

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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-71752	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" 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	
2. Name of Operator Devon Energy Production Co., LP		7. If Unit or CA Agreement, Name and No	
3a. Address 20 North Broadway OKC, OK 73102		8. Lease Name and Well No. Rifleman 6 Federal Com 3	
3b. Phone No. (include area code) (405)-552-7802		9. API Well No. 30-015-36205	
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface NENW 480' FNL & 2630' FWL At proposed prod. zone NENW 660' FNL & 1980' FWL		10. Field and Pool, or Exploratory Happy Valley; Morrow	
14. Distance in miles and direction from nearest town or post office* Approximately 4 miles west of Carlsbad, NM.		11. Sec, T R M or Blk. and Survey or Area Sec 6 T22S-R26E	
15. Distance from proposed* location to nearest property or lease line, ft (Also to nearest drig unit line, if any) 480'		12. County or Parish Eddy	
16. No. of acres in lease 518.15		13. State NM	
17. Spacing Unit dedicated to this well 320		18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft 1476'	
19. Proposed Depth TVD 11277 MD 11400		20. BLM/BIA Bond No. on file CO-1104	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3409' GL		22. Approximate date work will start* 01/15/2008	
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 | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2. A Drilling Plan | 5. Operator certification |
| 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) | 6. Such other site specific information and/or plans as may be required by the BLM |

25. Signature 	Name (Printed/Typed) Stephanie A. Ysasaga	Date 01/10/2008
Title Sr. Staff Engineering Technician		
Approved by (Signature) 	Name (Printed/Typed) Don Peterson	Date MAR 04 2008
Title FIELD MANAGER		
Office CARLSBAD FIELD OFFICE		

Application approval does not warrant 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:

Title 18 U.S.C. Section 1001 and Title States any false, fictitious or fraudulent

*(Instructions on page 2)

If earthen pits are used in association with the drilling of this well, an OCD pit permit must be obtained prior to pit construction

APPROVAL FOR TWO YEARS

and willfully to make to any department or agency of the United States

CARLSBAD CONTROLLED WATER BASIN

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240

DISTRICT II
1301 W. Grand Avenue, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised October 12, 2005

Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-36205	Pool Code 78060	Pool Name HAPPY VALLEY; MORROW
Property Code 30651	Property Name RIFLEMAN 6 FED COM	Well Number 3
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION COMPANY LP	Elevation 3409'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	6	22 S	26 E		480	NORTH	2630	WEST	EDDY

Bottom Hole Location If Different From Surface

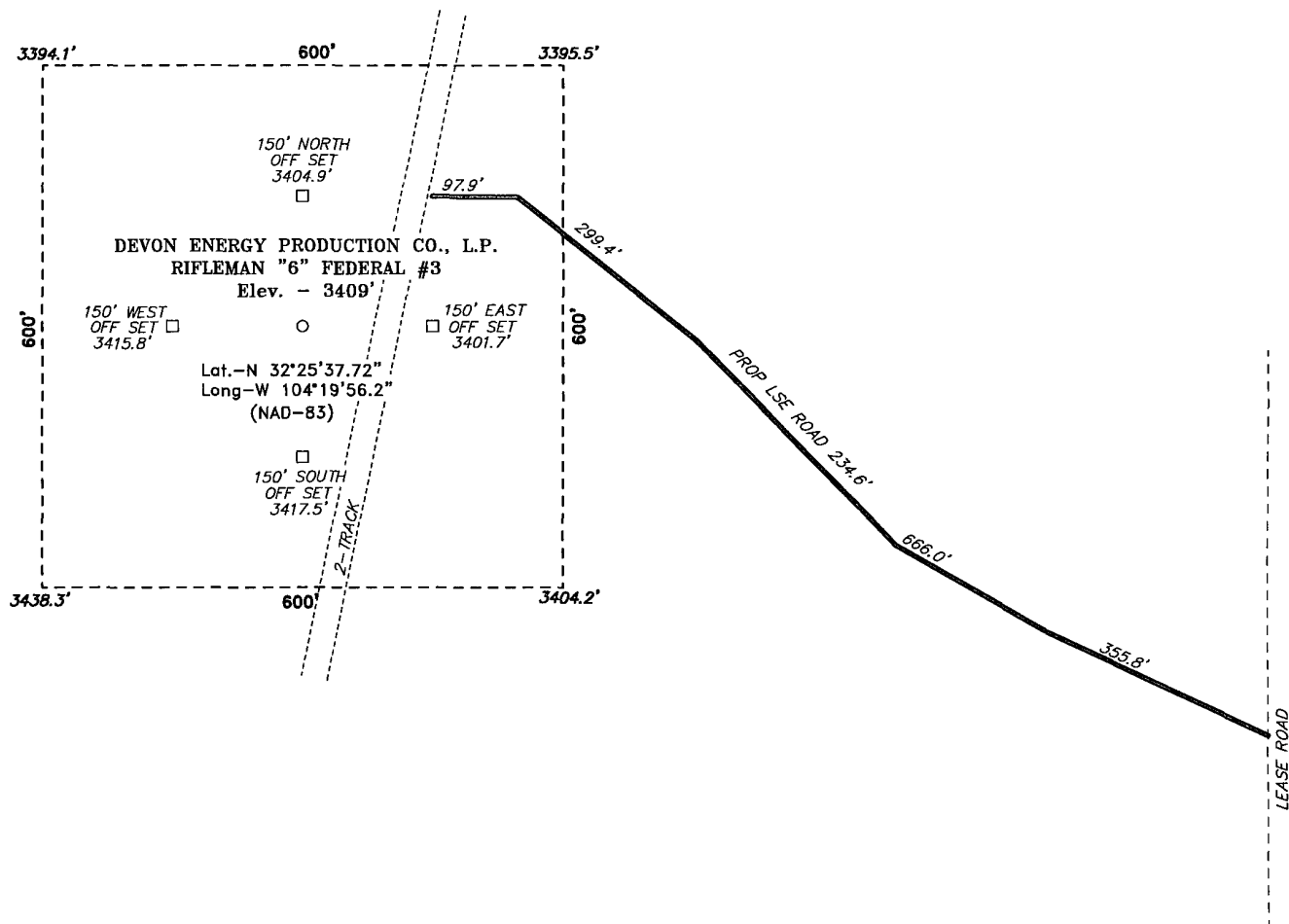
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	6	22 S	26 E		660	NORTH	1980	WEST	EDDY

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
320			

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>SURFACE LOCATION Lat - N32°25'37.72" Long - W104°19'56.25" SPC- N.: 519130.888 E.: 541656.564 (NAD-83) NM-13406</p> <p>BOTTOM HOLE LOCATION Lat - N32°25'36.0" Long - W104°20'03.9" SPC- N.: 518950.89 E.: 541006.56 (NAD-83) NM-71752</p> <p>PENETRATION POINT: 794' FNL & 1499'</p>	<p>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 unleased mineral interest in the land including the proposed bottom hole 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>Signature _____ Date _____ STEPHANIE A. YSASAGA Printed Name</p> <p>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>NOVEMBER 28, 2007</p> <p>Date Surveyed _____ Signature of Surveyor _____ Professional Surveyor</p> <p> Certificate No. Gary L. Jones 7977</p> <p>BASIN SURVEYS</p>
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SECTION 2, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF JONES ROAD AND BITTER
CHERRY ROAD, GO WEST APPROX 1.5 MILES TO
LEASE ROAD, ON LEASE ROAD GO SOUTH 0.8 MILES
TO PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786—HOBBS, NEW MEXICO

W.O. Number: 18835

Drawn By: J. M. SMALL

Date: 12-06-2007

Disk: 18835W JMS

200 0 200 400 FEET

SCALE: 1" = 200'

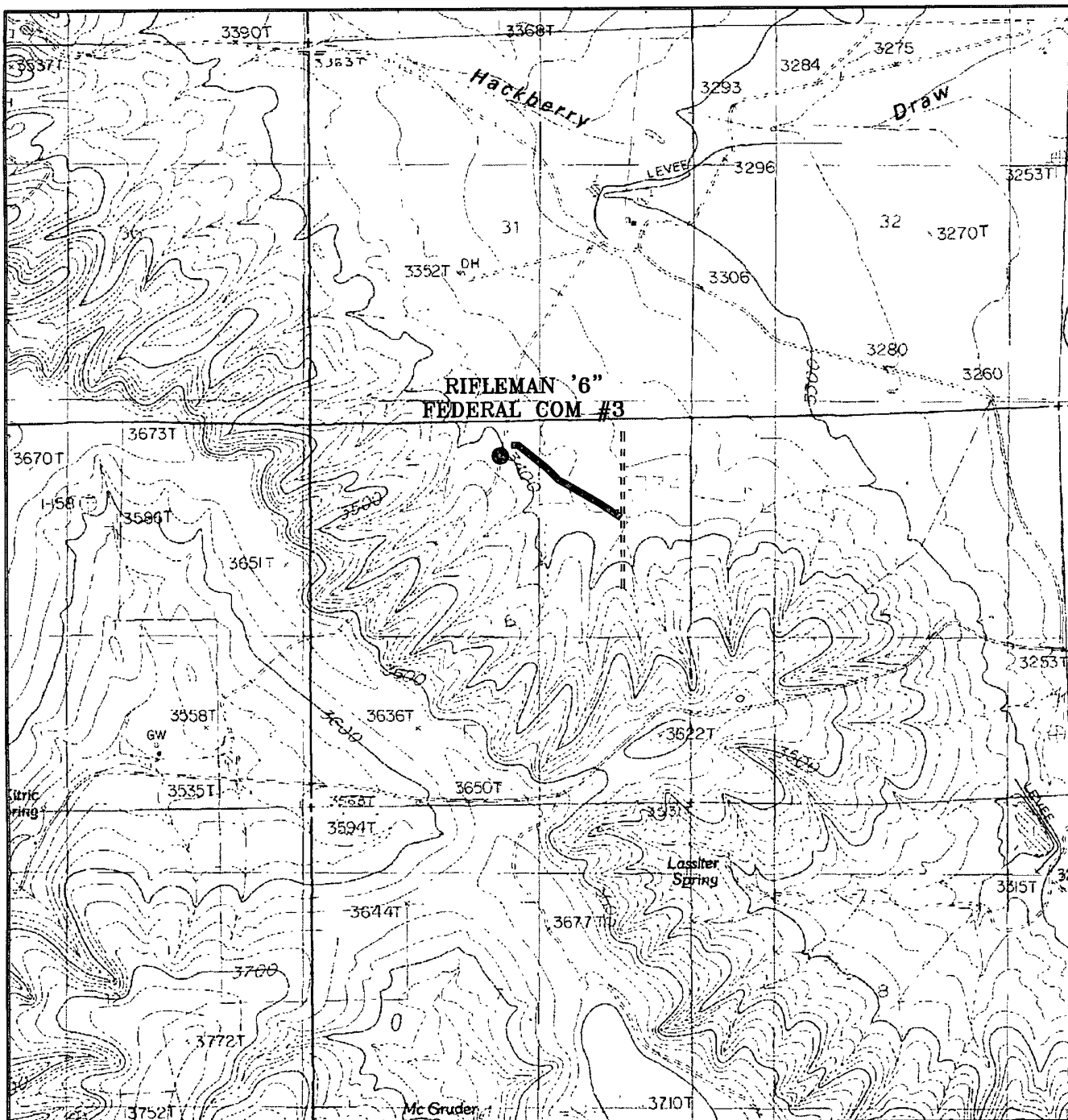
DEVON ENERGY PROD. CO., L.P.

REF: RIFLEMAN "6" FEDERAL #3 / WELL PAD TOPO

THE RIFLEMAN "6" FEDERAL No. 3 LOCATED 480'
FROM THE NORTH LINE AND 2630' FROM THE WEST LINE OF
SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 11-28-2007

Sheet 1 of 1 Sheets



RIFLEMAN "6" FEDERAL COM #3

Located at 480' FNL AND 2630' FWL
 Section 6, Township 22 South, Range 26 East,
 N.M.P.M., Eddy County, New Mexico.



P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

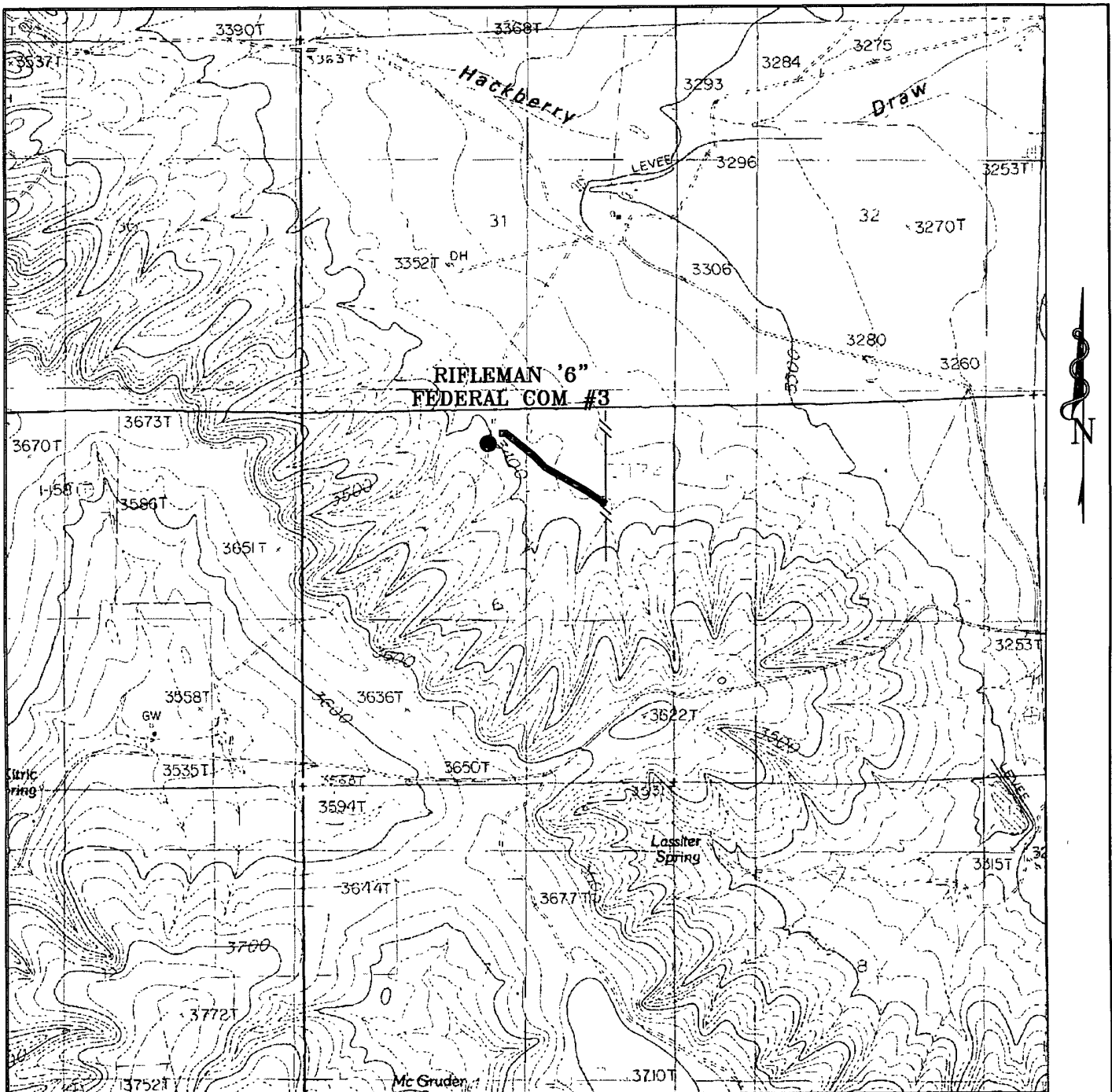
W.O. Number: JMS 18835T

Survey Date: 11-28-2007

Scale: 1" = 2000'

Date: 12-06-2007

**DEVON ENERGY
 PROD. CO., L.P.**



PROPOSED PIPELINE TO THE RIFLEMAN "6" FEDERAL COM #3
 Section 6, Township 22 South, Range 26 East,
 N.M.P.M., Eddy County, New Mexico.

basin
surveys
 focused on excellence
 in the oilfield

P.O. Box 1786
 1120 N. West County Rd.
 Hobbs, New Mexico 88241
 (505) 393-7316 - Office
 (505) 392-3074 - Fax
 basinsurveys.com

W.O. Number: JMS 18835TT

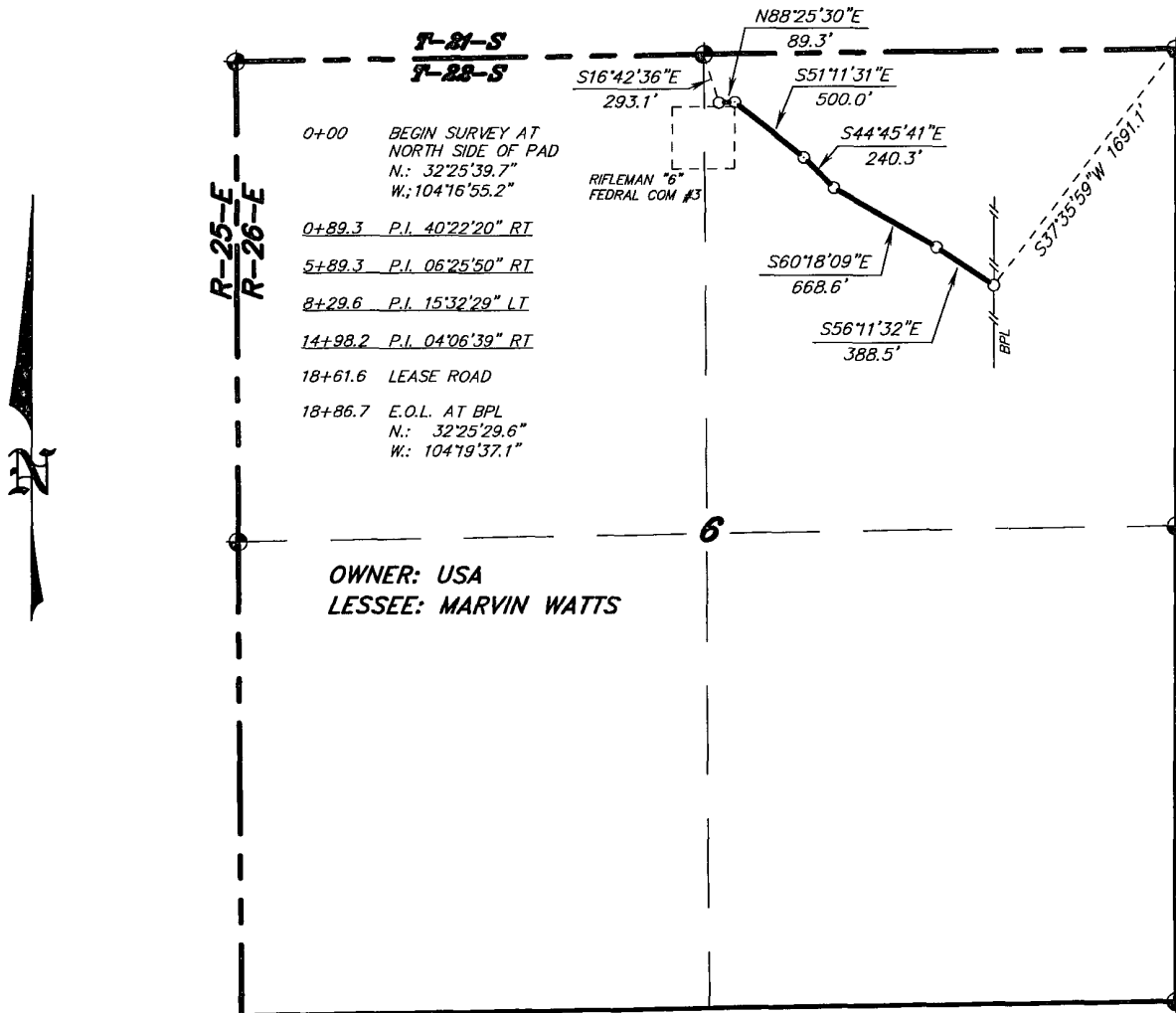
Survey Date: 11-28-2007

Scale: 1" = 2000'

Date: 12-06-2007

DEVON ENERGY
 PROD. CO., L.P.

SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.

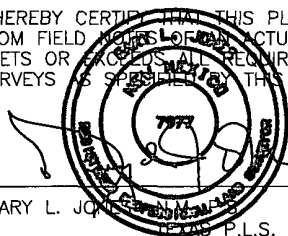


LEGAL DESCRIPTION

A STRIP OF LAND 30.0 FEET WIDE, LOCATED IN SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO AND BEING 15.0 FEET LEFT AND RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

SECTION 6 = 1886.7 FEET = 0.36 MILES = 114.35 RODS = 1.30 ACRES

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



GARY L. JONES P.L.S. No. 7977
No. 5074

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 18835 Drawn By: J. M. SMALL

Date: 12-07-2007 Disk: JMS 18835P

1000 0 1000 2000 FEET

DEVON ENERGY PROD. CO., L.P.

REF: PROPOSED PIPELINE TO THE RIFLEMAN "6" FEDERAL COM #3

A PIPELINE CROSSING USA LAND IN
SECTION 6, TOWNSHIP 22 SOUTH, RANGE 26 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 11-28-2007 Sheet 1 of 1 Sheets

DRILLING PROGRAM

Devon Energy Production Company, LP

Rifleman 6 Federal Com 3

Surface Location: 480' FNL & 2630' FWL, Unit C, Sec 6 T22S R26E, Eddy, NM

Bottom hole Location: 660' FNL & 1980' FWL, Unit C, Sec 6 T22S R26E, 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. Seven Rivers	0'	Fresh Water
b. Capitan	500'	Fresh Water
c. Delaware Sd	2340'	Oil
d. Bone Spring Lime	4630'	Oil
e. 1st Bone Spring Sd	6150'	Oil
f. 2nd Bone Spring Sd	6650'	Oil
g. 3 rd Bone Springs Sd	7870'	Oil
h. Wolfcamp Lm	8275'	Gas
i. Penn	9280'	Gas
j. Strawn Lm	9760'	Gas
k. Atoka	10160'	Gas
l. U Morrow Clastics	10660'	Gas
m. Middle Morrow Lime	10840'	Gas
n. Lower Morrow	11075'	Gas
o. Barnett Shale	11200'	
p. Total Depth	11400'	

No other formations are expected to yield oil, gas or fresh water in measurable volumes. The surface fresh water sands will be protected by setting 20" casing at 500' and circulating cement back to surface. Fresh water sands will be protected by setting 9 5/8" casing at 2365' and circulating cement to surface. The Morrow intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement to surface.

3. Casing Program:

<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' - 500'	20"	0'-500'	94#/ft	BT&C	H-40
12 1/4"	500'-2365'	9 5/8"	0-2365'	40#/ft	LT&C	J-55
8 3/4"	2365'- 11400'	5 1/2"	0'-11400'	17#/ft	LT&C	HCP-110

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"	2.00	5.36	12.36
9 5/8"	2.09	2.81	5.50
5 1/2"	1.40	1.61	2.67

4. Cement Program:

a. 20" Surface

Cement Lead Slurry: 645 sacks (35:65) Poz (Fly Ash):Premium Plus C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 93.6% Fresh Water. **Yield:** 1.83. **Tail Slurry:** 300 sacks Premium Plus C Cement + 2% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.3% Fresh Water. **Yield:** 1.35. **Displacement:** 43.2 bbls Mud @ 9.0 ppg. TOC to surface.

b. 9 5/8" Intermediate

Cement Lead Slurry: 820 sacks (35:65) Poz (Fly Ash):Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 5 lbs/sack LCM-1 + 6% bwoc Bentonite + 95.8% Fresh Water. **Yield:** 1.95. **Tail Slurry:** 250 sacks Premium Plus C Cement + 1% bwoc Calcium Chloride + 0.125 lbs/sack Cello Flake + 56.2% Fresh Water. **Yield:** 1.34. **Displacement:** 176.3 bbls Mud @ 8.5 ppg. TOC to surface.

c. 5 1/2" Production

Stage 1:

Cement Slurry: 685 sacks (15:61:11) Poz (Fly Ash):Premium Plus C Cement:CSE-2 + 0.3% bwoc R-3 + 1% bwow Potassium Chloride + 0.75% bwoc EC-1 + 0.125 lbs/sack Cello Flake + 0.4% bwoc CD-32 + 3 lbs/sack LCM-1 + 0.6% bwoc FL-25 + 0.6% bwoc FL-52A + 72.3% Fresh Water. **Yield:** 1.57 cf/sack. **Displacement:** 2360.8 bbls Displacement Fluid.

Stage 2: DV Tool @ 8500'

Lead Slurry: 510 sacks (35:65) Poz (Fly Ash):Class H Cement + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 0.4% bwoc FL-52A + 102.1% Fresh Water. **Yield:** 1.94. **Tail Slurry:** 700 sacks (60:40) Poz (Fly Ash):Class H Cement + 1% bwow Sodium Chloride + 0.75% bwoc BA-10A + 0.1% bwoc R-3 + 0.125 lbs/sack Cello Flake + 2 lbs/sack Kol Seal + 4% bwoc MPA-1 + 61.3% Fresh Water. **Yield:** 1.34. **Displacement:** 197.6 bbls Displacement Fluid.

Stage 3: DV Tool @ 4000'

Lead Slurry: 640 sacks (35:65) Poz (Fly Ash):Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 6% bwoc Bentonite + 107.8% Fresh Water. **Yield:** 2.04.

Tail Slurry: 100 sacks (60:40) Poz (Fly Ash):Premium Plus C Cement + 5% bwow Sodium Chloride + 0.125 lbs/sack Cello Flake + 0.4% bwoc Sodium Metasilicate + 4% bwoc MPA-1 + 64.7% Fresh Water. **Yield:** 1.37. **Displacement:** 93.0 bbls Displacement Fluid. TOC @ to surf.

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach surface. All casing is new and API approved.

5. Pressure Control Equipment:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (5M system) double ram type (5000 psi WP) preventor and a bag-type (Hydril) preventor (5000 psi WP) and rotating head. Both units will be hydraulically operated and the ram type preventor will be equipped with blind rams on top and 4 1/2" drill pipe rams on bottom. The BOP will be installed on the 20" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to **1400 psi with the rig pump before drilling out the 20" casing shoe (70% of 94#, H-40 casing)**. Prior to drilling out the 9 5/8" casing shoe, the BOP's and Hydril will be tested as per BLM Drilling Operations Order #2.

Pipe rams will be operated and checked each 24-hour period and each time the drill pipe is out of the hole. These functional tests will be documented on the daily drillers log. A 2" kill line and 3" choke line will be incorporated in the drilling spool below the ram-type BOP. Other accessory BOP equipment will include a Kelly cock, floor safety valve, choke lines and choke manifold having 5000 psi WP rating.

6. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' - 500'	8.6-9.4	32-34	NC	Fresh Water-Gel/Lime
500' - 2365'	8.4-8.5	28-29	NC	Fresh Water - Gel
2365' - 8000'	9.5-9.8	28	NC	Cut Brine
8000' - 11400'	10.0-10.2	34-38	8cc	Brine/Brine/Polymer

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 20" casing shoe until the 5 1/2" casing is cemented. Breathing equipment will be on location upon drilling the 20" shoe until total depth is reached.

8. Logging, Coring, and Testing Program:

- Drill stem tests will be based on geological sample shows.

- ii. 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.

4 8.

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 4700 psi and Estimated BHT 180°. No H2S is anticipated to be encountered.

10 9.

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.

Nov 10 05 02:10p

Aug 23 04 08:10a

505 7485211

p. 1

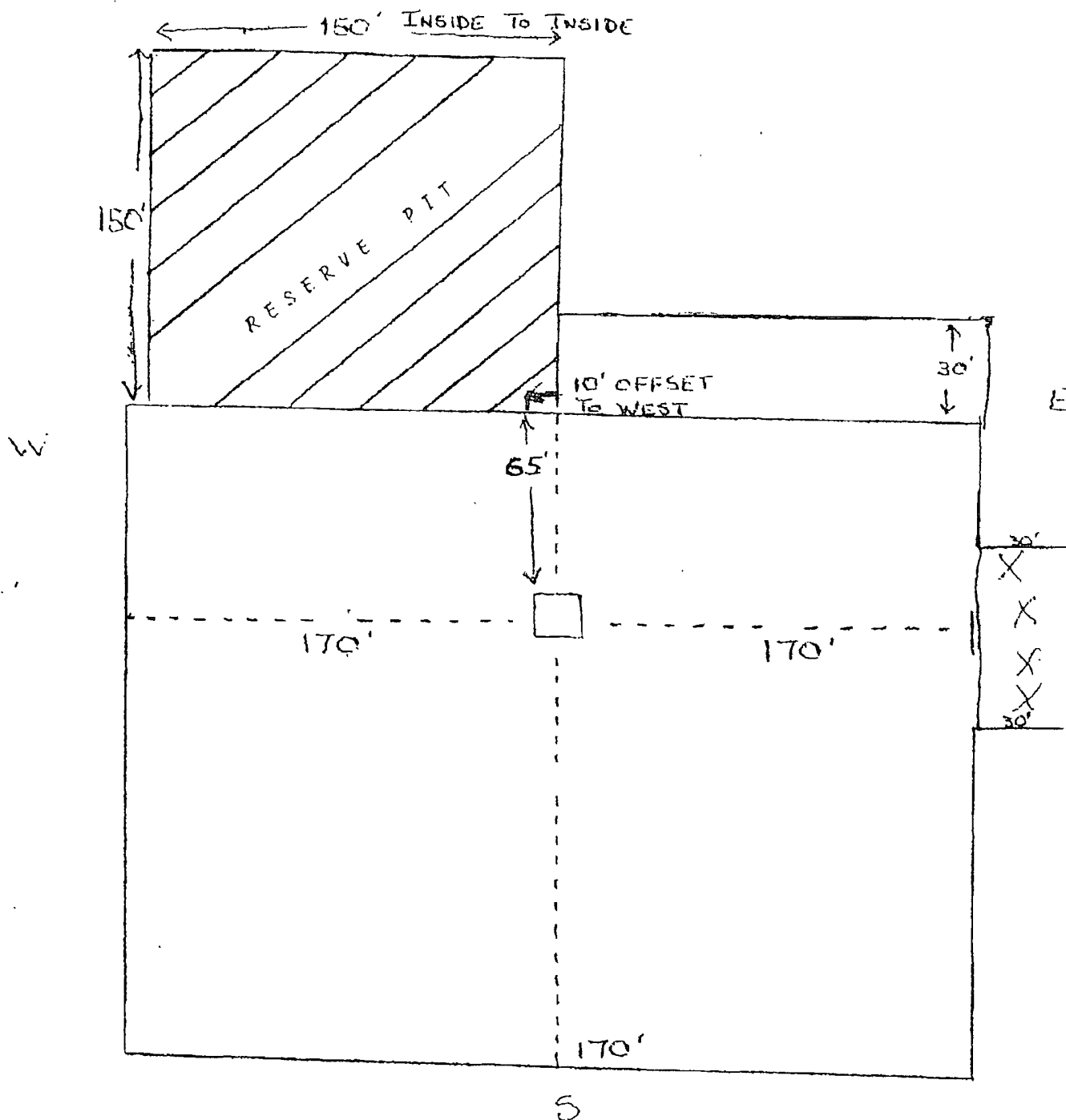
p. 2



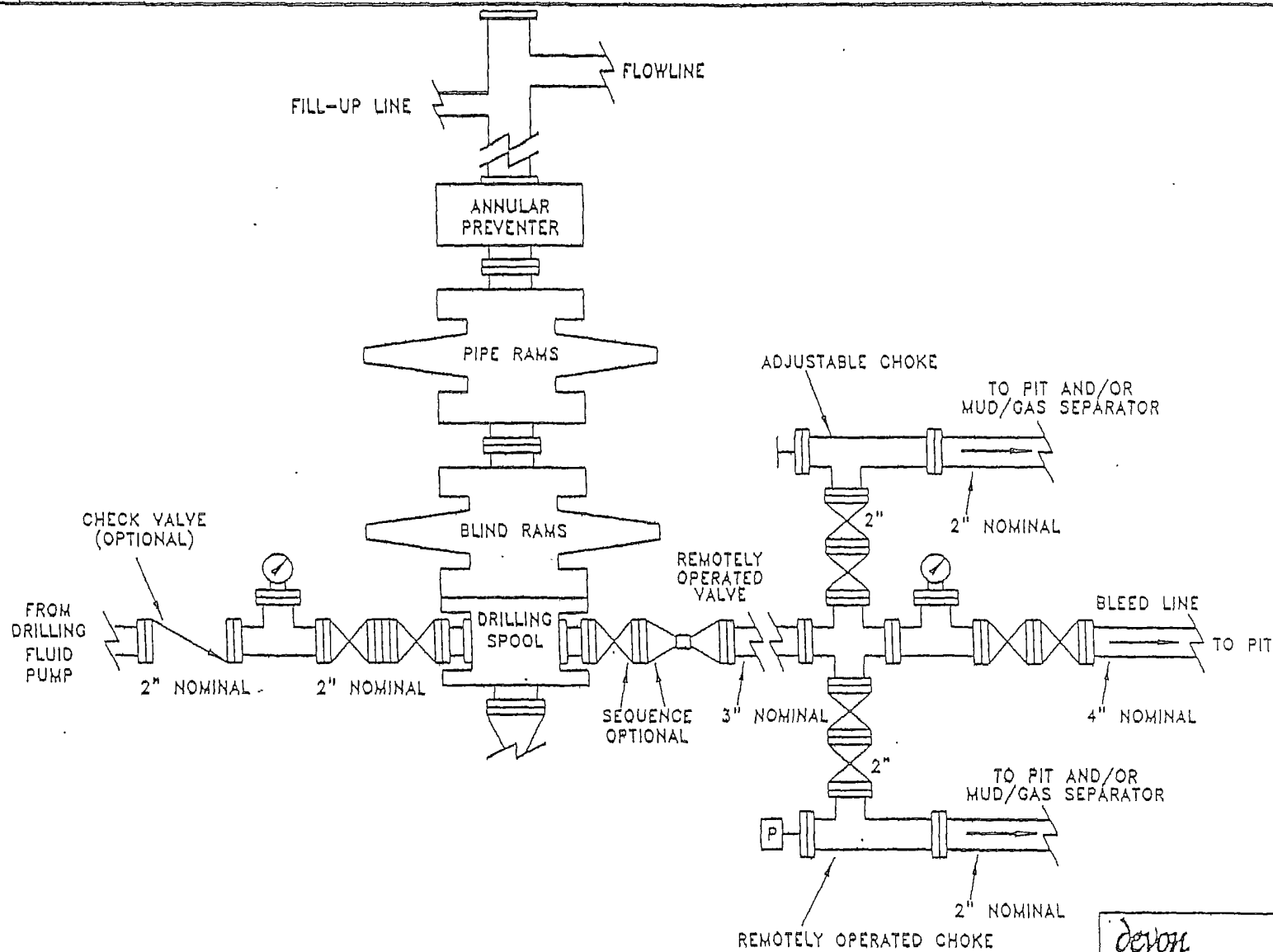
McVAY DRILLING COMPANY
Post Office Box 924
Hobbs, New Mexico 88241
(505) 397-3311
(505) 393-3744

N

Ms V44 17



SEE ATTACHED FOR
CONDITIONS OF APPROVAL



DEVON

EXHIBIT 1

PROPOSED 5-M BOPE
AND CHOKE ARRANGEMENT

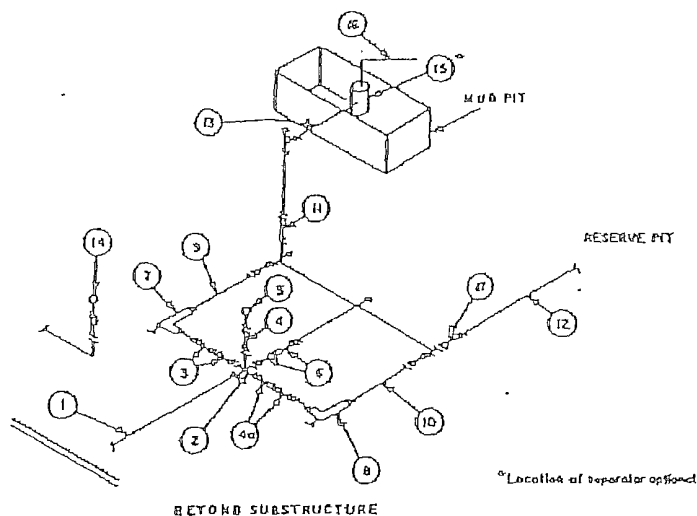
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SC

MINIMUM CHOKE MANIFOLD
3,000, 5,000 and 10,000 PSI Working Pressure

3 MWP - 5 MWP - 10 MWP

Exhibit E



MINIMUM REQUIREMENTS									
No.		3,000 MWP			5,000 MWP			10,000 MWP	
		I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL
1	Line from drilling spool		3"	3,000		3"	5,000		3"
2	Cross 3"x3"x3"x2"			3,000			5,000		
	Cross 3"x3"x3"x3"								10,000
3	Valves (1) Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000
4	Valve Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	1-13/16"		3,000	1-13/16"		5,000	1-13/16"	10,000
4a	Valves (1)	2-1/16"		3,000	2-1/16"		5,000	3-1/8"	10,000
5	Pressure Gauge			3,000			5,000		10,000
6	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000
7	Adjustable Choke (3)	2"		3,000	2"		5,000	2"	10,000
8	Adjustable Choke	1"		3,000	1"		5,000	2"	10,000
9	Line		3"	3,000		3"	5,000		3"
10	Line		2"	3,000		2"	5,000		3"
11	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000
12	Lines		3"	1,000		3"	1,000		3"
13	Lines		3"	1,000		3"	1,000		3"
14	Remote reading compound standpipe pressure gauge			3,000			5,000		10,000
15	Gas Separator		2"x5"			2"x5"			2"x5"
16	Line		4"	1,000		4"	1,000		4"
17	Valves Gate <input type="checkbox"/> Plug <input type="checkbox"/> (2)	3-1/8"		3,000	3-1/8"		5,000	3-1/8"	10,000

(1) Only one required in Class 3M.

(2) Gate valves only shall be used for Class 10M.

(3) Remote operated hydraulic choke required on 5,000 psi and 10,000 psi for drilling.

EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS

1. All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
2. All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
3. All lines shall be securely anchored.
4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
7. Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Rifleman 6 Federal Com 3

Surface Location: 480' FNL & 2630' FWL, Unit C, Sec 6 T22S R26E, Eddy, NM
Bottom hole Location: 660' FNL & 1980' FWL, Unit C, Sec 6 T22S R26E, 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 5000 psi working pressure.
4. All fittings will be flanged.
5. A full bore safety valve tested to a minimum 5000 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.

Devon Energy

Eddy County (NM83E)

Sec 6-T22S-R26E

Rifleman 6-3

Wellbore #1

Plan: 12-12-07

Standard Planning Report

12 December, 2007

Quantum

Planning Report

Database: EDM 2003.16 Single User Db
Company: Devon Energy
Project: Eddy County (NM83E)
Site: Sec 6-T22S-R26E
Well: Rifleman 6-3
Wellbore: Wellbore #1
Design: 12-12-07

Local Co-ordinate Reference: Well Rifleman 6-3
TVD Reference: WELL @ 0 0ft (Original Well Elev)
MD Reference: WELL @ 0 0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Project	Eddy County (NM83E)
Map System:	US State Plane 1983
Geo Datum:	North American Datum 1983
Map Zone:	New Mexico Eastern Zone
System Datum:	Mean Sea Level

Site	Sec 6-T22S-R26E				
Site Position:		Northing:	519,130.89ft	Latitude:	32° 25' 37.765 N
From:	Map	Easting:	541,656.56ft	Longitude:	104° 19' 56.277 W
Position Uncertainty:	0.0 ft	Slot Radius:	"	Grid Convergence:	0 00 °

Well	Rifleman 6-3				
Well Position	+N/-S	0.0 ft	Northing:	519,130.89 ft	Latitude: 32° 25' 37.765 N
	+E/-W	0.0 ft	Easting:	541,656.56 ft	Longitude: 104° 19' 56.277 W
Position Uncertainty		0.0 ft	Wellhead Elevation:	ft	Ground Level: 0.0ft

Wellbore	Wellbore #1				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2006	12/12/2007	8 40	60.34	49,072

Design	12-12-07				
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)	
	0.0	0.0	0 0	254.52	

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0 00	0.0	0 0	0.0	0 00	0.00	0.00	0.00	
4,600.0	0.00	0.00	4,600.0	0 0	0 0	0.00	0.00	0.00	0 00	
5,162.1	11.24	254.52	5,158.5	-14.7	-53 0	2.00	2.00	0.00	254.52	
8,339.6	11.24	254.52	8,275 0	-180.0	-650.0	0.00	0.00	0.00	0 00	Rifleman 6-3 Targe
11,400 0	11.24	254.52	11,276 7	-339.2	-1,225 0	0.00	0 00	0.00	0.00	

Quantum Planning Report

Database: EDM 2003.16 Single User Db
Company: Devon Energy
Project: Eddy County (NM83E)
Site: Sec 6-T22S-R26E
Well: Rifleman 6-3
Wellbore: Wellbore #1
Design: 12-12-07

Local Co-ordinate Reference: Well Rifleman 6-3
TVD Reference: WELL @ 0.0ft (Original Well Elev)
MD Reference: WELL @ 0.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

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)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0	0.00	0.00	4,600.0	0.0	0.0	0.0	0.00	0.00	0.00
KOP - 2/100 @ 254.52 AZI - Bone Spring Lm									
4,700.0	2.00	254.52	4,700.0	-0.5	-1.7	1.7	2.00	2.00	0.00
4,800.0	4.00	254.52	4,799.8	-1.9	-6.7	7.0	2.00	2.00	0.00
4,900.0	6.00	254.52	4,899.5	-4.2	-15.1	15.7	2.00	2.00	0.00
5,000.0	8.00	254.52	4,998.7	-7.4	-26.9	27.9	2.00	2.00	0.00
5,100.0	10.00	254.52	5,097.5	-11.6	-41.9	43.5	2.00	2.00	0.00
5,162.1	11.24	254.52	5,158.5	-14.7	-53.0	55.0	2.00	2.00	0.00
Begin Hold to TD									
5,200.0	11.24	254.52	5,195.7	-16.6	-60.1	62.4	0.00	0.00	0.00
5,300.0	11.24	254.52	5,293.8	-21.8	-78.9	81.9	0.00	0.00	0.00
5,400.0	11.24	254.52	5,391.8	-27.0	-97.7	101.4	0.00	0.00	0.00
5,500.0	11.24	254.52	5,489.9	-32.2	-116.5	120.8	0.00	0.00	0.00
5,600.0	11.24	254.52	5,588.0	-37.5	-135.3	140.3	0.00	0.00	0.00
5,700.0	11.24	254.52	5,686.1	-42.7	-154.0	159.8	0.00	0.00	0.00
5,800.0	11.24	254.52	5,784.2	-47.9	-172.8	179.3	0.00	0.00	0.00
5,900.0	11.24	254.52	5,882.2	-53.1	-191.6	198.8	0.00	0.00	0.00
6,000.0	11.24	254.52	5,980.3	-58.3	-210.4	218.3	0.00	0.00	0.00
6,100.0	11.24	254.52	6,078.4	-63.5	-229.2	237.8	0.00	0.00	0.00
6,200.0	11.24	254.52	6,176.5	-68.7	-248.0	257.3	0.00	0.00	0.00
6,300.0	11.24	254.52	6,274.6	-73.9	-266.8	276.8	0.00	0.00	0.00
6,400.0	11.24	254.52	6,372.6	-79.1	-285.6	296.3	0.00	0.00	0.00
6,500.0	11.24	254.52	6,470.7	-84.3	-304.4	315.8	0.00	0.00	0.00
6,600.0	11.24	254.52	6,568.8	-89.5	-323.1	335.3	0.00	0.00	0.00
6,700.0	11.24	254.52	6,666.9	-94.7	-341.9	354.8	0.00	0.00	0.00
6,800.0	11.24	254.52	6,765.0	-99.9	-360.7	374.3	0.00	0.00	0.00
6,900.0	11.24	254.52	6,863.1	-105.1	-379.5	393.8	0.00	0.00	0.00
7,000.0	11.24	254.52	6,961.1	-110.3	-398.3	413.3	0.00	0.00	0.00
7,100.0	11.24	254.52	7,059.2	-115.5	-417.1	432.8	0.00	0.00	0.00
7,200.0	11.24	254.52	7,157.3	-120.7	-435.9	452.3	0.00	0.00	0.00
7,300.0	11.24	254.52	7,255.4	-125.9	-454.7	471.8	0.00	0.00	0.00
7,400.0	11.24	254.52	7,353.5	-131.1	-473.5	491.3	0.00	0.00	0.00
7,500.0	11.24	254.52	7,451.5	-136.3	-492.3	510.8	0.00	0.00	0.00
7,600.0	11.24	254.52	7,549.6	-141.5	-511.0	530.3	0.00	0.00	0.00
7,700.0	11.24	254.52	7,647.7	-146.7	-529.8	549.8	0.00	0.00	0.00
7,800.0	11.24	254.52	7,745.8	-151.9	-548.6	569.3	0.00	0.00	0.00
7,900.0	11.24	254.52	7,843.9	-157.1	-567.4	588.8	0.00	0.00	0.00
8,000.0	11.24	254.52	7,941.9	-162.3	-586.2	608.3	0.00	0.00	0.00
8,100.0	11.24	254.52	8,040.0	-167.5	-605.0	627.8	0.00	0.00	0.00
8,200.0	11.24	254.52	8,138.1	-172.7	-623.8	647.3	0.00	0.00	0.00
8,300.0	11.24	254.52	8,236.2	-177.9	-642.6	666.8	0.00	0.00	0.00
8,339.6	11.24	254.52	8,275.0	-180.0	-650.0	674.5	0.00	0.00	0.00
Wolfcamp - Rifleman 6-3 Target #1									
8,400.0	11.24	254.52	8,334.3	-183.1	-661.4	686.2	0.00	0.00	0.00
8,500.0	11.24	254.52	8,432.3	-188.3	-680.1	705.7	0.00	0.00	0.00
8,600.0	11.24	254.52	8,530.4	-193.5	-698.9	725.2	0.00	0.00	0.00
8,700.0	11.24	254.52	8,628.5	-198.7	-717.7	744.7	0.00	0.00	0.00
8,800.0	11.24	254.52	8,726.6	-203.9	-736.5	764.2	0.00	0.00	0.00
8,900.0	11.24	254.52	8,824.7	-209.2	-755.3	783.7	0.00	0.00	0.00
9,000.0	11.24	254.52	8,922.8	-214.4	-774.1	803.2	0.00	0.00	0.00
9,100.0	11.24	254.52	9,020.8	-219.6	-792.9	822.7	0.00	0.00	0.00
9,200.0	11.24	254.52	9,118.9	-224.8	-811.7	842.2	0.00	0.00	0.00

Quantum

Planning Report

Database: EDM 2003.16 Single User Db
Company: Devon Energy
Project: Eddy County (NM83E)
Site: Sec 6-T22S-R26E
Well: Rifleman 6-3
Wellbore: Wellbore #1
Design: 12-12-07

Local Co-ordinate Reference: Well Rifleman 6-3
TVD Reference: WELL @ 0.0ft (Original Well Elev)
MD Reference: WELL @ 0.0ft (Original Well Elev)
North Reference: True
Survey Calculation Method: Minimum Curvature

Planned Survey

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)
9,300.0	11.24	254.52	9,217.0	-230.0	-830.5	861.7	0.00	0.00	0.00
9,400.0	11.24	254.52	9,315.1	-235.2	-849.3	881.2	0.00	0.00	0.00
9,500.0	11.24	254.52	9,413.2	-240.4	-868.0	900.7	0.00	0.00	0.00
9,600.0	11.24	254.52	9,511.2	-245.6	-886.8	920.2	0.00	0.00	0.00
9,700.0	11.24	254.52	9,609.3	-250.8	-905.6	939.7	0.00	0.00	0.00
9,800.0	11.24	254.52	9,707.4	-256.0	-924.4	959.2	0.00	0.00	0.00
9,900.0	11.24	254.52	9,805.5	-261.2	-943.2	978.7	0.00	0.00	0.00
10,000.0	11.24	254.52	9,903.6	-266.4	-962.0	998.2	0.00	0.00	0.00
10,100.0	11.24	254.52	10,001.6	-271.6	-980.8	1,017.7	0.00	0.00	0.00
10,200.0	11.24	254.52	10,099.7	-276.8	-999.6	1,037.2	0.00	0.00	0.00
10,300.0	11.24	254.52	10,197.8	-282.0	-1,018.4	1,056.7	0.00	0.00	0.00
10,400.0	11.24	254.52	10,295.9	-287.2	-1,037.1	1,076.2	0.00	0.00	0.00
10,500.0	11.24	254.52	10,394.0	-292.4	-1,055.9	1,095.7	0.00	0.00	0.00
10,600.0	11.24	254.52	10,492.0	-297.6	-1,074.7	1,115.2	0.00	0.00	0.00
10,700.0	11.24	254.52	10,590.1	-302.8	-1,093.5	1,134.7	0.00	0.00	0.00
10,800.0	11.24	254.52	10,688.2	-308.0	-1,112.3	1,154.2	0.00	0.00	0.00
10,900.0	11.24	254.52	10,786.3	-313.2	-1,131.1	1,173.7	0.00	0.00	0.00
11,000.0	11.24	254.52	10,884.4	-318.4	-1,149.9	1,193.2	0.00	0.00	0.00
11,100.0	11.24	254.52	10,982.5	-323.6	-1,168.7	1,212.7	0.00	0.00	0.00
11,200.0	11.24	254.52	11,080.5	-328.8	-1,187.5	1,232.2	0.00	0.00	0.00
11,300.0	11.24	254.52	11,178.6	-334.0	-1,206.3	1,251.6	0.00	0.00	0.00
11,400.0	11.24	254.52	11,276.7	-339.2	-1,225.0	1,271.1	0.00	0.00	0.00
TD at 11400.0									

Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
Rifleman 6-3 Target #	0.00	0.00	8,275.0	-180.0	-650.0	518,950.89	541,006.56	32° 25' 35.984 N	104° 20' 3 861 W
- hit/miss target									
- Shape									
- Point									

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
8,339.6	8,275.0	Wolfcamp		0.00	
4,600.0	4,600.0	Bone Spring Lm		0.00	

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
4,600.0	4,600.0	0.0	0.0	KOP - 2/100 @ 254.52 AZI
5,162.1	5,158.5	-14.7	-53.0	Begin Hold to TD
11,400.0	11,276.7	-180.0	-650.0	TD at 11400.0

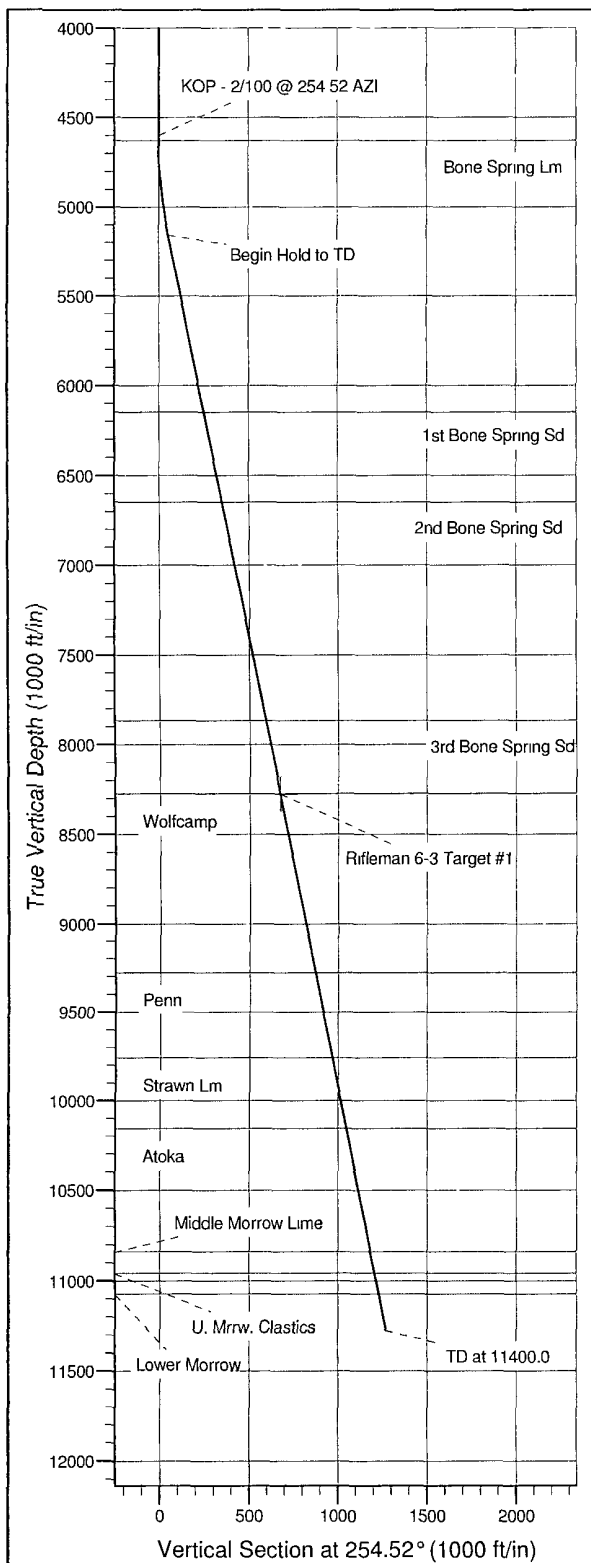
Devon Energy

Project Eddy County (NM83E)
Site Sec 6-T22S-R26E
Well Rifleman 6-3
Wellbore Wellbore #1
Design 12-12-07



Azimuths to True North
Total Correction 8.40°

Magnetic Field
Strength 49072.5 nT
Dip Angle 60.34°
Date 12/12/2007
Model BGM2006

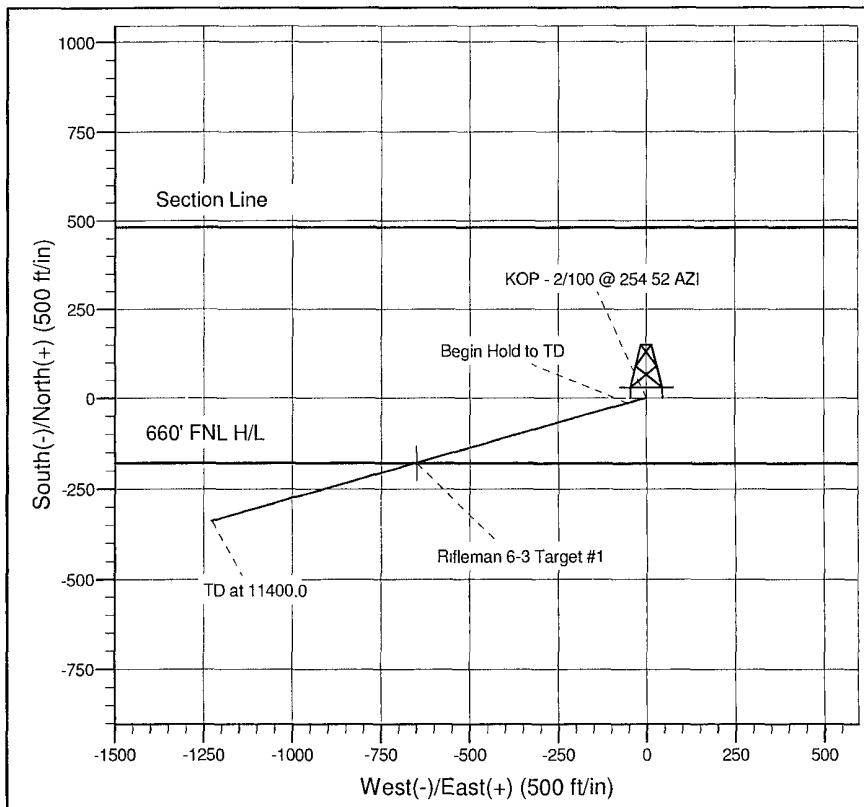


WELL DETAILS Rifleman 6-3						
+N/-S	+E/-W	Northing	Easting	Ground Level 0 0	Latitude 32° 25' 37.765 N	Longitude 104° 19' 56.277 W
0 0	0 0	519130.89	541656.56			

FORMATION TOP DETAILS				ANNOTATIONS		
TVDPath	MDPath	Formation		TVD	MD	Annotation
2340 0	2340 0	Delaware Sd		4600 0	4600 0	KOP - 2/100 @ 254.52 AZI
4630 0	4630 0	Bone Spring Lm		5158 5	5162 1	Begin Hold to TD
6150 0	6173 0	1st Bone Spring Sd		11276 7	11400 0	TD at 11400.0
6650 0	6652 8	2nd Bone Spring Sd				
7870 0	7926 7	3rd Bone Spring Sd				
8275 0	8339 6	Wolfcamp				
9280 0	9364 2	Penn				
9760 0	9853 6	Strawn Lm				
10160 0	10261 5	Atoka				
10840 0	10954 8	Middle Morrow Lime				
10960 0	11077 1	U. Mrnw. Clastics				
11075 0	11194 4	Lower Morrow				

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	IFace	VSec	Target
1	0 0	0 00	0 00	0 0	0 0	0 0	0 00	0 00	0 0	
2	4600 0	0 00	0 00	4600 0	0 0	0 0	0 00	0 00	0 0	
3	5162 1	11 24	254 52	5158 5	-14.7	-53.0	2.00	254.52	55.0	
4	8339 6	11 24	254 52	8275 0	-180.0	-650.0	0.00	0.00	674.5	Rifleman 6-3 Target #1
5	11400 0	11 24	254 52	11276 7	-339.2	-1225.0	0.00	0.00	1271.1	

WELLBORE TARGET DETAILS									
Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape	
Rifleman 6-3 Target #1	8275 0	-180 0	-650 0	518950.89	541006.56	32° 25' 35.984 N	104° 20' 3.861 W	Point	



Magnetic Calculator Results: Devon Rifleman 6-3

Geomagnetic Model	:	BGGM2006
Latitude	:	32° 25' 37.765 N
Longitude	:	104° 19' 56.277 W
Sample Date	:	12/12/2007
Vertical Depth	:	0.0
Azimuth of Magnetic North:		8.400° True
Magnetic Declination	:	8.400°E from True North
Dip Angle from Horizontal:		60.343°
Magnetic Field Strength	:	49072 nT
Magnetic Field X value	:	24021 nT
Magnetic Field Y value	:	3547 nT
Magnetic Field Z value	:	42644 nT
Magnetic Field Horizontal:		24281 nT
Magnetic Azimuth Apply	:	8.40 to convert to True North
Gyroscope Azimuth Apply	:	0.00 to convert to True North

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
 - a. Characteristics of H2S
 - b. Physical effects and hazards
 - c. Proper use of safety equipment and life support systems.
 - d. Principle and operation of H2S detectors, warning system and briefing areas
 - e. Evacuation procedures, routes and first aid.
 - f. Proper use of 30-minute pressure demand air pack.
2. H2S Detection and Alarm System
 - a. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
3. Windsock and/or wind streamers
 - a. Windsock at mud pit area should be high enough to be visible
 - b. Windsock at briefing area should be high enough to be visible
 - c. There should be a windsock at entrance to location
4. Condition Flags and Signs
 - a. Warning Sign on access road to location
 - b. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H2S present in dangerous concentration. Only emergency personnel admitted to location.
5. Well Control Equipment
 - a. See Exhibit "E" & "E-1"
6. Communication
 - a. While working under masks chalkboards will be used for communication.
 - b. Hand signals will be used where chalk board is inappropriate
 - c. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
7. Drill stem Testing
 - a. Exhausts will be watered
 - b. Flare line will be equipped with an electric igniter or a propane pilot light in case gas reaches the surface.
 - c. If the location is near to a dwelling a closed DST will be performed.
8. Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.

If H2S is encountered, mud system will be altered if necessary to maintain control or formation. A mud gas separator will be brought into service along with H2S scavengers if necessary.

SURFACE USE PLAN

Devon Energy Production Company, LP

Rifleman 6 Federal Com 3

Surface Location: 480' FNL & 2630' FWL, Unit C, Sec 6 T22S R26E, Eddy, NM

Bottom hole Location: 660' FNL & 1980' FWL, Unit C, Sec 6 T22S R26E, Eddy, NM

1. Existing Roads:

- a. The well site and elevation plat for the proposed well are reflected on the well site layout; Form C-102. The well was staked by Basin Surveys.
- b. All roads into the location are depicted on Exhibit 3.
- c. Directions to Location: From the junction of Jones Road and Bitter Cherry Road, go west approximately 1.5 miles to lease road, on lease road go south 0.8 miles to proposed lease road.

2. New or Reconstructed Access Roads:

- a. The well site layout, Form C-102 shows the existing County Road. Approximately 1420' of new access road will be constructed as follows:
- b. The maximum width of the road will be 15'. It will be crowned and made of 6" of rolled and compacted caliche. Water will be deflected, as necessary, to avoid accumulation and prevent surface erosion.
- c. Surface material will be native caliche. This material will be obtained from a BLM approved pit nearest in proximity to the location. The average grade will be approximately 1%.
- d. No cattle guards, grates or fence cuts will be required. No turnouts are planned.

3. Location of Existing Wells:

1 Mile Radius Plat shows all existing and proposed wells within a one-mile radius of the proposed location. See attached plat.

4. Location of Existing and/or Proposed Production Facilities:

- a. In the event the well is found productive, the Rifleman 6 Federal Com 3 tank battery would be utilized and the necessary production equipment will be installed at the well site. See Production Facilities Layout diagram.
- b. If necessary, the well will be operated by means of an electric prime mover. Electric power poles will be set along side of the access road.
- c. All flow lines will adhere to API standards. All flow lines will adhere to API standards. See attached plat on C-102 for proposed pipeline east of location to existing buried pipeline going to the Rifleman 6 Federal 2. Will lay approximately 1887' of 4" steel pipeline flowing from the Rifleman 6 Federal 3 location to the BPL connection. Will be buried 36" from surface to pipe.
- d. If the well is productive, rehabilitation plans are as follows:
 - i. The reserve pit will be back-filled after the contents of the pit are dry (within 120 days after completion, weather permitting).
 - ii. The original topsoil from the well site will be returned to the location. The drill site will then be contoured as close as possible to the original state.

location by transport truck using the existing and proposed roads shown in the C-102. On occasion, water will be obtained from a pre-existing water well, running a pump directly to the drill rig. In these cases where a poly pipeline is used to transport water for drilling purposes, proper authorizations will be secured. If a poly pipeline is used, the size, distance, and map showing route will be provided to the BLM via sundry notice.

6. Construction Materials:

All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM approved pit or from prevailing deposits found under the location. All roads will be constructed of 6" rolled and compacted caliche. Will use BLM recommended use of extra caliche from other locations close by for roads, if available.

7. Methods of Handling Waste Material:

- a. Drill cuttings will be disposed of in the reserve pits.
- b. All trash, junk and other waste material will be contained in trash cages or trash bins to prevent scattering. When the job is completed all contents will be removed and disposed of in an approved sanitary landfill.
- c. The supplier, including broken sacks, will pick up salts remaining after completion of well.
- d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete.
- e. Remaining drilling fluids will be allowed to evaporate in the reserve pits until the pits are dry enough to be broken out for further drying. If the drilling fluids do not evaporate in a reasonable time they will be hauled off by transports to a state approved disposal site. Later pits will be broken out to speed dry. Water produced during completion will be put in reserve pits. Oil and condensate produced will be put in a storage tank and sold.
- f. Disposal of fluids to be transported by the following companies:
 - i. American Production Service Inc, Odessa TX
 - ii. Gandy Corporation, Lovington NM
 - iii. I & W Inc, Loco Hill NM
 - iv. Jims Water Service of Co Inc, Denver CO

8. Ancillary Facilities: No campsite or other facilities will be constructed as a result of this well.

9. Well Site Layout

- a. Exhibit D shows the proposed well site layout with dimensions of the pad layout.
- b. This exhibit indicated proposed location of reserve and sump pits and living facilities.
- c. Mud pits in the active circulating system will be steel pits & the reserve pit will be lined.
- d. If needed, the reserve pit is to be lined with polyethylene. The pit liner will be 6 mils thick. Pit liner will extend a minimum 2'00" over the reserve pits dikes where the liner will be anchored down.
- e. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased to preclude endangering wildlife.

10. Plans for Surface Reclamation:

- a. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. The reserve pit area will be broken out and leveled after drying to a condition where these efforts are feasible. The original top soil will again be returned to the pad and contoured, as close as possible, to the original topography. Will close the pits per OCD compliance regulations.
- b. The pit lining will be buried or hauled away in order to return the location and road to their pristine nature. All pits will be filled and location leveled, weather permitting, within 120 days after abandonment.
- c. The location and road will be rehabilitated as recommended by the BLM.
- d. If the well is a producer, the reserve pit fence will be torn down after the pit contents have dried. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.
- e. If the well is deemed commercially productive, the reserve pit will be restored as described in 10(A) within 120 days subsequent to the completion date. Caliche from areas of the pad site not required for operations will be reclaimed. The original top soil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography.

11. Surface Ownership

- a. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is multiple use with the primary uses of the region for the grazing of livestock and the production of oil and gas.
- b. The proposed road routes and the surface location will be restored as directed by the BLM.

12. Other Information:

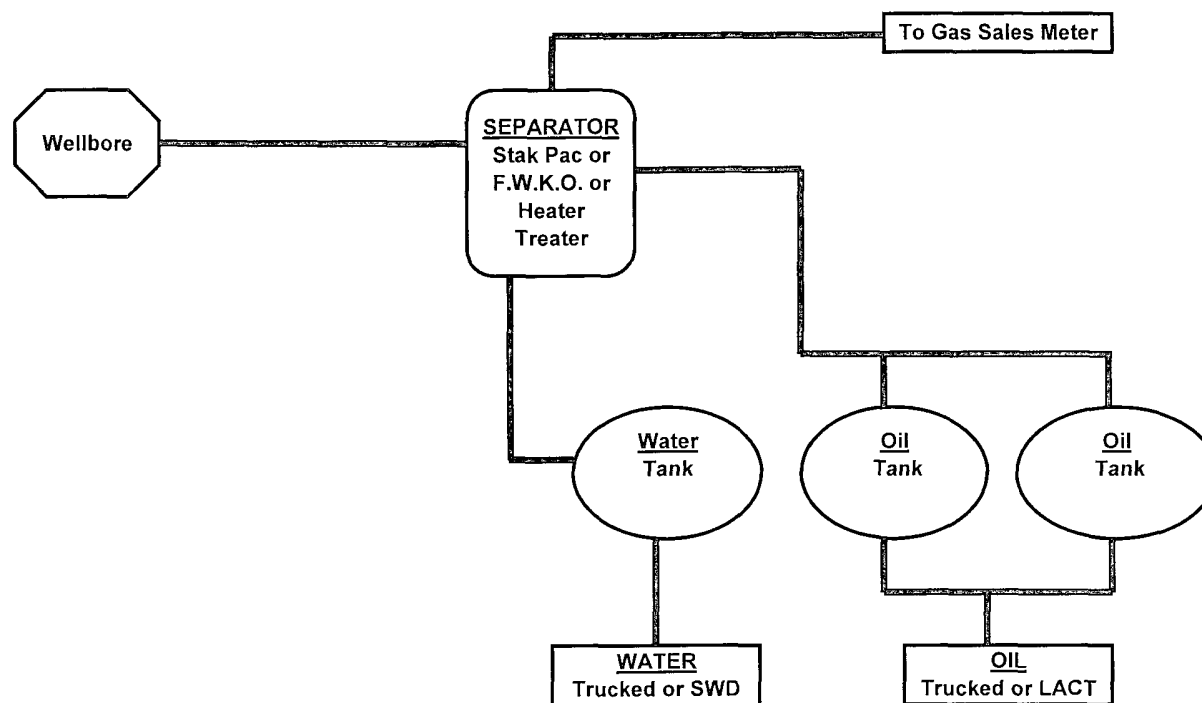
- a. The area surrounding the well site is grassland. The topsoil is very sandy in nature. The vegetation is moderately sparse with native prairie grass, sagebush, yucca and miscellaneous weeds. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. There is no permanent or live water in the general proximity of the location.
- c. There are no dwellings within 2 miles of location.
- d. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.

13. Bond Coverage:

Bond Coverage is Nationwide; Bond # is CO-1104

DEVON ENERGY PRODUCTION COMPANY LP

General Production Facilities Diagram



Operators Representative:

The Devon Energy Production Company, L.P. representatives responsible for ensuring compliance of the surface use plan are listed below.

Greg McGowen
Operations Engineer Advisor

Joe Johnston
Superintendent

Devon Energy Production Company, L.P.
20 North Broadway, Suite 1500
Oklahoma City, OK 73102-8260

Devon Energy Production Company, L.P.
Post Office Box 250
Artesia, NM 88211-0250

(405) 228-8965 (office)
(405) 464-9769 (cell)

(505) 748-0171 (office)
(505) 513-0630 (cell)

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 24th day of January, 2008.

Printed Name: Stephanie A. Ysasaga

Signed Name: [Signature]

Position Title: Sr. Staff Engineering Technician

Address: 20 North Broadway, OKC OK 73102

Telephone: (405)-552-7802

Field Representative (if not above signatory): Joe Johnston (see above)

Address (if different from above):

Telephone (if different from above):

E-mail (optional):

PECOS DISTRICT CONDITIONS OF APPROVAL

OPERATOR'S NAME:	Devon Energy Production
LEASE NO.:	NM-71752
WELL NAME & NO.:	3-Rifleman 6 Federal Com
SURFACE HOLE FOOTAGE:	480' FNL & 2630' FWL
BOTTOM HOLE FOOTAGE:	660' FNL & 1980' FWL
LOCATION:	Section 6, T. 22 S., R 26 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**
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- ☒ **Production (Post Drilling)**
 - Well Structures & Facilities
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- ☐ **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)

V-DOOR NORTH NORTHWEST. CLOSED LOOP SYSTEM REQUIRED. NO EARTHEN PITS ALLOWED.

RESTRICT PAD SIZE TO 150 FT. TO THE NORTHEAST, 150 FT. TO THE NORTHWEST AND 130 FT. TO THE SOUTHWEST.

Cave and Karst

Cave/Karst Surface Mitigation

The following stipulations will be applied to minimize impacts during construction, drilling and production.

Berming:

Tank batteries will be bermed to contain 1 ½ times the content of the largest tank.

Bermed areas will be lined with a permanent 20 mil plastic liner and then lined with a 4 oz. felt liner to prevent tears or punctures in liner.

Closed Mud System Using Steel Tanks with All Fluids and Cuttings Hauled Off.

A closed mud system with steel tanks will be utilized to drill the well. All fluids and cuttings will be hauled off site for disposal. No pits are allowed.

Cave/Karst Subsurface Mitigation

The following stipulations will be applied to protect cave/karst and ground water concerns:

Lost Circulation:

ALL lost circulation zones from the surface to the base of the cave occurrence zone will be logged and reported in the drilling report.

Regardless of the type of drilling machinery used, if a void of four feet or more and circulation losses greater than 100 percent occur simultaneously while drilling in any cave-bearing zone, the BLM will be notified immediately by the operator. The BLM will assess the consequences of the situation and work with operator on corrective actions to resolve the problem.

Delayed Blasting:

Any blasting will be phased and time delayed.

Abandonment Cementing:

Upon well abandonment the well bore will be cemented completely from 100 feet below the bottom of the cave bearing zone to the surface.

Record Keeping:

The Operator will track customary drilling activities, including the rate of penetration, pump pressure, weight on bit, bit drops, percent of mud returns, and presence of absence of cuttings returning to the surface. As part of customary record keeping, each detectable void or sudden increase in the rate of penetration not attributable to a change in the formation type should be documented and evaluated as it is encountered.

Visual Resources Management

Visual Resources Stipulations

The proposed project is located within a Class Three Visual Resource Area. The project will be built in a manner to minimize visibility. The proposed project will be an impacting feature to its surrounding natural visual resources.

Painting Requirement

In accordance with notice to lessees (NTL) 87-1 New Mexico, *Painting of Oil Field Facilities to Minimize Visual Impacts*: ALL permanent surface production facilities, including the well-drive control system, treatment, storage, power (except specifically approved electrical transmission lines and poles, or other permanent above-ground facilities not otherwise specifically subject to safety coloring requirements), shall be painted by the holder to blend with the dominant natural color of the surrounding landscape. The paint used shall be one of the "Standard Environmental Colors" designated by the Rocky Mountain Five-State Interagency Committee, and shall be a flat, non-reflective finish. The color specified for this location is:

Standard Environmental Color: Shale Green
Munsell Soil Color Chart Number: # 657

Any exception to this Painting Requirement must be approved by the BLM Authorized Officer in writing prior to implementation.

Surface Mitigation

The following stipulations will apply to minimize impacts during construction, drilling and production.

1. The proposed construction and scenic impacts will be limited to the approved pad size.
2. No cut and fill to create the pad is allowed.
3. Only facilities that solely serve the production from this pad can be added to this action. ie. no compressor station or central storage tanks can be placed on the approved pad.

4. Upon completion of the well and installation of the production facilities (if the well is a producer) the pad will be reclaimed back to a minimal size needed for production operations (approximately 50 ft out from the anchors). The pads edges will be recontoured and the extra caliche and pad material will be hauled off-site. After one year, the BLM may require additional site reclamation.
5. The reclaimed areas will be grid rolled and reseeded with seed mix as indicated in the Special Drilling Stipulations.

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 (505) 234-5972 at least 3 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

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

C. RESERVE PITS

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

If the operator elects to surface the access road and/or well pad, mineral materials extracted during construction of the reserve pit may be used for surfacing the well pad and access road and other facilities on the lease.

Payment shall be made to the BLM prior to removal of any additional federal mineral materials from any site other than the reserve pit. Call the Carlsbad Field Office at (505) 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 thirty (30) 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

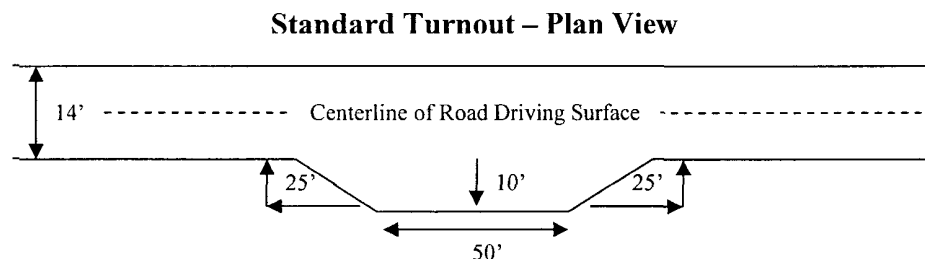
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching

Ditching shall be required on both sides of the road.

Turnouts

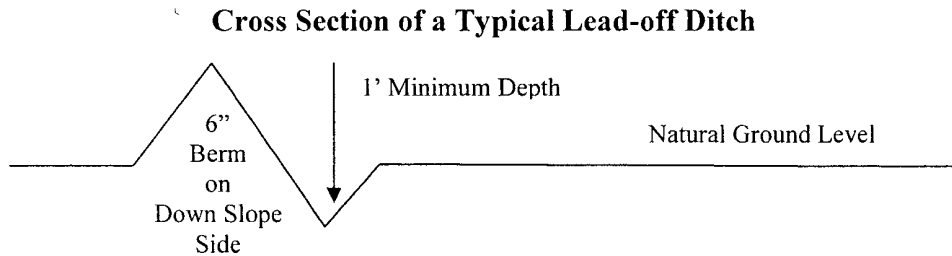
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:



Drainage

Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outloping 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.



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

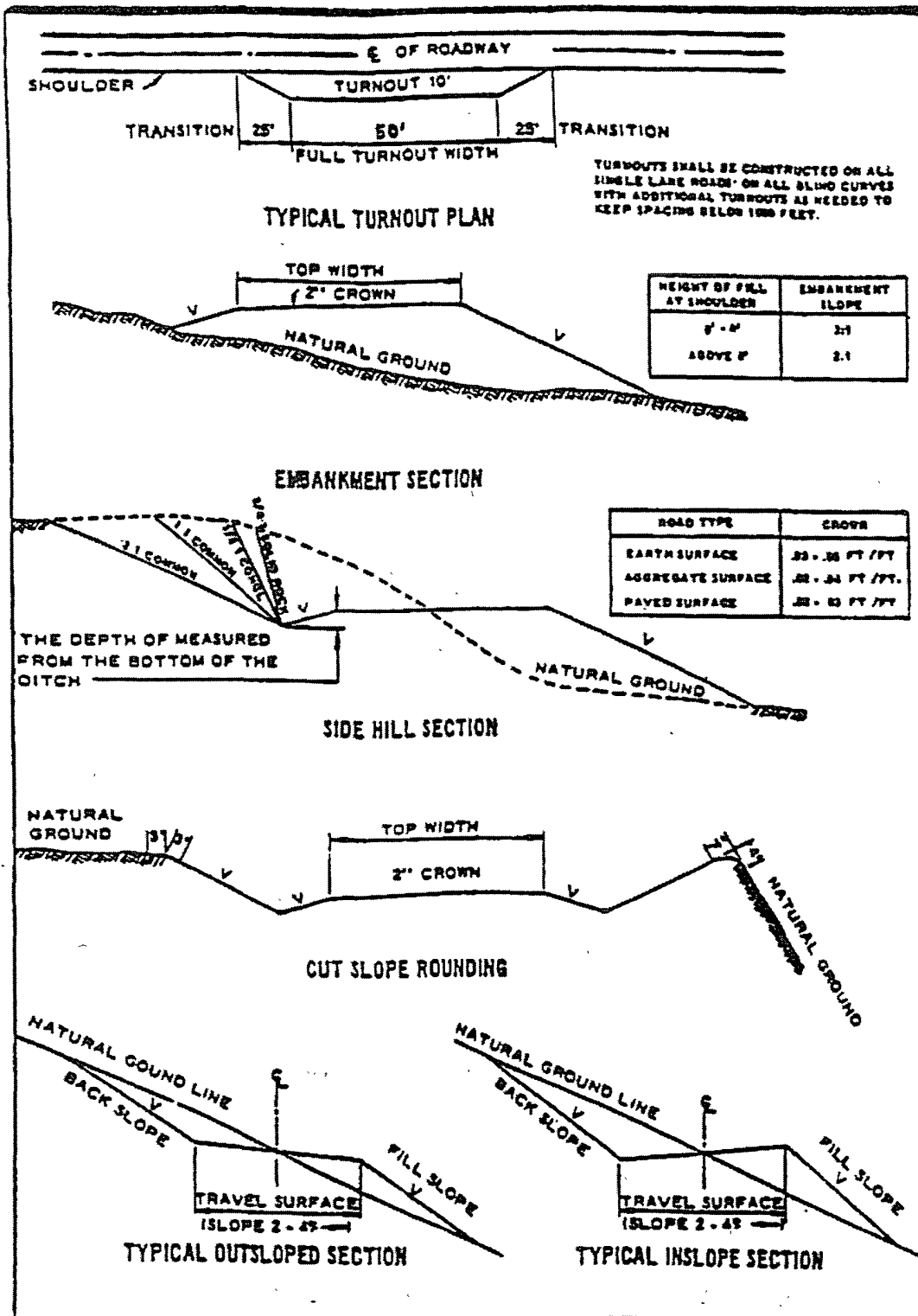
Where entry is required across a fence line, the fence shall be braced and tied off on both sides of the passageway prior to cutting.

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. **Although Hydrogen Sulfide has not been reported in the area, it is always a potential hazard. If Hydrogen Sulfide is encountered, please report measured amounts 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.
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.

B. CASING

1. The 20 inch surface casing shall be set at **approximately 500 feet** and cemented to the surface. **Centralizers required on surface casing per Onshore Order 2.III.B.1.f.**
 - 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 a surface log readout will be used or a cement bond log shall be run to verify the top of the cement.
 - b. Wait on cement (WOC) time 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. (This is to include the lead cement). **Please provide WOC times to inspector for cement slurries.**

- 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 action will be done prior to drilling out that string.

Location is near the City of Carlsbad water well field.

High cave/karst.

Possible lost circulation in the Capitan Reef, Delaware, and Bone Spring formations.

Possible high pressure gas bursts in the Wolfcamp and over pressure through the Pennsylvanian Section.

- 2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

☒ Cement to surface. If cement does not circulate see B.1.a-d above. **Please provide WOC times to inspector for cement slurries.**

- 3. The minimum required fill of cement behind the 5-1/2 inch production casing is:

☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office. **All stages to circulate.**

- 4. 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. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
 - a. The tests shall be done by an independent service company.
 - b. The results of the test shall be reported to the appropriate BLM office.
 - c. 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.

- d. 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.
- e. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the **Wolfcamp** formation **if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days**. This test does not exclude the test prior to drilling out the casing shoe as per Onshore Order No. 2.
- f. A variance to test the surface casing and BOP/BOPE to the reduced pressure of **1400** psi with the rig pumps is approved.

D. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the **Wolfcamp** formation, and shall be used until production casing is run and cemented.

E. DRILL STEM TEST

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

WWI 022908

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 ten-feet-high shall be used.

B. PIPELINES

BURIED PIPELINE STIPULATIONS

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The Holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.
2. The Holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the

authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil or other pollutant, wherever found, shall be the responsibility of holder, regardless of fault. Upon failure of holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve holder of any responsibility as provided herein.

5. All construction and maintenance activity will be confined to the authorized right-of-way.

6. The pipeline will be buried with a minimum cover of **36** inches between the top of the pipe and ground level.

7. Blading of all vegetation will be allowed. Blading is defined as the complete removal of brush and ground vegetation. Clearing of brush species will be allowed. Clearing defined as the removal of brush while leaving ground vegetation (grasses, weeds, etc.) intact. Clearing is best accomplished by holding the blade 4 to 6 inches above the ground surface. In areas where blading and/or clearing is allowed, maximum width of these operations will not exceed **35** feet.

8. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

9. Vegetation, soil, and rocks left as a result of construction or maintenance activity will be randomly scattered on this right-of-way and will not be left in row, piles, or berms, unless otherwise approved by the Authorized Officer. A berm will be left over the ditch line to allow for settling back to grade.

10. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

11. The holder will reseed. Seeding will be done according to the attached seeding requirements, using the following seed mix.

<input type="checkbox"/> seed mixture 1	<input checked="" type="checkbox"/> seed mixture 3
<input type="checkbox"/> seed mixture 2	<input type="checkbox"/> seed mixture 4

12. All above-ground structures not subject to safety requirements shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. All signs and information thereon will be posted in a permanent, conspicuous manner, and will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline route is not used as a roadway.

15. Any cultural and/or paleontological resources (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder 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 will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

16. Special Stipulations:

IX. INTERIM RECLAMATION & RESERVE PIT CLOSURE

A. INTERIM RECLAMATION

If the well is a producer, interim reclamation shall be conducted on the well site in accordance with the orders of the Authorized Officer. The operator shall submit a Sundry Notices and Reports on Wells (Notice of Intent), Form 3160-5, prior to conducting 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.

The operators should work with BLM surface management specialists to devise the best strategies to reduce the size of the location. Any reductions 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 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.

Seed Mixture 3, for Shallow Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorised officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

<u>Species</u>	<u>lb/acre</u>
Plains Bristlegrass (<i>Setaria magrostachya</i>)	1.0
Green Spangletop (<i>Leptochloa dubia</i>)	2.0
Side oats Grama (<i>Bouteloua curtipendula</i>)	5.0

*Pounds of pure live seed:

Pounds of seed x percent purity x percent germination = pounds pure live seed
(Insert Seed Mixture Here)

X. FINAL ABANDONMENT & REHABILITATION REQUIREMENTS

Upon abandonment of the well and/or when the access road is no longer in service the Authorized Officer shall issue instructions and/or orders for surface reclamation and restoration of all disturbed areas.

On private surface/federal mineral estate land the reclamation procedures on the road and well pad shall be accomplished in accordance with the private surface land owner agreement.