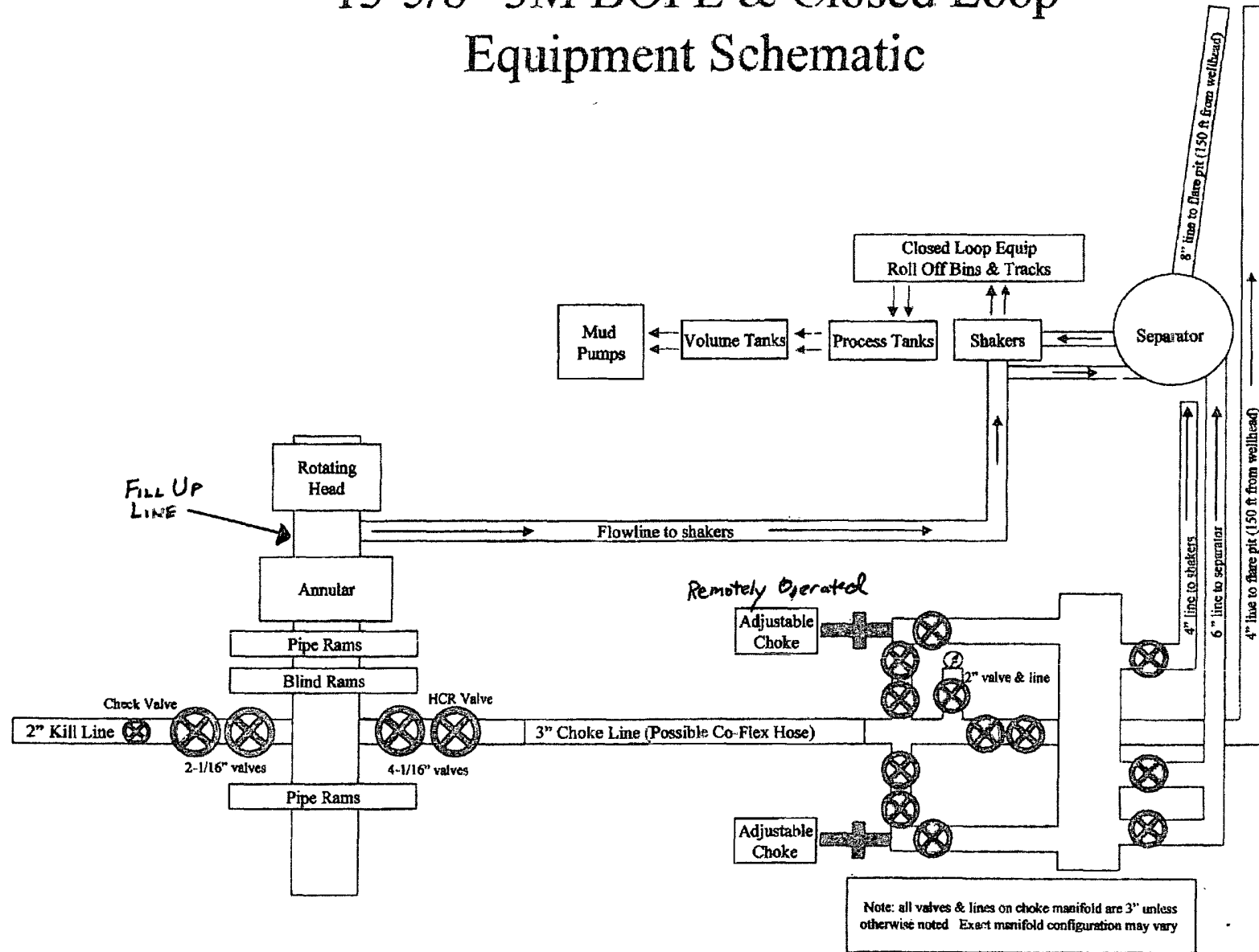
Bottom Hole Location: 1980' FSL & 330' FWL, Unit L, Sec 3 T21S R27E, Eddy, NM

1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOP bore.
2. Wear ring will be properly installed in head.
3. Blowout preventer and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 3000 psi WP with proper thread connections will be available on the rotary rig floor at all times.
6. All choke lines will be anchored to prevent movement.
7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
8. Will maintain a kelly cock attached to the kelly.
9. Hand wheels and wrenches will be properly installed and tested for safe operation.
10. Hydraulic floor control for blowout preventer will be located as near in proximity to driller's controls as possible.
11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

20" 2K Annular



13-5/8" 3M BOPE & Closed Loop Equipment Schematic





QUALITY DOCUMENT

PHOENIX RUBBER INDUSTRIAL LTD.

H-6728 Szeged, Budapesti út 10. Hungary • H-6701 Szeged, P. O. Box 152
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Phone: (361) 456-4200 • Fax: (361) 217-2972, 456-4273 • www.taurusemerge.hu

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT N° 890	
PURCHASER: Phoenix Beattie Co				P.O. N° 1520FA-872	
PHOENIX ORDER N° 172232		HOSE TYPE: 3" ID Choke and Kill Hose			
HOSE SERIAL N° 34403		NOMINAL / ACTUAL LENGTH: 11,43 m			
W.P 68,96 MPa 10000 psi		T.P 103,4 MPa 15000 psi		Duration: 60 min.	
Pressure test with water at ambient temperature					
See attachment. (1 page)					
↑ 10 mm = 10 Min. → 10 mm = 16 MPa					
COUPLINGS					
Type	Serial N°		Quality	Heat N°	
3" coupling with 4 1/16" Flange end	1231/a 1228		AISI 4130	80751	
			AISI 4130	47438	
API Spec 16 C Temperature rate: "B"					
All metal parts are flawless					
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.					
Date: 20. June. 2002.	Inspector		Quality Control PHOENIX RUBBER Industrial Ltd. Hose Inspection and Certification Dept.		

VERIFIED TRUE COPY
PHOENIX RUBBER Q.C.



**Devon Energy Corporation
20 North Broadway
Oklahoma City, Oklahoma 73102-8260**

Hydrogen Sulfide (H₂S) Contingency Plan

For

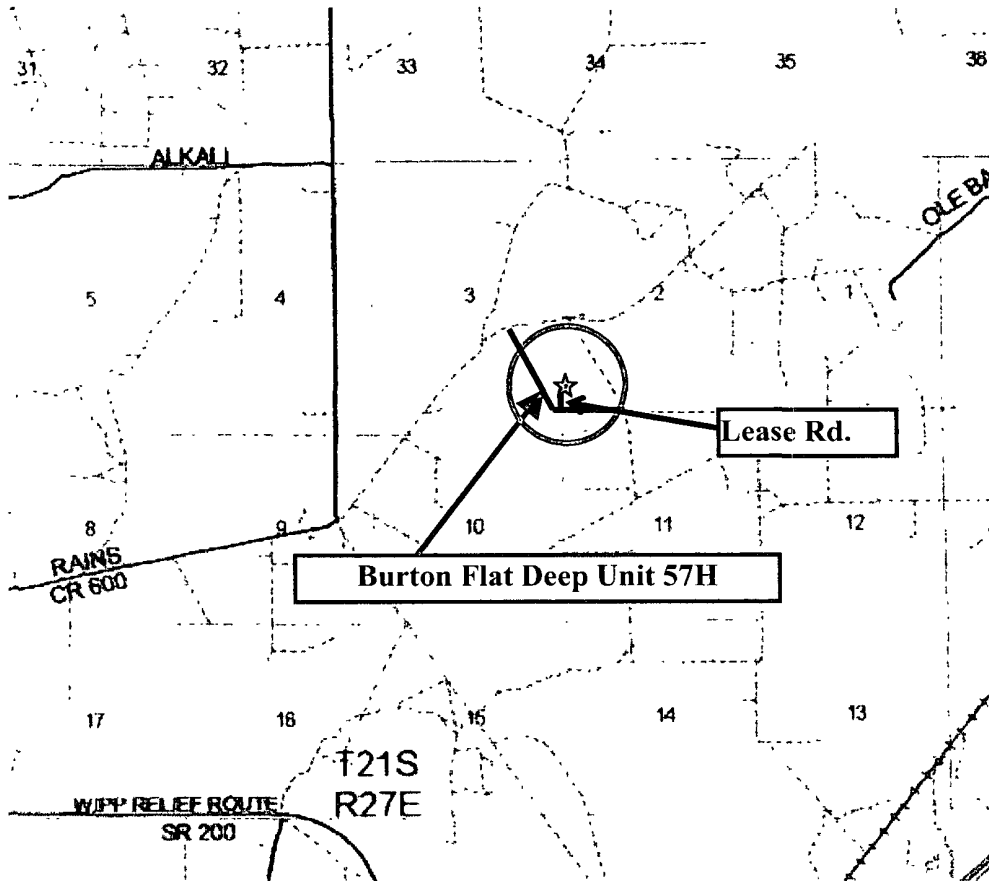
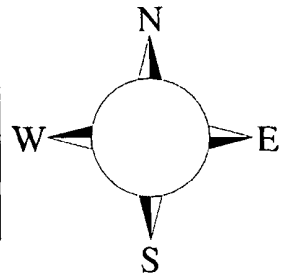
Burton Flat Deep Unit 57H

**Sec-2, T-21S R-27E
1520' FSL & 50' FWL,
LAT. = 32.5061940'N (NAD83)
LONG = 104.1687794'W**

Eddy County NM

Burton Flat Deep Unit 57H

This is an open drilling site. H₂S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H₂S, including warning signs, wind indicators and H₂S monitor.



Assumed 100 ppm 3000' ()
 100 ppm H₂S concentration shall trigger activation of this plan.

Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from the location entrance road, South then East or Northwest on primitive road. Crews should then block both directions of the road so as not to allow anyone traversing into a hazardous area. The blockade should be at a safe distance outside of the ROE. There are no homes or buildings in or near the ROE.

Assumed 100 ppm ROE = 3000'

100 ppm H₂S concentration shall trigger activation of this plan.

Emergency Procedures

In the event of a release of gas containing H₂S, the first responder(s) must

- Isolate the area and prevent entry by other persons into the 100 ppm ROE.
- Evacuate any public places encompassed by the 100 ppm ROE.
- Be equipped with H₂S monitors and air packs in order to control the release.
- Use the “buddy system” to ensure no injuries occur during the response
- Take precautions to avoid personal injury during this operation.
- Contact operator and/or local officials to aid in operation. See list of phone numbers attached.
- Have received training in the
 - Detection of H₂S, and
 - Measures for protection against the gas,
 - Equipment used for protection and emergency response.

Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO₂). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

Characteristics of H₂S and SO₂

Common Name	Chemical Formula	Specific Gravity	Threshold Limit	Hazardous Limit	Lethal Concentration
Hydrogen Sulfide	H ₂ S	1.189 Air = 1	10 ppm	100 ppm/hr	600 ppm
Sulfur Dioxide	SO ₂	2.21 Air = 1	2 ppm	N/A	1000 ppm

Contacting Authorities

Devon Energy Corp. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Devon Energy Corp. Company response must be in coordination with the State of New Mexico’s ‘Hazardous Materials Emergency Response Plan’ (HMER)

Hydrogen Sulfide Drilling Operation Plan

I. HYDROGEN SULFIDE (H₂S) TRAINING

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on this well:

1. The hazards and characteristics of hydrogen sulfide (H₂S)
2. The proper use and maintenance of personal protective equipment and life support systems.
3. The proper use of H₂S detectors, alarms, warning systems, briefing areas, evacuation procedures, and prevailing winds.
4. The proper techniques for first aid and rescue procedures.

In addition, supervisory personnel will be trained in the following areas:

1. The effects of H₂S metal components. If high tensile tubular are to be used, personnel will be trained in their special maintenance requirements.
2. Corrective action and shut-in procedures when drilling or reworking a well and blowout prevention and well control procedures.
3. The contents and requirements of the H₂S Drilling Operations Plan and Public Protection Plan.

There will be an initial training session just prior to encountering a known or probable H₂S zone (within 3 days or 500 feet) and weekly H₂S and well control drills for all personnel in each crew. The initial training session shall include a review of the site specific H₂S Drilling Operations Plan and the Public Protection Plan.

II. HYDROGEN SULFIDE TRAINING

Note: All H₂S safety equipment and systems will be installed, tested, and operational when drilling reaches a depth of 500 feet above, or three days prior to penetrating the first zone containing or reasonable expected to contain H₂S.

1. Well Control Equipment

- A. Flare line
- B. Choke manifold
- C. Blind rams and pipe rams to accommodate all pipe sizes with properly sized closing unit
- D. Auxiliary equipment may include if applicable: annular preventer and rotating head.

2. Protective equipment for essential personnel:

- A. 30-minute SCBA units located in the doghouse and at briefing areas, as indicated on well site diagram. As it may be difficult to communicate audibly while wearing these units, hand signals shall be utilized.

3. H₂S detection and monitoring equipment:

- A. Portable H₂S monitors positioned on location for best coverage and response. These units have warning lights and audible sirens when H₂S levels of 20 PPM are reached. These units are usually capable of detecting SO₂, which is a byproduct of burning H₂S.

4. Visual warning systems:

- A. Wind direction indicators as shown on well site diagram
- B. Caution/ Danger signs shall be posted on roads providing direct access to locations. Signs will be painted a high visibility yellow with black lettering of sufficient size to be reasonable distance from the immediate location. Bilingual signs will be used when appropriate..

5. Mud program:

- A. The mud program has been designed to minimize the volume of H₂S circulated to surface. Proper mud weight, safe drilling practices and the use of H₂S scavengers will minimize hazards when penetrating H₂S bearing zones.

6. Metallurgy:

- A. All drill strings, casings, tubing, wellhead, blowout preventer, drilling spool, kill lines, choke manifold lines, and valves shall be H₂S trim.
- B. All elastomers used for packing and seals shall be H₂S trim.

7. Communication:

- A. Radio communications in company vehicles including cellular telephones and 2-way radio
- B. Land line (telephone) communications at Office

8. Well testing:

- A. Drill stem testing will be performed with a minimum number of personnel in the immediate vicinity, which are necessary to safety and adequately conduct the test. The drill stem testing will be conducted during daylight hours and formation fluids will not be flowed to the surface. All drill-stem-testing operations conducted in an H₂S environment will use the closed chamber method of testing.
- B. There will be no drill stem testing.

Devon Energy Corp. Company Call List

<u>Artesia (575)</u>	<u>Cellular</u>	<u>Office</u>	<u>Home</u>
Foreman – Robert Bell.....	748-7448	748-0178	746-2991
Asst. Foreman –Tommy Polly.....	748-5290	748-0165	748-2846
Don Mayberry	748-5235	748-0164	746-4945
Montral Walker	390-5182	748-0193	936-414-6246
Engineer – Marcos Ortiz.....	(405) 317-0666....	(405) 552-8152....	(405) 381-4350

Agency Call List

<u>Lea</u>	<u>Hobbs</u>
<u>County</u>	State Police
<u>(575)</u>	City Police
	Sheriff's Office
	Ambulance.....
	Fire Department.....
	LEPC (Local Emergency Planning Committee).....
	NMOCD
	US Bureau of Land Management

<u>Eddy</u>	<u>Carlsbad</u>
<u>County</u>	State Police
<u>(575)</u>	City Police
	Sheriff's Office.....
	Ambulance.....
	Fire Department.....
	LEPC (Local Emergency Planning Committee).....
	US Bureau of Land Management
	New Mexico Emergency Response Commission (Santa Fe) ...
	24 HR
	National Emergency Response Center (Washington, DC) ..

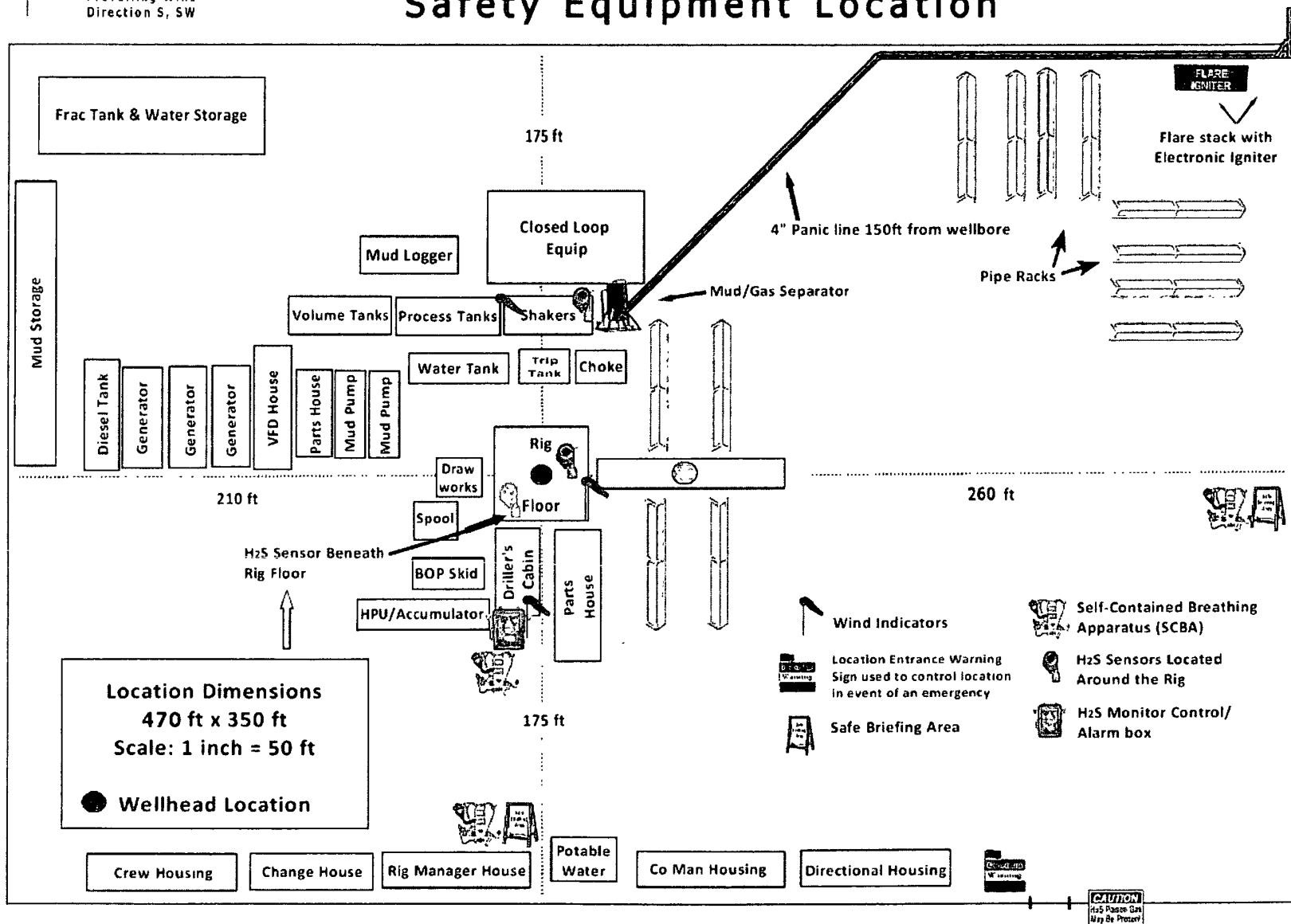
Emergency Services

	Boots & Coots IWC
	Cudd Pressure Control.....
	Halliburton
	B. J. Services.....
<i>Give</i>	Flight For Life - Lubbock, TX
<i>GPS</i>	Aerocare - Lubbock, TX
<i>position:</i>	Med Flight Air Amb - Albuquerque, NM
	Lifeguard Air Med Svc. Albuquerque, NM

Prepared in conjunction with
Wade Rohloff



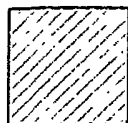
Devon Energy - 2 Well Pad Rig Location Layout Safety Equipment Location



devon

**Proposed Interim
Site Reclamation**

Devon Energy Production Co.
BFDU 57H
1520' FSL & 50' FWL
Sec. 2-T21S-R27E
Eddy County, NM

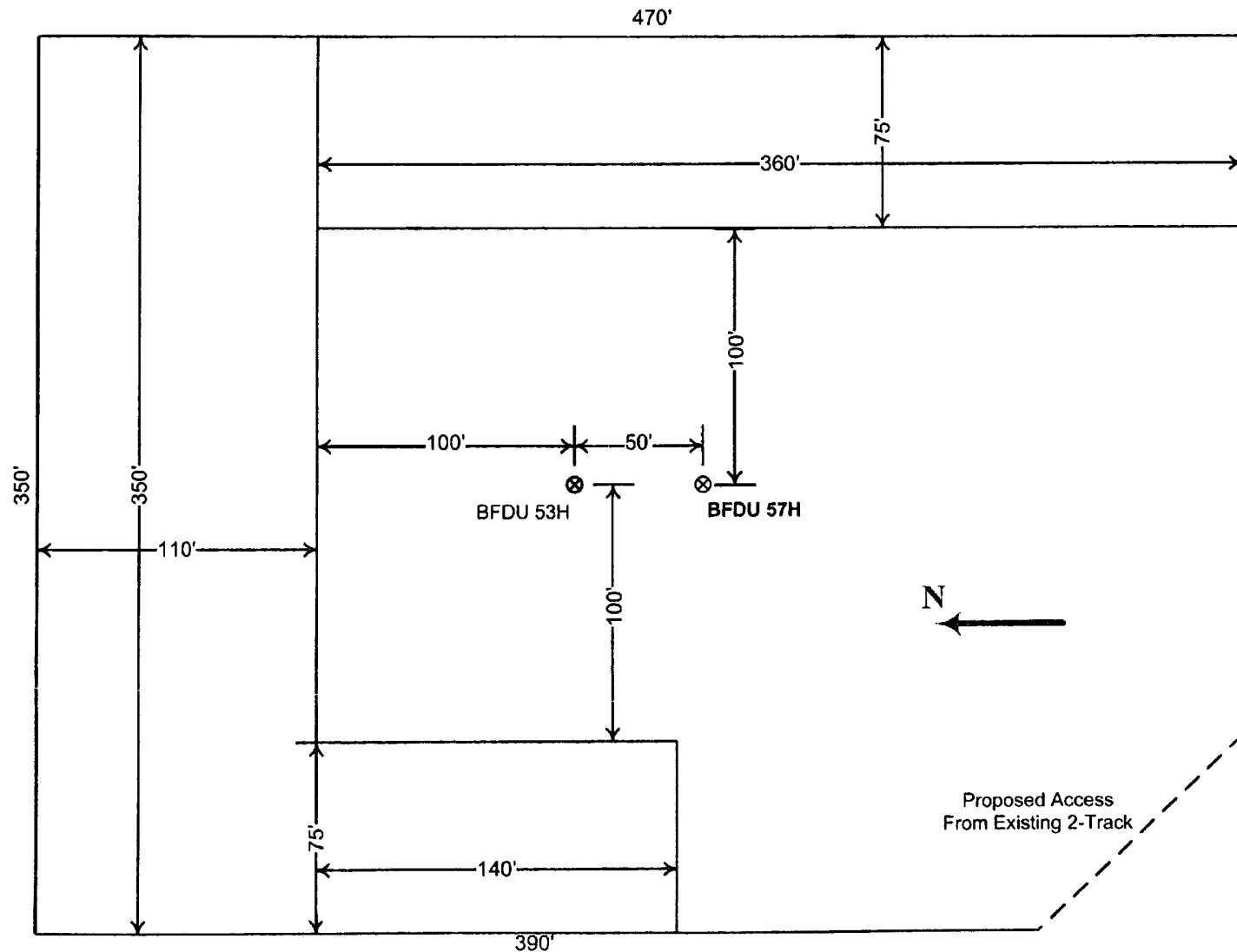


Proposed
Reclamation
Area



Scale: 1in = 60ft.

Proposed Production Facility at the BFDU 52H/56H well pad in Sec. 3-T21S-R27E



Topsoil stock pile on West edge of location

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	DEVON ENERGY
LEASE NO.:	NM0560289
WELL NAME & NO.:	57H-BURTON FLAT DEEP UNIT
SURFACE HOLE FOOTAGE:	1520'/S. & 50'/W.
BOTTOM HOLE FOOTAGE:	1980'/S. & 330'/W. (Sec. 3)
LOCATION:	Section 2, T. 21S., R. 27 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

- ☐ **General Provisions**
- ☐ **Permit Expiration**
- ☐ **Archaeology, Paleontology, and Historical Sites**
- ☐ **Noxious Weeds**
- ☒ **Special Requirements**
 - Commercial well determination**

- ☐ **Construction**
 - Notification
 - Topsoil
 - Closed Loop System
 - Federal Mineral Material Pits
 - Well Pads
 - Roads
- ☐ **Road Section Diagram**
- ☒ **Drilling**
 - High Cave/Karst
 - Logging Requirements
 - Mud logger / casing depth
 - Waste Material and Fluids
- ☐ **Production (Post Drilling)**
 - Well Structures & Facilities
 - Pipelines
 - Electric Lines
- ☐ **Interim Reclamation**
- ☐ **Final Abandonment & Reclamation**

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Commercial Well Determination

Well is outside of the established Bone Spring participating area. A commercial well determination shall be submitted after the well has been on production at least 6 months.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-6235 at least working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately inches in depth. The topsoil will be used for interim and final reclamation.

There is no measurable soil on this well pad to stockpile. No topsoil stockpile is required.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width

The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty (20) feet.

Surfacing

Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning

Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

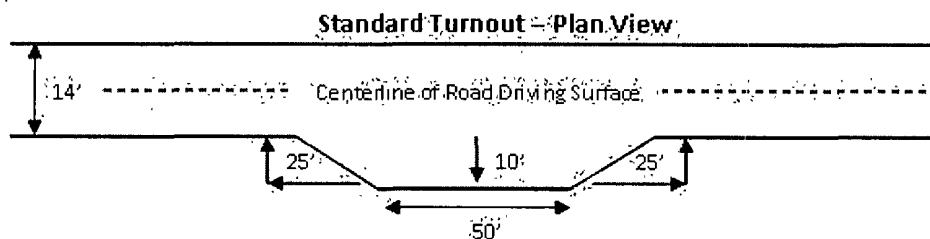
Ditching

Ditching shall be required on the uphill side of the road.

Ditching shall be required on both sides of the road.

Turnouts

Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

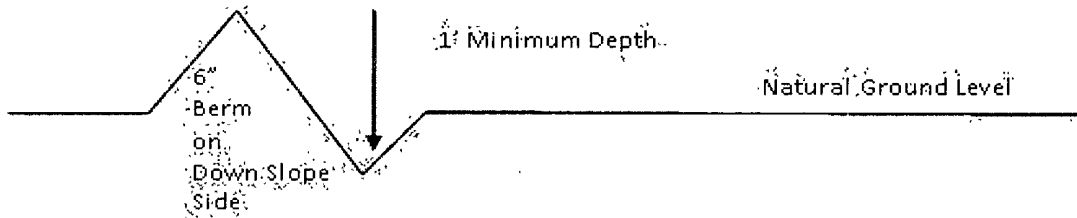


Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

A typical lead-off ditch has a minimum depth of 1 foot below and a berm of 6 inches above natural ground level. The berm shall be on the down-slope side of the lead-off ditch.

Cross Section of a Typical Lead-off Ditch



All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval are variable for lead-off ditches and shall be determined according to the formula for spacing intervals of lead-off ditches, but may be amended depending upon existing soil types and centerline road slope (in %);

Formula for Spacing Interval of Lead-off Ditches

Example - On a 4% road slope that is 400 feet long, the water flow shall drain water into a lead-off ditch. Spacing interval shall be determined by the following formula:

$$400 \text{ foot road with } 4\% \text{ road slope: } \frac{400'}{4\%} + 100' = 200' \text{ lead-off ditch interval}$$

Culvert Installations

Appropriately sized culvert(s) shall be installed at the deep waterway channel flow crossing.

Cattleguards

An appropriately sized cattleguard(s) sufficient to carry out the project shall be installed and maintained at fence crossing(s).

Any existing cattleguard(s) on the access road shall be repaired or replaced if they are damaged or have deteriorated beyond practical use. The operator shall be responsible for the condition of the existing cattleguard(s) that are in place and are utilized during lease operations.

A gate shall be constructed and fastened securely to H-braces.

Fence Requirement

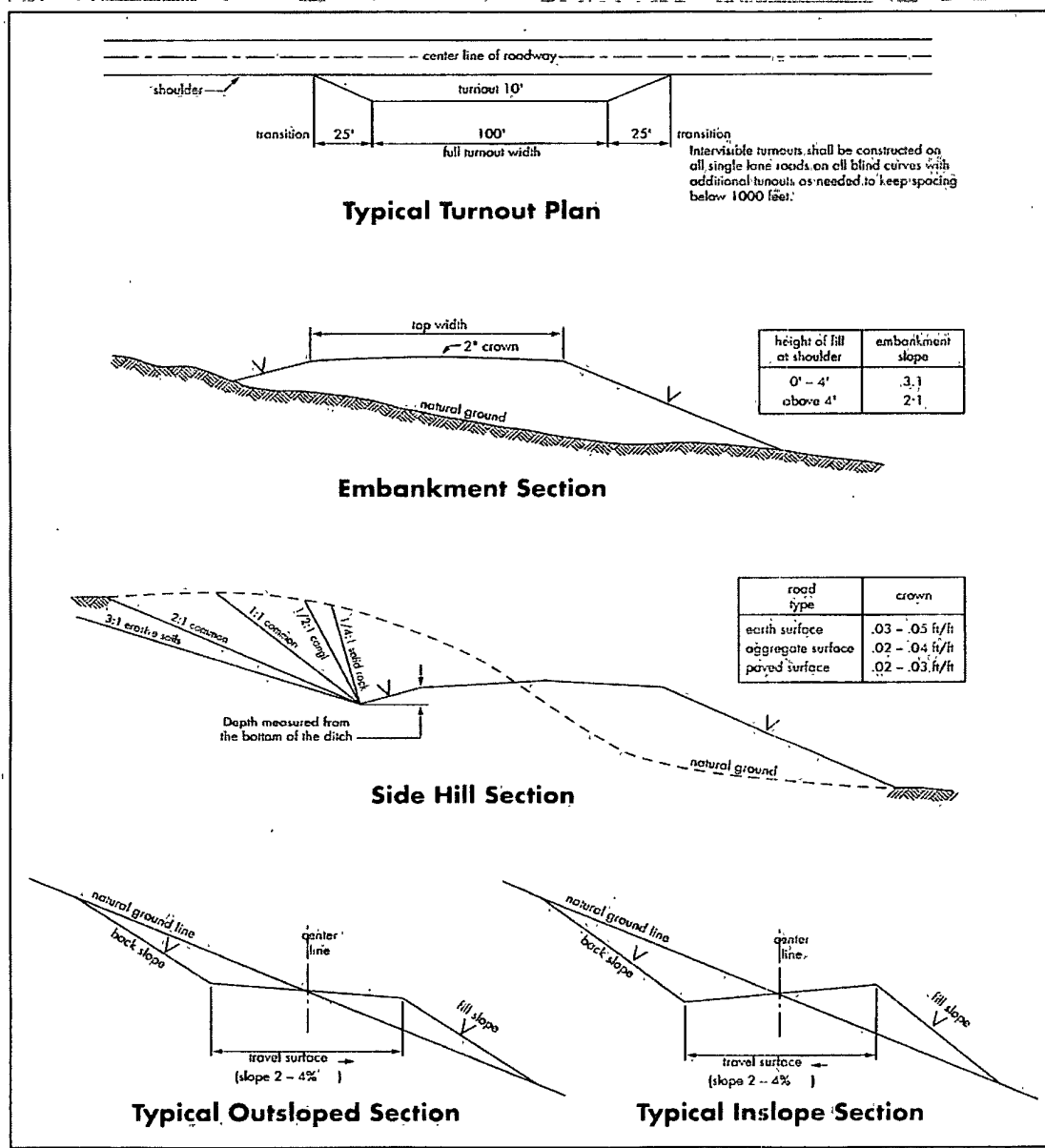
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

The operator shall notify the private surface landowner or the grazing allotment holder prior to crossing any fence(s).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS REQUIREMENTS

The BLM is to be notified a minimum of 4 hours in advance for a representative to witness:

- a. Spudding well
- b. Setting and/or Cementing of all casing strings
- c. BOPE tests

☒ **Eddy County**

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,
(575) 361-2822

1. A Hydrogen Sulfide (H₂S) Drilling Plan shall be activated 500 feet prior to drilling into the **Yates** formation. **As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.**
2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a “Major” violation.**
3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. Also if present the Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. **DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE.** Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

High cave/karst.

Possible lost circulation in the Artesia Group, Delaware and Bone Spring.

- 1. Due to the recently discovered “shrimp” species in the Burton Flat Cave Complex, the operator shall employ a mud-logger so that the casing can be set as near the salt as possible, which will probably occur before the estimated maximum cave depth of 350’. The 20 inch surface casing shall be set 10-25 feet above the top of the salt at approximately 280 feet (in a competent bed) and cemented to the surface.**
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
 - b. Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry.**
 - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **13-3/8** inch intermediate casing is:
 - ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to high cave/karst or Capitan Reef.**
3. The minimum required fill of cement behind the **9-5/8** inch 2nd intermediate casing is:
 - ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to Capitan Reef.**
4. The minimum required fill of cement behind the **5-1/2** inch production casing is:
 - ☒ Top of cement shall be at **600'**. Operator shall provide method of verification.
5. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.
2. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **2000 (2M)** psi.
 - a. **For surface casing only:** If the BOP/BOPE is to be tested against casing, the wait on cement (WOC) time for that casing is to be met (see WOC statement at start of casing section). Independent service company required.
4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 13-3/8 inch intermediate casing shoe shall be **3000 (3M)** psi.
5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips or where the float does not hold, the minimum wait time before cut-off is eight hours after bumping the plug or when the cement reaches 500 psi compressive strength (including lead when specified), whichever is greater. BOP/BOPE testing can begin after the above conditions are satisfied.
 - b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
 - c. The results of the test shall be reported to the appropriate BLM office.
 - d. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**
 - e. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

WWI 091012

VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities

Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures

The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement

All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color
Shale Green, Munsell Soil Color Chart # 5Y 4/2

VRM Facility Requirement

Low-profile tanks not greater than eight-feet-high shall be used.

B. PIPELINES

C. ELECTRIC LINES

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

(Insert Seed Mixture Here)