

Bany

N.M. Oil Cons. DIV-Dist. 2
1301 W. Grand Avenue
Artesia, NM 88210

Form 3160-3
(April 2004)

0081

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

5. Lease Serial No.
NMNM-055477-A 0554477A
6. If Indian, Allottee or Tribe Name

1a. Type of work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. 35267
Filaree 24C Fed Com 4

2. Name of Operator
Devon Energy Production Company, LP

9. API Well No.
30-015-34446

3a. Address 20 North Broadway
Oklahoma City, Oklahoma City 73102-8260

3b. Phone No. (include area code)
405-552-7802 78060

10. Field and Pool, or Exploratory
Happy Valley; Morrow (Gas)

4. Location of Well (Report location clearly and in accordance with any State requirements.)
At surface 660' FNL & 1980' FWL
At proposed prod. zone 660' FNL & 1980' FWL

RECEIVED
NOV 28 2005
OUL-ARTESIA

11. Sec., T. R. M. or Blk. and Survey or Area
Lot C Sec 24, T22S R25E

14. Distance in miles and direction from nearest town or post office*
Approximately 5 miles west of Carlsbad, NM

12. County or Parish
Eddy County
13. State
NM

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any)

16. No. of acres in lease
440

17. Spacing Unit dedicated to this well
320

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft.

19. Proposed Depth
11,400

20. BLM/BIA Bond No. on file

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3401'

22. Approximate date work will start*
11/15/2005

23. Estimated duration
45 days

24. Attachments

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

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

25. Signature
Title
Senior Engineering Technician

Name (Printed/Typed)
Stephanie A. Ysasaga

Date
10/14/2005

Approved by (Signature)
/s/ Joe G. Lara

Name (Printed/Typed)
/s/ Joe G. Lara

Date
NOV 22 2005

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 1 YEAR

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.

*(Instructions on page 2)

79.5

Carlsbad Controlled Water Basin

WITNESS 13 3/8" CEMENT JOB

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS AND
SPECIAL STIPULATIONS
ATTACHED

Operator to take flowline mud samples every 100'
from 4150' to 2200' in order to determine chloride
levels. Please submit data to OCB-Artesia Thanks Bryan
Arment

Additional Operator Remarks:

Devon Energy Production Company, LP proposes to drill a Morrow well to 11,400' for commercial quantities of oil and gas. If the well is deemed noncommercial, the wellbore will be plugged and abandoned per Federal regulations. Devon Energy Production Co., LP plans to drill the well per the attached Drilling and Surface Use Plan.

Directions To Location:

From the Junction of Co. Rd 429 and Co. Rd. 428, go North on 428 for 0.7 mile; thence northwest around house for 0.2 mile; thence east for 0.3 mile to proposed lease road.

Access Road:

Approximately 861' of access road will be required. Archeological survey's will be requested for the pad and access road.

H2S:

No H2S is anticipated to be encountered.

Additional Comments:

The well is located on Devon lease NMNM-0554777-A, the other federal lease in the spacing unit is NMNM-96568.

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

DISTRICT II
811 South First, Artesia, NM 88210

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised March 17, 1999

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

OIL CONSERVATION DIVISION

2040 South Pacheco
Santa Fe, New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code 78060	Pool Name Happy Valley; Morrow (Gas)
Property Code	Property Name FILAREE 24C FED COM	Well Number 4
OGRID No. 6137	Operator Name DEVON ENERGY PRODUCTION CO., L.P.	Elevation 3401'

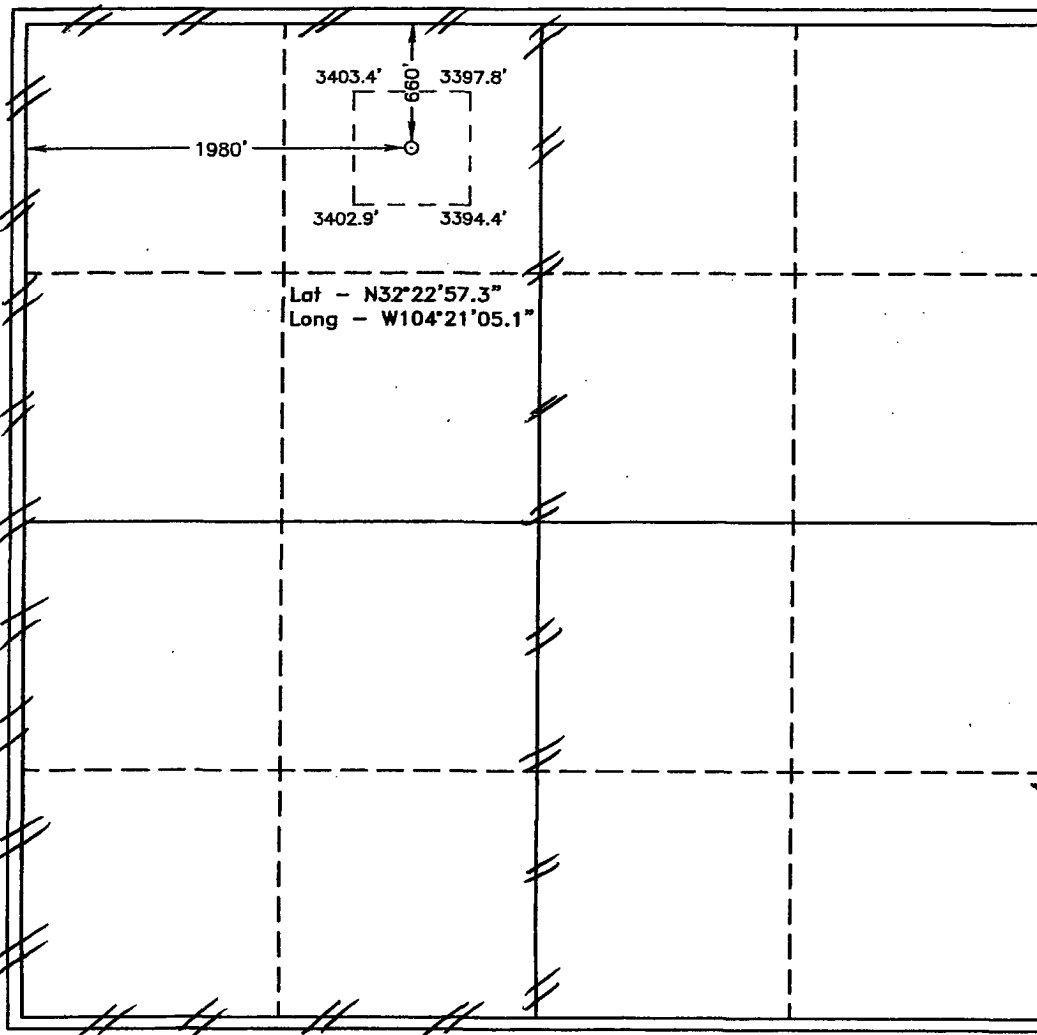
Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	24	22 S	25 E		660	NORTH	1980	WEST	EDDY

Bottom Hole Location If Different From Surface

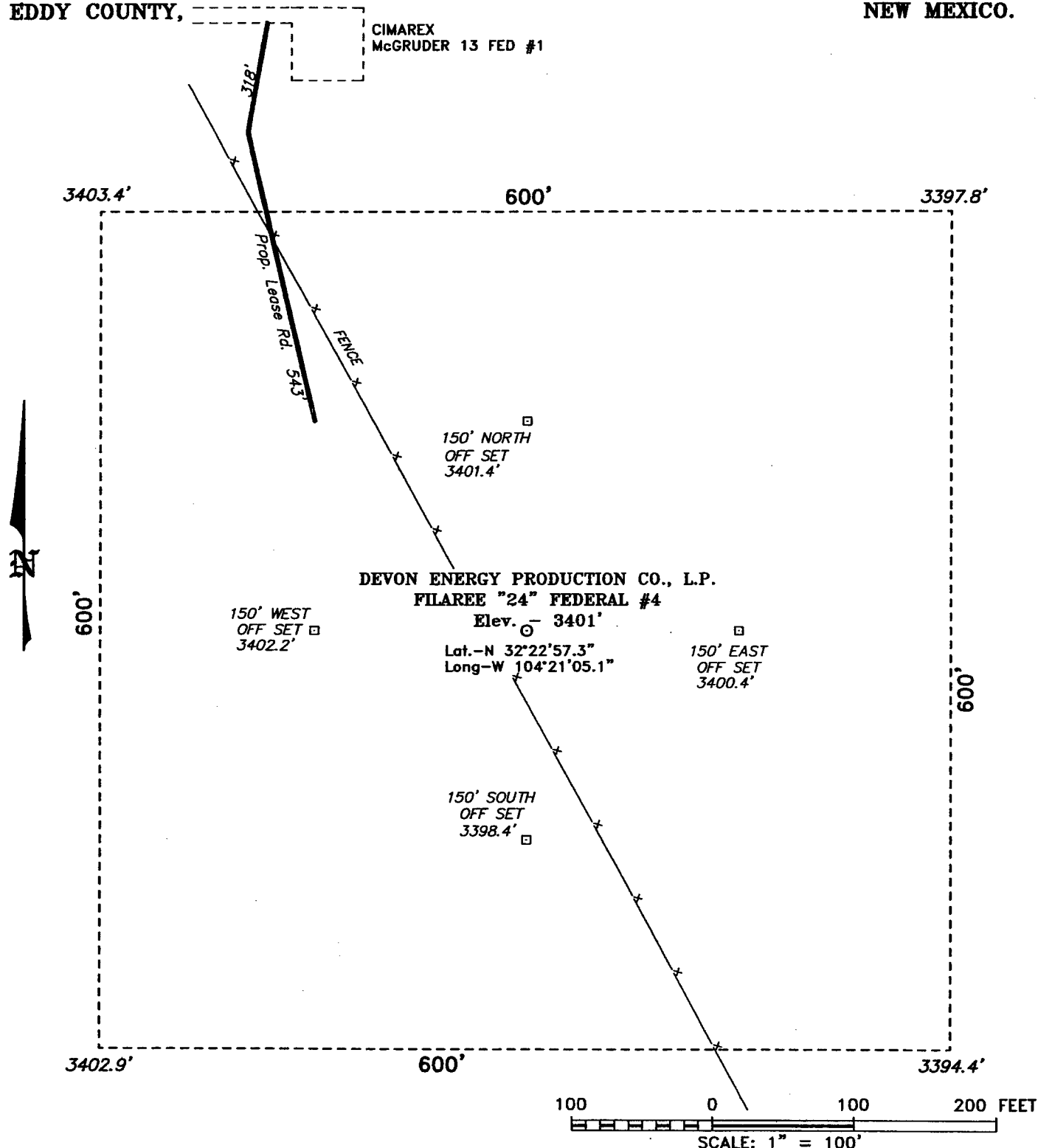
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres 320	Joint or Infill	Consolidation Code	Order No.						

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



OPERATOR CERTIFICATION	
I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.	
Signature	Stephanie A. Ysasaga
Printed Name	Senior Engineering Technician
Title	10/13/05
Date	
SURVEYOR CERTIFICATION	
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.	
AUGUST 29, 2005	
Date Surveyed	GARY L. JONES
Signature & Seal	Professional Surveyor
Certificate No.	7977
BASIN SURVEYS	

SECTION 24, TOWNSHIP 22 SOUTH, RANGE 25 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO.



Directions to Location:

FROM THE JUNCTION OF CO. RD. 429 AND CO. RD. 428, GO NORTH ON 428 FOR 0.7 MILE; THENCE NORTHWEST AROUND HOUSE FOR 0.2 MILE; THENCE EAST FOR 0.3 MILE TO PROPOSED LEASE ROAD.

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

W.O. Number: 5722 Drawn By: K. GOAD

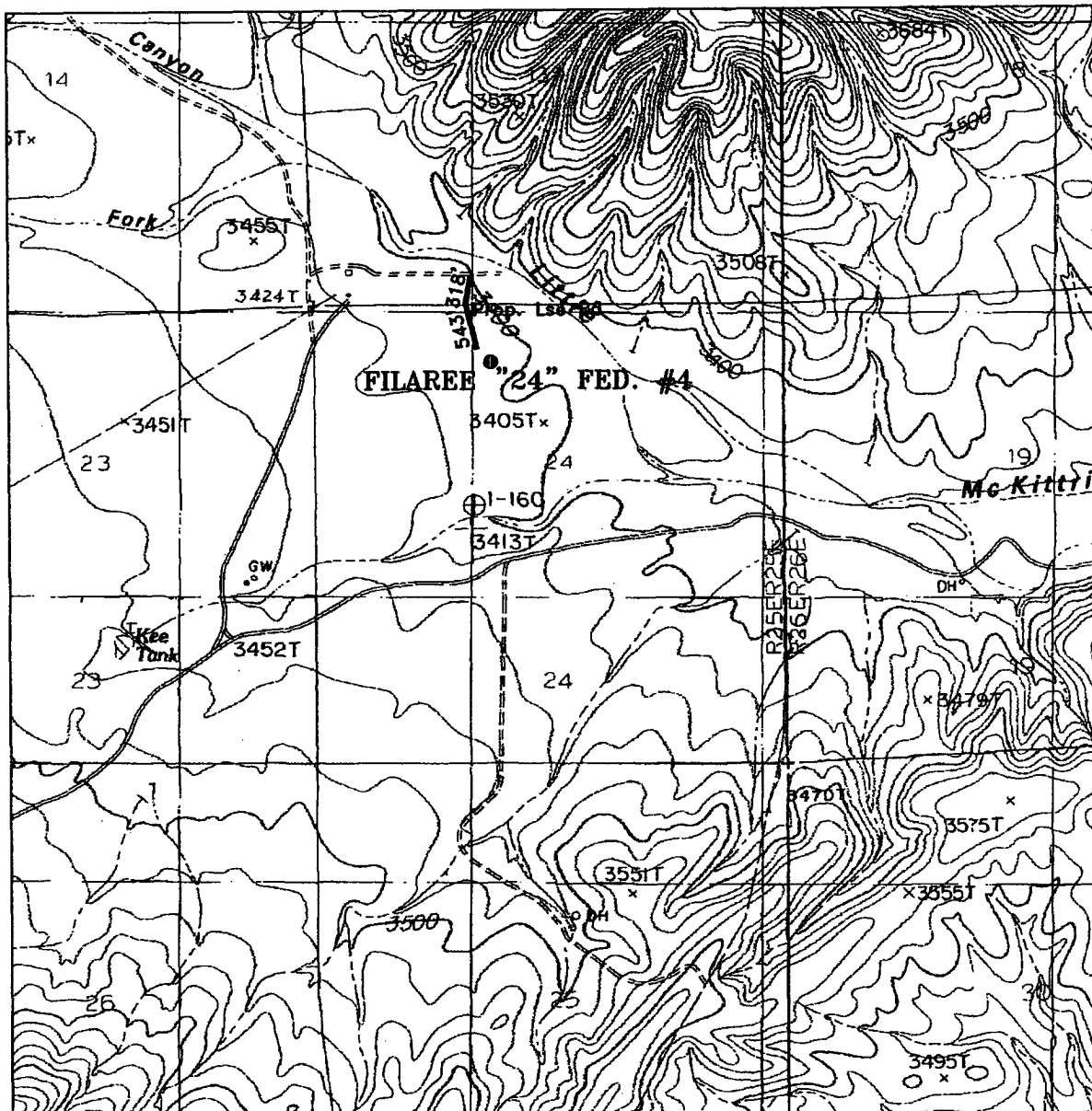
Date: 09-09-2005 Disk: KJG CD#4 - 5722A.DWG

DEVON ENERGY PROD. CO., L.P.

REF: FILAREE "24" FED. No. 4 / Well Pad Topo

THE FILAREE "24" FED. No. 4 LOCATED 660' FROM
THE NORTH LINE AND 1980' FROM THE WEST LINE OF
SECTION 24, TOWNSHIP 22 SOUTH, RANGE 25 EAST,
N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 08-29-2005 Sheet 1 of 1 Sheets



FILAREE "24" FEDERAL #4

Located at 660' FNL and 1980' FWL
 Section 24, Township 22 South, Range 25 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: 5722AA - KJG #1

Survey Date: 08-31-2005

Scale: 1" = 2000'

Date: 09-09-2005

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

DRILLING PROGRAM

Devon Energy Production Company, LP

Filaree 24C Fed Com 4

Surface Location: 660' FNL & 1980' FWL, Unit C, Sec 24 T22S R25E, Eddy, NM

Bottom hole Location: 660' FNL & 1980' FWL, Unit C, Sec 24 T22S R25E, Eddy, NM

1. Geologic Name of Surface Formation

- a. Permian Undifferentiated

2. Estimated tops of geological markers:

a. Yates	225'
b. Capitan	365'
c. Delaware	2230'
d. Bone Spring Lm	4580'
e. First Bone Spring Sand	5535'
f. Second Bone Spring Sand	6075'
g. Third Bone Spring Sand	7800'
h. Wolfcamp	8115'
i. Upper Penn	8760'
j. Strawn Lime	9590'
k. Base Strawn	9880'
l. Atoka	9925'
m. Morrow	10350'
n. Morrow Clastics	10600'
o. Middle Morrow Lime	10705'
p. Lower Morrow	10950'
q. Barnett Shale	11100'
r. Total Depth	11400'

3. Estimated Depths of Anticipated Fresh Water, Oil or Gas

a. Capitan	225'	Water
b. Delaware	2230'	Oil
c. Bone Spring Lm	4580'	Oil
d. Second Bone Spring Sand	6075'	Gas
e. Third Bone Spring Sand	7800'	Gas
f. Wolfcamp	8115'	Gas
g. Upper Penn	8760'	Gas
h. Strawn Lm	9590'	Gas
i. Atoka	9925'	Gas
j. Morrow Clastics	10600'	Gas
k. Middle Morrow Lm	10705'	Gas
l. Lower Morrow	10950'	Gas

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 13 3/8" casing at 450' and circulating cement back to surface. Fresh water will be protected by setting 9 5/8" casing at 2200' and circulating cement to surface. The Morrow intervals will be isolated by setting 5 1/2" casing to total depth and circulating cement above the base of the 9 5/8" casing.

4. Casing Program:

<u>Hole Size</u>	<u>Interval</u>	<u>OD Csg</u>	<u>Weight</u>	<u>Collar</u>	<u>Grade</u>
17 1/2"	0' -450'	13 3/8"	48#	ST&C	H-40
12 1/4"	450' - 2200'	9 5/8"	36#	LT&C	J-55
8 3/4"	2200-11400'	5 1/2"	17#	LT&C	HCP110

5. Cement Program:

- a. 13 3/8" Surface Cement to surface with 214sx 35:65 Poz C, 6%bentonite, 2%Cacl, 1/4pps Celloflake(12.8ppg) followed by 200sx "C", 2%Cacl, 1/4pps Celloflake(14.8ppg). TOC-Surface
- b. 9 5/8" Intermediate Cement to surface with 35:65 Poz C,6%Bentonite, 5% NaCl, 5pps LCM-1, 1/4pps Celloflake (12.7ppg) followed by 250 sx 60:40 Poz C,4%MPA-1,5% NaCl,0.5% Sodium Metasilicate(13.8ppg). TOC-Surface
- c. 5 1/2" Production Cement with Stage1: 816 sx 15:61:11 PozC Cemnet CSE-2, 3% NaCl, 0.6%FL-25, 0.6% FL-52A, 0.4% CD-32, 0.75% EC-1,5pps LCM-1, 1/4pps Celloflake(13.3ppg)DV Tool@8000',Second Stage: 845sx 60:40 Poz C, 4% MPA-1,1% NaCl, 0.75% BA-10,2pps KolSeal, 1/4pps Celloflake, 0.1%R-3 (13.8ppg) DV Tool @ 5000', Third Stage: 874sx 35:65 Poz C, 6% Benntonite, 5% NaCl, 0.1/4 pps Celloflake. 0.006 gps FP-13L (12.5ppg) followed by 150 sx 60:40 Poz C, 5% NaCl,0.3% Sodium Metasilicate, 1/4 pps Celloflake, 0.003 gps FP-13L, 4% MPA-1 (13.8ppg) TOC

The above cement volumes could be revised pending the caliper measurement from the open hole logs. The top of cement is designed to reach approximately 500' above the 8 5/8" casing shoe.

6. Pressure Control Equipment:

The blowout preventor equipment (BOP) shown in Exhibit #1 will consist of a (3M system) double ram type (5000 psi WP) preventor and a bag-type (Hydril) preventor (5000 psi WP). 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 drilling head will be installed on the 13 3/8" surface casing and utilized continuously until total depth is reached. All BOP's and associated equipment will be tested to 1200 psi with the rig pump before drilling out the 13 3/8" casing shoe (70% of 48#, 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.

7. Proposed Mud Circulation System

<u>Depth</u>	<u>Mud Wt.</u>	<u>Visc</u>	<u>Fluid Loss</u>	<u>Type System</u>
0' – 450'	8.4-9.0	30-34	NC	Fresh Water
450' – 2200'	8.4	29	NC	Fresh Water
2200' – 8500'	8.4	29	NC	Fresh Water
8500' – 9500'	9.3-9.5	28	NC	Cut Brine
9500' – 11400'	9.3-10.2	31-38	10-8	Brine/Polymer

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

8. Auxiliary Well Control and Monitoring Equipment:

- a. A Kelly cock will be in the drill string at all times.
- b. A full opening drill pipe stabbing valve having the appropriate connections will be on the rig floor at all times.
- c. 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.

9. Logging, Coring, and Testing Program:

- a. Drill stem tests will be based on geological sample shows.
- b. The open hole electrical logging program will be:
 - i. Total Depth to Intermediate Casing Dual Laterolog-Micro Laterolog with SP and Gamma Ray. Compensated Neutron – Z Density log with Gamma Ray and Caliper.
 - ii. Total Depth to Surface Compensated Neutron with Gamma Ray
 - iii. No coring program is planned
 - iv. Additional testing will be initiated subsequent to setting the 5 1/2" production casing. Specific intervals will be targeted based on log evaluation, geological sample shows and drill stem tests.

10. 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 4000 psi and Estimated BHT 175°. No H₂S is anticipated to be encountered.

11. 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.

SURFACE USE PLAN

Devon Energy Production Company, LP

Filaree 24C Fed Com 4

Surface Location: 660' FNL & 1980' FWL, Unit C, Sec 24 T22S R25E, Eddy, NM

Bottom hole Location: 660' FNL & 1980' FWL, Unit C, Sec 24 T22S R25E, Eddy, NM

1. Existing Roads:

- a. The well site and elevation plat for the proposed well are reflected on Exhibit 2. 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 Co. Rd 429 and Co. Rd. 428, go North on 428 for 0.7 mile; thence northwest around house for 0.2 mile; thence east for 0.3 mile to proposed lease road.

2. Access Road

- a. Exhibit #3 shows the existing lease road. Approximately 861' 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. Proposed Facilities

- a. In the event the well is found productive, the North Pure Gold 9 tank battery would be utilized and the necessary production equipment will be installed at the well site.
- 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.
- 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.

4. 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. Wastewater from living quarters will be drained into hole with a minimum of 10'. These holes will be covered during drilling and will be back filled when the well is completed. 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.

5. Well Site Layout

- a. Exhibit D Shows the proposed well site 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 is proposed to be unlined unless subsurface conditions encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- 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. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

6. 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, some mesquite bushes and shinnery oak. No wildlife was observed but it is likely that deer, rabbits, coyotes, and rodents traverse the area.
- b. The surface is owned by the US Government and is administered by the Bureau of Land Management. The surface is of limited use except for the grazing of livestock and the production of oil and gas.
- c. A Cultural Resources Examination will be completed by Southern New Mexico Archaeological Services, Inc. and forwarded to the BLM office in Carlsbad, New Mexico.
- d. There are no dwellings within 2 miles of location.

Operators Representative:

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

Wyatt Abbitt
Operations Engineer Advisor

Don Mayberry
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

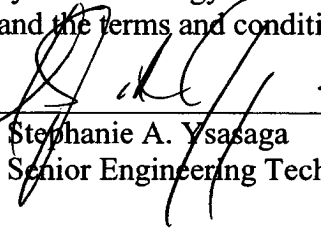
(405) 552-8137 (office)
(405) 245-3471 (Cellular)

(505) 748-3371 (office)
(505) 746-4945 (home)

Certification

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access road; that I am familiar with the conditions that presently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Devon Energy Production Company, L.P. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Signed: _____


Stephanie A. Ysasaga
Senior Engineering Technician

Date: October 13th, 2005

Attachment to Exhibit #1
NOTES REGARDING BLOWOUT PREVENTERS
Devon Energy Production Company, LP
Filaree 24C Fed Com 4

Surface Location: 660' FNL & 1980' FWL, Unit C, Sec 24 T22S R25E, Eddy, NM
Bottom hole Location: 660' FNL & 1980' FWL, Unit C, Sec 24 T22S R25E, 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.

HYDROGEN SULFIDE DRILLING OPERATIONS PLAN

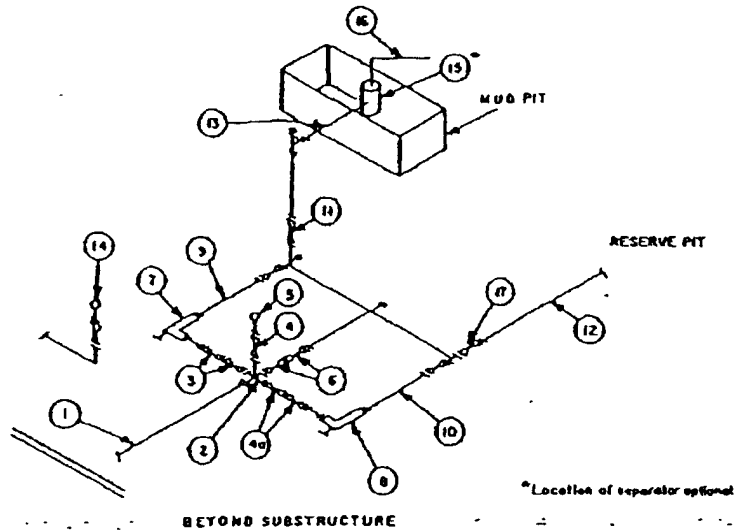
1. All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:
 - a. Characteristics of H2S
 - b. Physical effects and hazards
 - c. Proper use of safety equipment and life support systems.
 - d. Principle and operation of H2S detectors, 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.

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	RATING
1	Line from drilling spool		3"	3,000		3"	5,000		3"	10,000
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"	10,000
10	Line		2"	3,000		2"	5,000		3"	10,000
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"	2,000
13	Lines		3"	1,000		3"	1,000		3"	2,000
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"	2,000
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

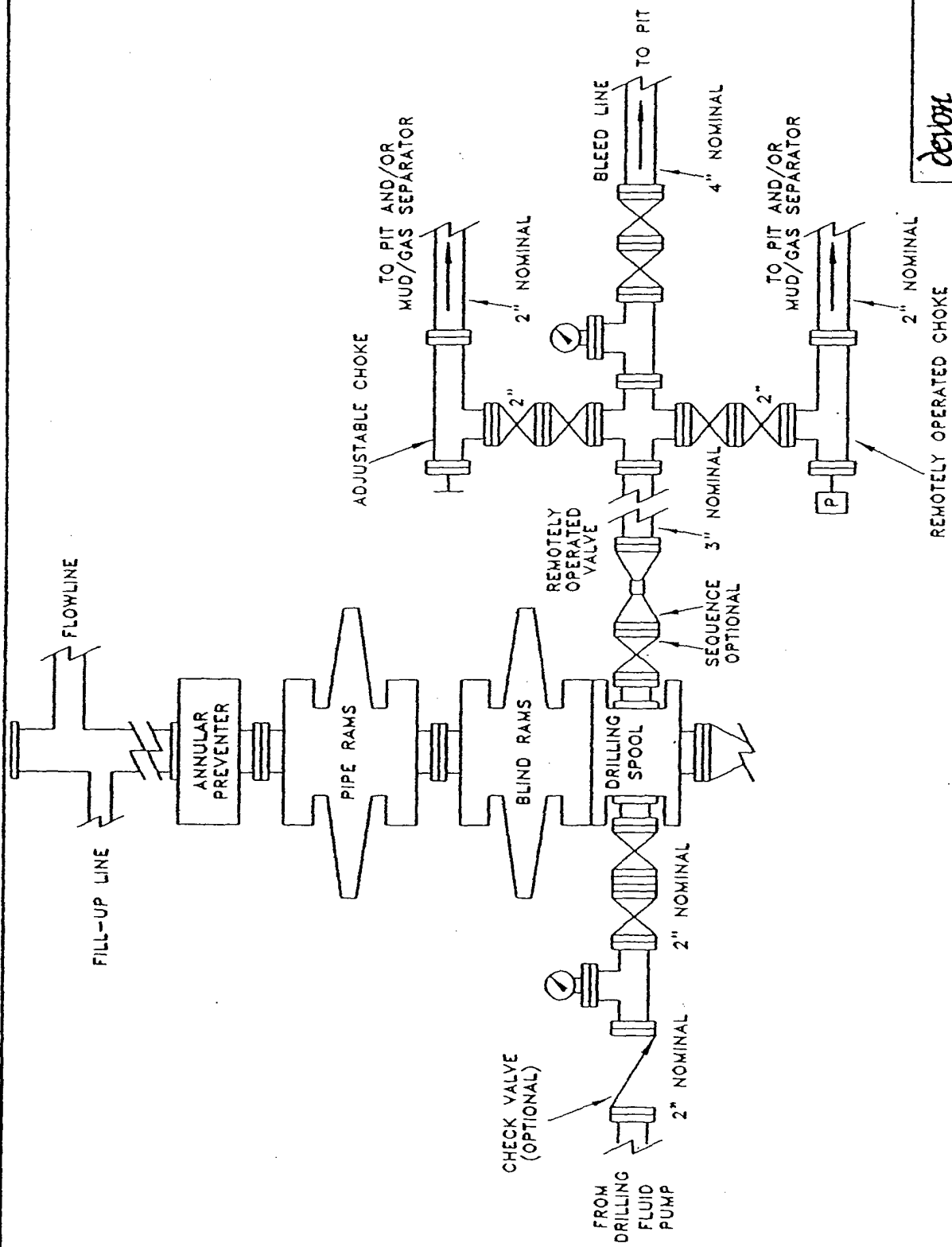
(1) Only one required in Class 3M.

(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

- All connections in choke manifold shall be welded, studded, flanged or Cameron clamp of comparable rating.
- All flanges shall be API 6B or 6BX and ring gaskets shall be API RX or BX. Use only BX for 10 MWP.
- All lines shall be securely anchored.
- Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 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.
- 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.
- Discharge lines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.



devon

EXHIBIT 1

PROPOSED 5-M BOPE AND CHOKE ARRANGEMENT

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2mbope.dwg

SC

10/00

Valley 12

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: DEVON ENERGY PRODUCTION COMPANY, LP
Well Name & No. 4 - FILAREE 24C FEDERAL COM
Location: 660' FNL & 1980' FWL - SEC 24 - T22S - R25E - EDDY COUNTY
Lease: NM-055477-A 8554477-A (52)

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I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 234-5909 or (505) 361-2822 (After hours) - for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:
- A. Spudding
- B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch
- C. BOP tests
- 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. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.
4. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.
5. A Communitization Agreement covering the acreage dedicated to this well must be filed for approval with the BLM. The effective date of the agreement shall be prior to any sales.

II. CASING:

1. The 13-3/8 inch surface casing shall be set at 450 feet and cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.
2. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is circulate cement to the surface. Note: The intermediate casing shall be set between 2200 and 2270 feet and above the top of the Delaware Formation.
4. The minimum required fill of cement behind the 5-1/2 inch production casing is cement shall extend upward a minimum of 500 feet above the uppermost hydrocarbon bearing interval.

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 13-3/8 inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.
2. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling the surface and intermediate casing shall be 2000 psi. Minimum working pressure of the blowout preventer and related equipment (BOPE) required for drilling below the 9-5/8 inch intermediate casing shall be 5000 psi.
3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the tests.
 - The tests shall be done by an independent service company.
 - The results of the test shall be reported to the appropriate BLM office.
 - Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.
 - Testing must be done in a safe workman-like manner. Hard line connections shall be required.
 - BOPE must be tested prior to drilling into the Wolfcamp formation by an independent service company.
 - **Variance to test the BOP and associated equipment to 1200 psi with the rig pump before drilling out of the 13-3/8" casing shoe is approved. Prior to drilling out of the 9-5/8" casing shoe the BOP and hydril will be tested as per BLM OSO #2.**

IV. 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. Monitoring equipment shall consist of the following:

1. Recording pit level indicator to indicate volume gains and losses
2. Mud measuring device for accurately determining the mud volumes necessary to fill the hole during trips
3. Flow-sensor on the flow line to warn of abnormal mud returns from the well